Analyzer 7.2 Virtual Appliance Getting Started Guide

Notes, Cautions, and Warnings

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

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Overview

This Getting Started Guide contains installation procedures and configuration guidelines for deploying the Dell SonicWALL Analyzer Virtual Appliance on a server on your network. The Analyzer Virtual Appliance is a virtual machine that runs Analyzer, which is a Web-based application that can generate dynamic real-time and historical reports for a complete view of all activity through Dell SonicWALL security appliances.

This document contains the following sections:

Chapter 1

Before You Begin

See the following sections for information about system requirements for the Dell SonicWALL Analyzer Virtual Appliance:

System Requirements

The Dell SonicWALL Analyzer Virtual Appliance comes with a base license to manage either 5, 10, or 25 nodes. You can purchase additional licenses on MySonicWALL. For more information on licensing additional nodes, visit:
http://www.sonicwall.com/us/Products_Solutions.html

Before installing, review the requirements in the following sections:

Supported Platforms

The elements of basic VMware structure must be implemented prior to deploying the Analyzer Virtual Appliance. The Analyzer Virtual Appliance runs on the following VMware platforms:

- ESXi 4.1, 5.0, 5.1, and 5.5
- ESXi 4.0 Update 1 (Build 208167 and newer)
- ESX 4.1
- ESX 4.0 Update 1 (Build 208167 and newer)

Note: Dell SonicWALL Analyzer Virtual Appliance management is not supported on Apple MacOS.

Hardware Resource Requirements

Use the Capacity Calculator 2 to determine the hardware requirements for your deployment.

The performance of GMS Virtual Appliance depends on the underlying hardware. It is highly recommended to dedicate all the resources that are allocated to the Virtual Appliance, especially the hard-disk (datastore). In environments with high volumes of syslogs or AppFlow (IPFIX), you need to dedicate local datastores to the GMS Virtual Appliance.

When using Thick, or Flat, provisioning as the storage type option, the entire amount of disk space is allocated when you import and deploy the Analyzer Virtual Appliance file. When using Thin provisioning, the initial size is very small and grows dynamically as more disk space is needed by the Analyzer Virtual Appliance application, until the maximum size is reached. After allocated, the size does not shrink if the application space requirements are subsequently reduced.

Additional disk space provided to the Analyzer Virtual Appliance in the virtual environment, beyond the respective limits of 250GB or 950GB, is not utilized.

ESX/ESXi can be configured with datastores of varying block sizes. The 4 or 8MB requirement for the 950GB deployment is because the block size determines the largest virtual disk that can be deployed, as shown in the following table:

Block Size of Datastore	Largest Virtual Disk
1MB	256GB
2MB	512GB
4MB	1TB
8MB	2TB

MySQL Requirements

The Analyzer Virtual Appliance automatically installs MySQL as part of the base installation package. Separately installed instances of MySQL are not supported with the Analyzer Virtual Appliance.

Java Requirements

Download and install the latest version of the Java 7 plug-in on any system that accesses the Analyzer management interface. This can be downloaded from:
www.java.com
or
http://www.oracle.com/technetwork/java/javase/downloads/index.html

Browser Requirements

Dell SonicWALL Analyzer uses advanced browser technologies such as HTML5, which are supported in most recent browsers. Dell SonicWALL recommends using the latest Chrome, Firefox, Internet Explorer, or Safari browsers for administration of the Dell SonicWALL Analyzer.

This release supports the following Web browsers:

- Chrome 18.0 and higher (recommended browser for dashboard real-time graphics display)
- Firefox 16.0 and higher
- Internet Explorer 8.0 and higher (do not use compatibility mode)

Note Internet Explorer version 10.0 in Metro interfaces of Windows 8 is currently not supported.

Mobile device browsers are not recommended for Dell SonicWALL Analyzer system administration.

Network Requirements

To complete the Dell SonicWALL Analyzer Virtual Appliance deployment process documented in this *Getting Started Guide*, the following network requirements must be met:

- The Analyzer Virtual Appliance server must have access to the Internet
- The Analyzer Virtual Appliance server must have a static IP address
- The Analyzer Virtual Appliance server's network connection must be able to accommodate at least 1KB/s for each device under management. For example, if the Dell SonicWALL Analyzer Virtual Appliance is monitoring 100 Dell SonicWALL appliances, the connection must support at least 100KB/s.

Depending on the configuration of Dell SonicWALL log settings and the amount of traffic handled by each device, the network traffic can vary dramatically. The 1KB/s for each device is a general recommendation. Your installation requirements might vary, refer to the Capacity Calculator 2.

Dell SonicWALL Appliance and Firmware Support

Dell SonicWALL Platforms	Dell SonicWALL Firmware Version
Firewall / VPN	
SuperMassive 10000 Series	SonicOS 6.0 or newer **Note**: Only partial reporting support is currently available. Contact your Dell SonicWALL Sales representative for more information.
SuperMassive 9000 Series	SonicOS 6.1 or newer
NSA Series	SonicOS Enhanced 5.0 or newer
TZ Series	SonicOS Enhanced 3.2 or newer SonicOS Standard 3.1 or newer
PRO Series	SonicOS Enhanced 3.2 or newer
CSM Series	SonicOS CF 2.0 or newer
Secure Remote Access	
SMB SRA Series	SonicOS SSL-VPN 2.0 or newer (management) SonicOS SSL-VPN 2.1 or newer (reporting)
E-Class SRA Series	SRA 9.0 or newer
Backup and Recovery	
CDP Series	CDP 2.3 or newer (management) CDP 5.1 or newer (reporting)

Note Dell SonicWALL Analyzer 7.2 supports firewall App Control reporting. Refer to the SonicOS documentation for information on the supported SonicOS firmware versions.

Appliances running firmware newer than this Analyzer release can still be managed and reports can still be generated. However, the new features in the firmware release will be supported in an upcoming release of Analyzer.

Legacy SonicWALL XPRS/XPRS2, SonicWALL SOHO2, SonicWALL Tele2, and SonicWALL Pro/Pro-VX models are not supported for Dell SonicWALL Analyzer reporting. Appliances running SonicWALL legacy firmware including SonicOS Standard 1.x and SonicWALL legacy firmware 6.x.x.x are not supported for SonicWALL Analyzer reporting.

Dell SonicWALL Analyzer can be connected to SSL-VPN 2000 and 4000 appliances. Use the **Log > ViewPoint** page to set up the Analyzer connection (in addition to the configuration changes made on the Analyzer). In Dell SonicWALL SRA SSL-VPN 5.5 or later firmware versions, a **Log > Analyzer** page is provided for configuration of Analyzer settings.

Record Configuration Information

Before continuing, record the following configuration information for your reference.

SMTP Server Address:	The IP address or host name of your Simple Mail Transfer Protocol (SMTP) server. For example, mail.emailprovider.com.
HTTP Web Server Port:	The number of your Web server port if customized. The default port is 80.
HTTPS Web Server Port:	The number of your secure (SSL) Web server port if customized. The default port is 443.
Administrator Email 1:	The email address of a Analyzer administrator who receives email notifications.
Administrator Email 2:	The email address of an additional Analyzer administrator who receives email notifications. This field is optional.
Sender Email Address:	The email address from which the email notifications are sent.
Database User:	The MySQL user name for the database administrator. This is not required when using the bundled database on this server.*
Database Password:	The MySQL password for the database administrator. This is not required when using the bundled database on this server.*

*This information is needed if Microsoft SQL Server is used, or in the case of a distributed deployment.

Chapter 2

Introduction to the Management Interfaces

This section describes the two Dell SonicWALL Analyzer Virtual Appliance management interfaces. An almost identical URL is used when accessing either the Analyzer Virtual Appliance management interface or the Universal Management Host system interface, but the URL is modified to specify either “sgms” or “appliance.”

See the following sections:

Overview of the Two Interfaces

The Analyzer Virtual Appliance Universal Management Suite (UMS) installs two separate management interfaces:

- **Dell SonicWALL Universal Management Host (UMH) System Management Interface** – Used for system management of the host server, including registration and licensing, setting the admin password, selecting the deployment role, and configuring other system settings.

  To access the UMH system management interface on the default HTTP port using a browser on the host server, use the URL:
  http://localhost/appliance/

  From another system, access the UMH system management interface with the URL:
  http://<IP address>:<port>/appliance/

  If you are using the standard HTTP port, 80, it is not necessary to append the port number to the IP address.

- **Dell SonicWALL Analyzer Management Interface** – Used to access the Analyzer application that runs on the Windows server. This interface is used to configure Analyzer management of Dell SonicWALL appliances, including creating policies, viewing reports, and monitoring networks, and for configuring Analyzer administrative settings.

  Access the Analyzer Virtual Appliance management interface with one of the following URLs:
  http://localhost/sgms/
  or
  http://<IP address>:<port>/sgms/

Switching Between Management Interfaces

On systems deployed in the All In One role, the “SuperAdmin” user can easily switch between the UMH system management interface and the Analyzer Virtual Appliance management interface. The SuperAdmin is the master administrator for the entire Analyzer Virtual Appliance installation.

When logged in to either interface, the SuperAdmin can switch to the login page of the other interface by clicking **Switch** in the top right corner of the page. **Switch** is only visible for users with SuperAdmin privileges.

UMH System Interface Introduction

The Dell SonicWALL UMH system interface is used for system management of the Dell SonicWALL Analyzer Virtual Appliance instance, including registration and licensing, setting the admin password, configuring database settings, selecting the deployment role, and configuring other system settings.

When installing Dell SonicWALL Universal Management Suite on a host, a Web server is installed to provide the system management interface. The system interface is available by default at *http://localhost/appliance/* after restarting the system.

The login screen allows you to securely log in to the Dell SonicWALL UMH system interface using your system user ID and password.

Note

The admin account on the system interface can have a different password than the admin account for Analyzer Virtual Appliance.

Management Interface Introduction

Analyzer Virtual Appliance is a Web-based application for configuring and gathering reports from thousands of Dell SonicWALL Internet security appliances and non-Dell SonicWALL appliances, all from a central location. This section provides an introduction to the main elements of the Web-based management interface. This section contains the following subsections:

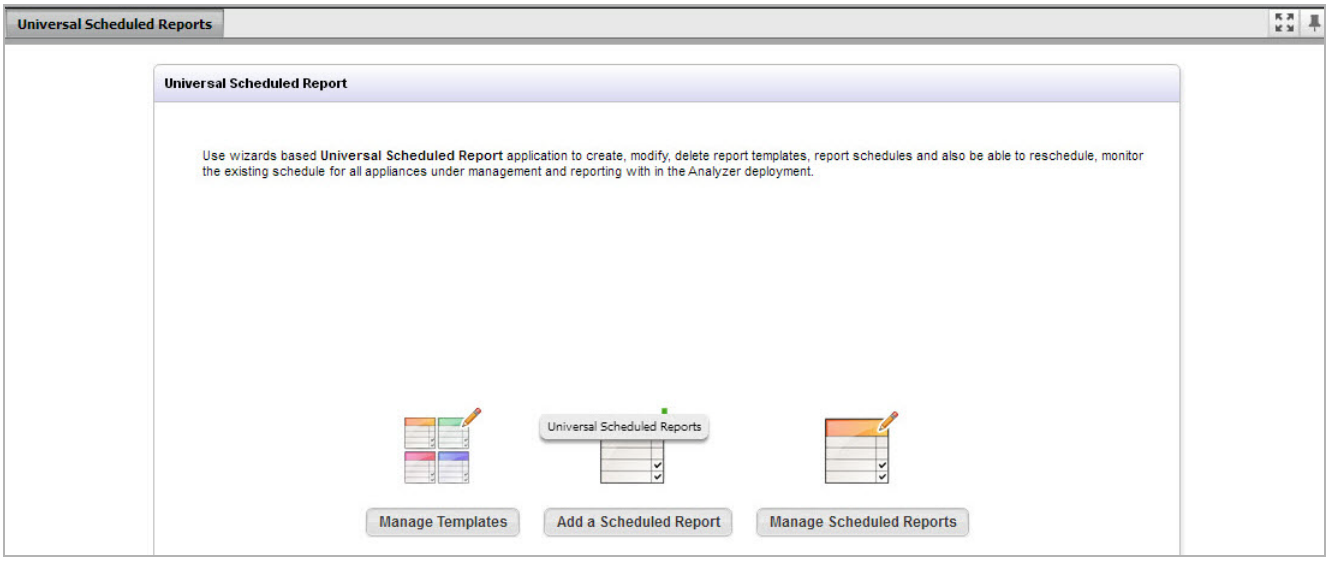
- Login Screen on page 11
- Dashboard on page 11
- Management Interface on page 12

Login Screen

The login screen allows you to securely log in to Analyzer Virtual Appliance using your Analyzer application user ID and password. The Analyzer Virtual Appliance management interface is available by default at *http://localhost/sgms/* after completing registration.

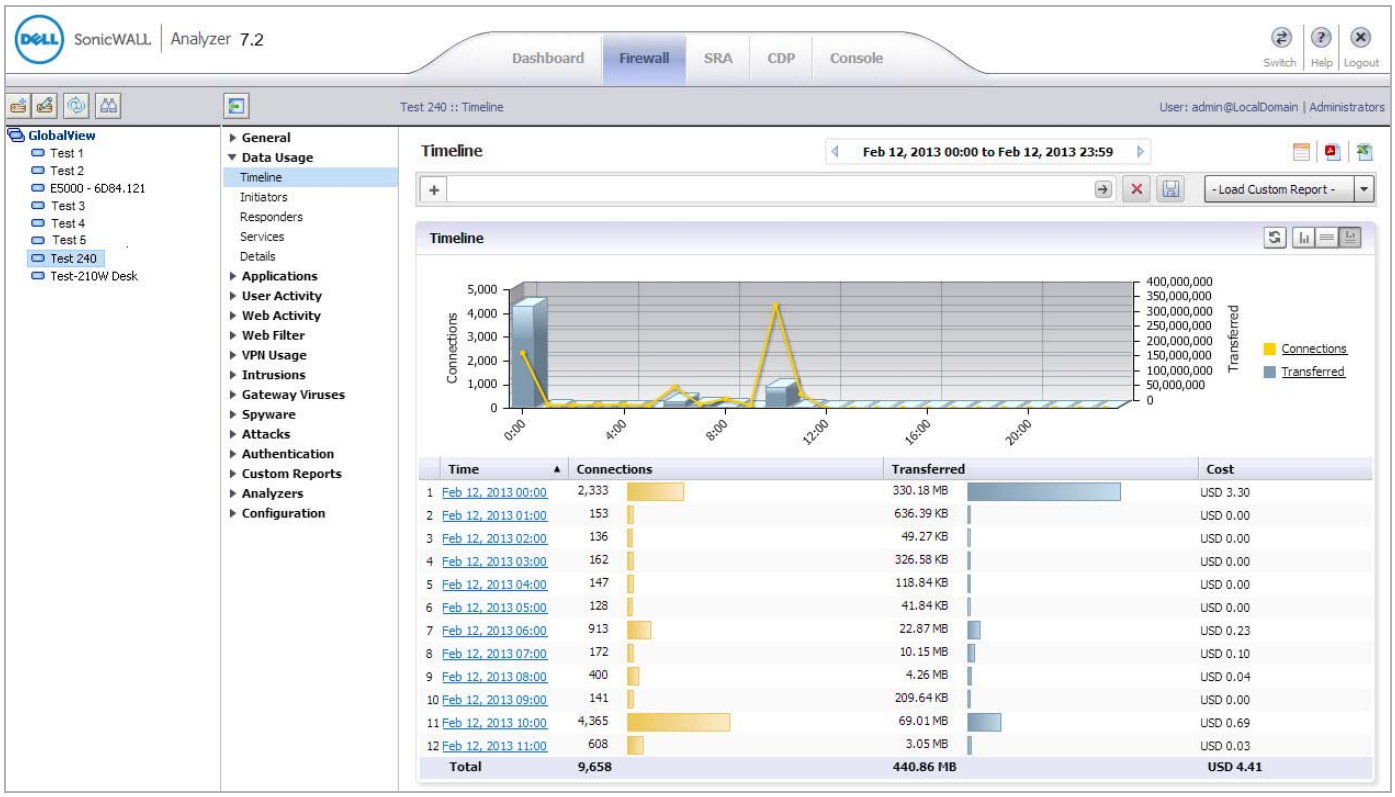
Dashboard

The Dashboard control bar provides top-of-the page menu items for customizing the settings of this page. When the Dashboard loads after Analyzer Virtual Appliance login, the control bar is displayed and then becomes hidden until you place your mouse cursor at the top of the page as shown in the following figure. You can lock the control bar by clicking on the “pin the control bar” icon.



Management Interface

The Analyzer Virtual Appliance management interface is the main control panel. The management interface allows you to add and modify appliances, complete monitoring and reporting tasks, and configure Analyzer Virtual Appliance settings.



Navigation Tabs

The management interface navigation tabs are located at the top of the management interface.

The navigation tabs are: Dashboard, Firewall, SRA, CDP, and Console. The Console tab provides tools to customize options found in the other Analyzer tabs and to manage Analyzer Virtual Appliance settings that affect the environment globally.

Left Pane

The left pane of the management interface provides a tree control that displays the current Analyzer Virtual Appliance view and a list of managed appliances within the current tab. The left pane is only displayed for the Firewall, SRA, and CDP appliance tabs. The current category and view are indicated by a blue highlighting. The left pane tree control provides the ability to switch between views and displays the current state of each appliance under management. A single box in the tree control indicates a node at appliance or unit level. Two boxes in the tree control indicates a node at a group level. A global node at the top of the tree control is indicated by a three-box icon. The color and additional images superimposed on these icons provide useful status information. For detailed information about appliance states, refer to Description of Managed Appliance States on page 13.

Note If there is only one appliance visible in the Left Pane, then the Left Pane automatically collapses to present a larger screen for the rest of the UI.

Center Pane

The center pane displays in the appliance tabs: **Firewall**, **SRA**, and **CDP**. A navigational tree control that provides access to the configuration options available based on navigational tab and left pane selections. The **Reports** sub-tab provides reporting on the global or appliance level, and is only available for **Firewall**, **SRA**, and **CDP**.

The current selection in the center pane is indicated by the highlighted item. The center pane options change based on the navigational tab and left pane selections, and selections in the center pane modify the display in the right pane.

Right Pane

The right pane displays the available status or tasks based on the current selection of navigational tab, left pane and center pane options. Configurations completed in the right pane modify global or appliance settings.

Description of Managed Appliance States

This section describes the meaning of icons that appear next to managed appliances listed in the left pane of the Dell SonicWALL Analyzer Virtual Appliance management interface.

Appliance Status	Description
	One blue box indicates that the appliance is operating normally. The appliance is accessible from the Analyzer Virtual Appliance, and no tasks are pending or scheduled.
	Three blue boxes indicate that all appliances in the global group of this type (Firewall/SRA/CDP) are operating normally.

Chapter 3

Installing and Upgrading

Dell SonicWALL Analyzer Virtual Appliance is installed by deploying an OVA file to your ESX/ESXi server. Each OVA file contains all software components related to the Analyzer Virtual Appliance including the MySQL database, executable binary files for all Analyzer services, and other necessary files.

You can deploy one or both OVA files multiple times as needed for your Analyzer Virtual Appliance environment. The Analyzer Virtual Appliance can be configured for a single server only.

You can deploy an OVA file by using the vSphere client that comes with ESX/ESXi. To get the vSphere client, point a browser to your ESX/ESXi server and click **Download vSphere Client**.

The Analyzer Virtual Appliance can be installed as a fresh install or as an upgrade to the latest version of Analyzer Virtual Appliance.

This section contains the following subsections:

Installing with VMware vSphere

To do a fresh install of the Analyzer Virtual Appliance using the vSphere client, complete the following steps:

Step 1 Download the following OVA files from MySonicWALL to a system that is accessible to your ESX/ESXi server.

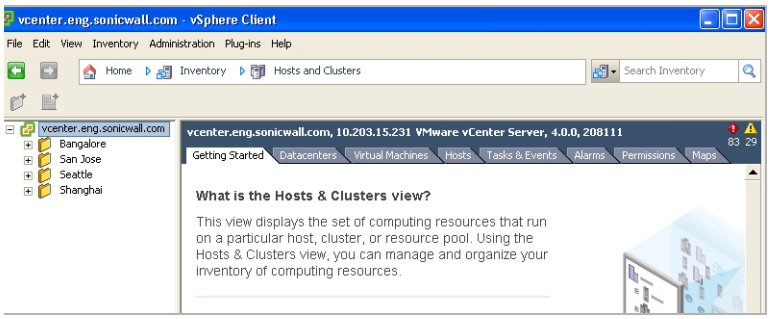
- sw_gmsvp_vm_eng_7.2.*xxxx.yyyy*.40GB.64bit.ova
- sw_gmsvp_vm_eng_7.2.*xxxx.yyyy*.250GB.64bit.ova
- sw_gmsvp_vm_eng_7.2.*xxxx.yyyy*.950GB.64bit.ova

Note Do not rename the OVA files.

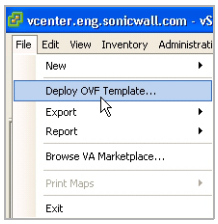
The “xxxx” represent the exact version numbers

Step 2 Launch vSphere and use it to log on to your ESX/ESXi server.

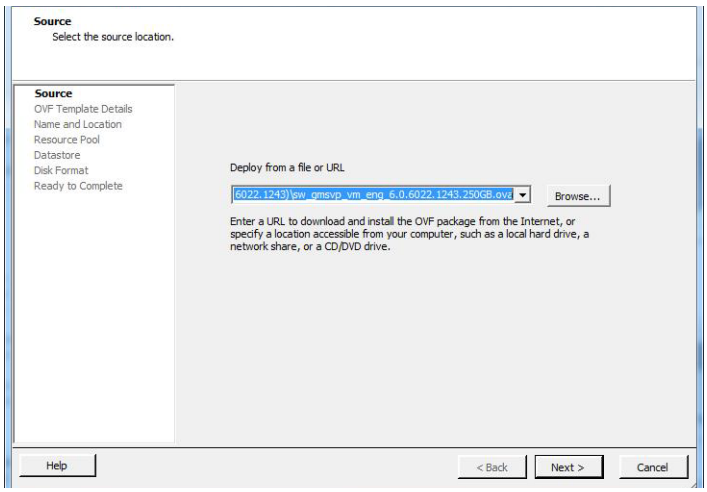
Step 3 In the Home screen, navigate to a view that shows the virtual machines running on your ESX/ESXi server.



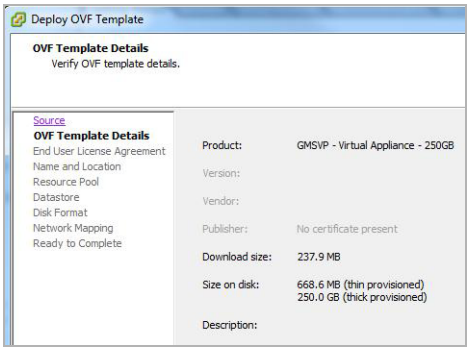
Step 4 To begin the import process, click **File** and select **Deploy OVF Template**.



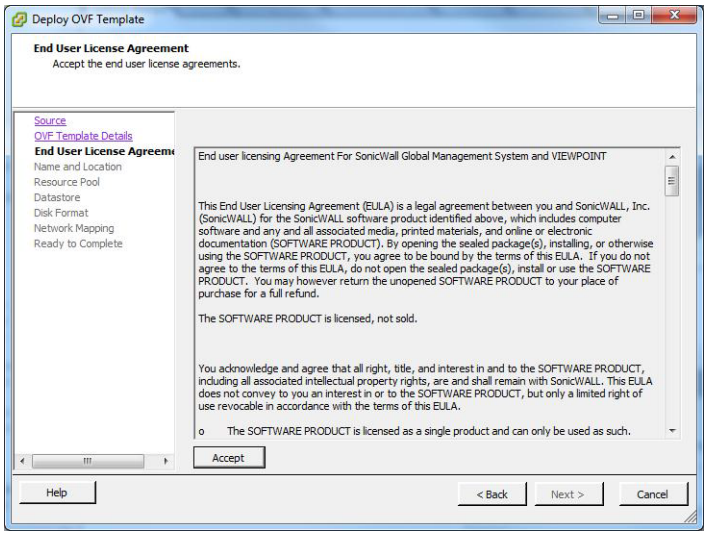
Step 5 In the Source screen of the Deploy OVF Template window, enter the name of the OVA file to import in the **Deploy from a file or URL** field. To deploy from a file, click **Browse** and then select the OVA file to import. To deploy from a URL, type in the URL of the OVA file. Click **Next**.



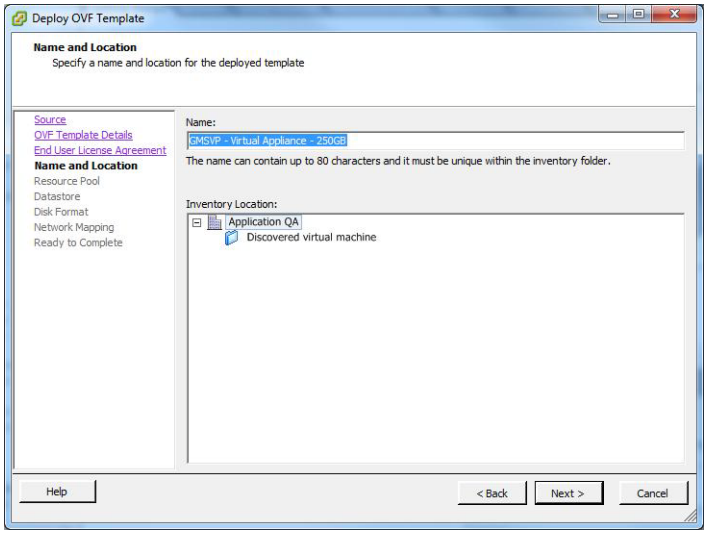
Step 6 In the OVF Template Details screen, verify the information about the selected file. To make a change, click the **Source** link to return to the Source screen and select a different file. To continue, click **Next**.



Step 7 In the **End User License Agreement** screen, read the agreement, click **Accept**, and then click **Next**.

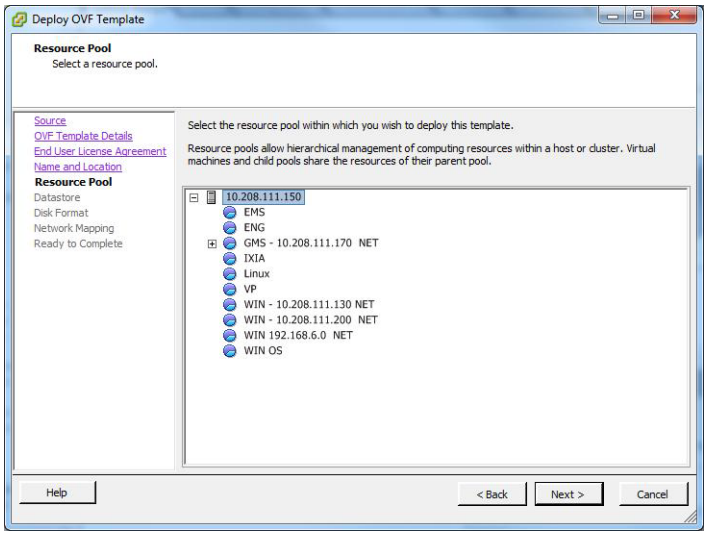


Step 8 In the Name and Location screen, enter a descriptive name for the virtual appliance into the **Name** field, and select the desired location in the **Inventory Location** field. You might incorporate the role or disk size as part of the name, as in “Analyzer_VM_250GB.” Click **Next**.

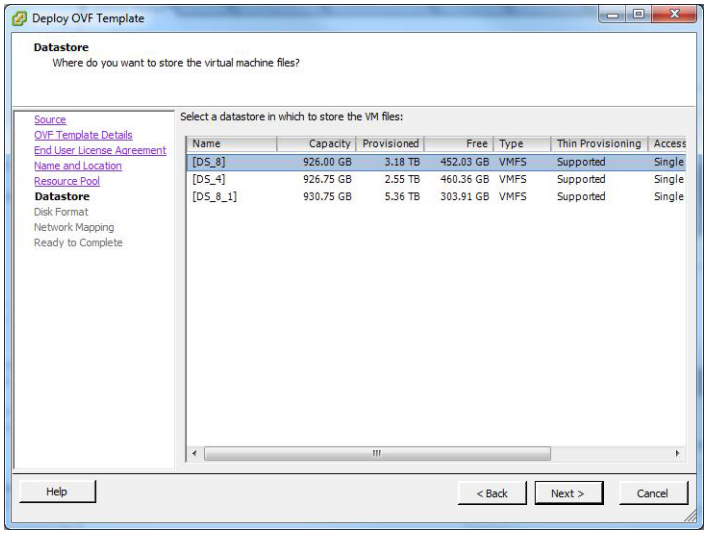


Step 9 In the Resource Pool screen, select the resource pool within which to deploy this Analyzer Virtual Appliance and then click **Next**.

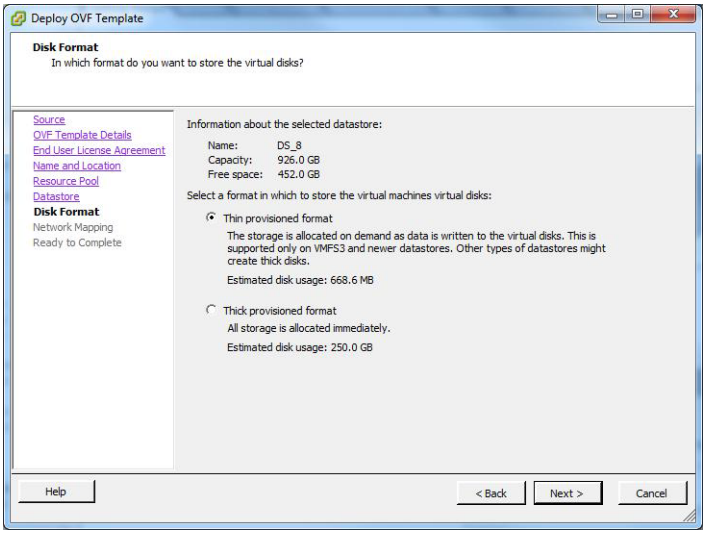
Note When deploying a 950GB file, be sure to select a resource pool with a block size of either 4 or 8MB.



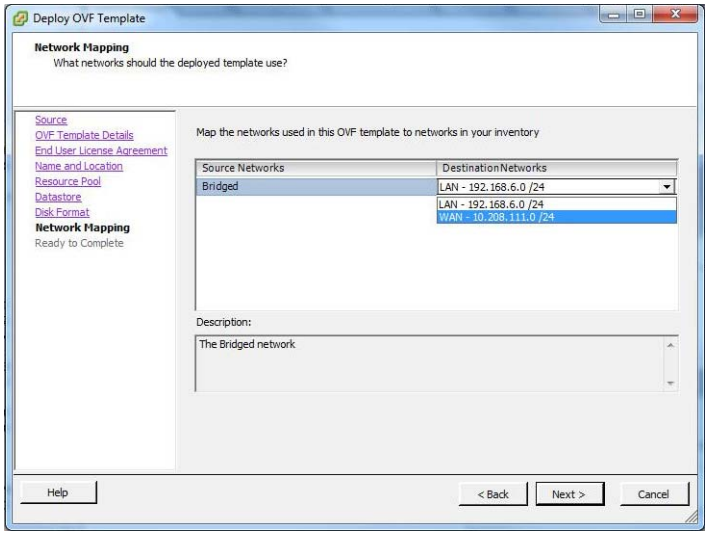
Step 10 In the Datastore screen, select the datastore on which to store the files for the Analyzer Virtual Appliance and then click **Next**.



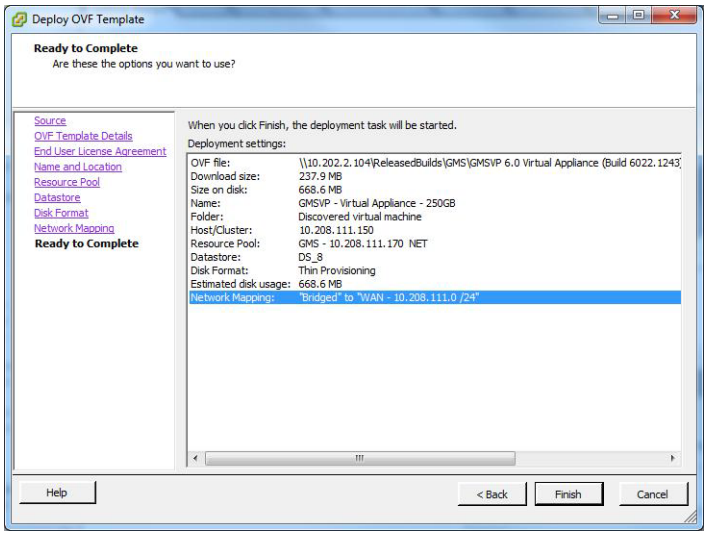
Step 11 In the Disk Format screen, select the format in which to store the virtual disks for the Analyzer Virtual Appliance. Select either **Thin provisioned format** or **Thick provisioned format**, and then click **Next**.



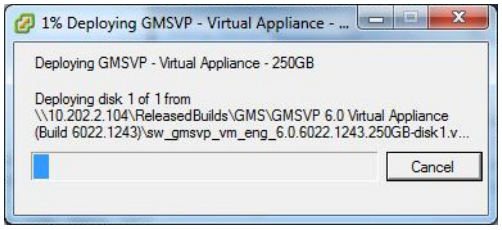
Step 12 In the Network Mapping screen, select the networks in your inventory to be used for the Analyzer Virtual Appliance, and then click **Next**.



Step 13 In the Ready to Complete screen, review and verify the displayed information. To begin the deployment with these settings, click **Finish**. Otherwise, click **Back** to navigate back through the screens to make a change.

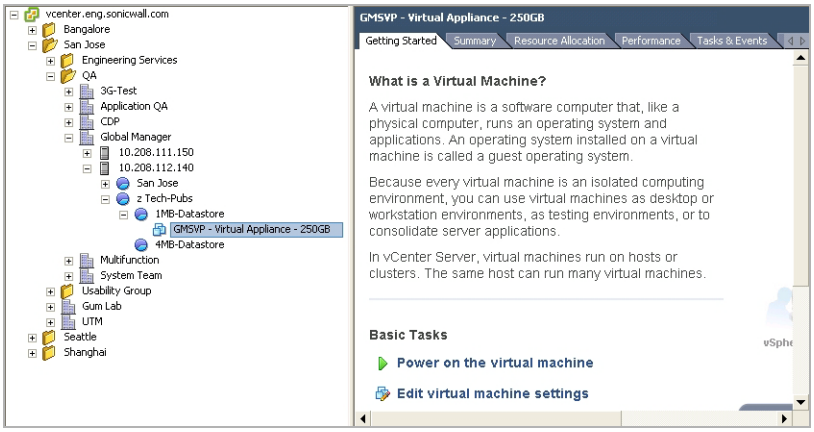


The Deploying dialog box shows the progress.



Step 14 In the Deployment Completed Successfully dialog box, click **Close**.

The name of the new Analyzer Virtual Appliance appears in the left pane of the vSphere window.



Step 15 To power on the virtual appliance and complete the required host configuration, see Performing Basic Tasks and Host Configuration on page 22.

Step 16 After completing the basic tasks and host configuration, register and license SonicWALL GMS, see Registering and Licensing on page 28.

Upgrading From an Earlier Version of Dell SonicWALL Analyzer

The Dell SonicWALL Analyzer Virtual Appliance can be upgraded from 7.0 to 7.2, but cannot be directly upgraded from Analyzer versions earlier than 7.0. To upgrade the Analyzer from a version earlier than 7.0, you need to upgrade to major versions of the Analyzer until you reach 7.0, then you can upgrade to Analyzer 7.2. For the Analyzer Virtual Appliance deployments, upgrading from the Analyzer 7.0 release to the Analyzer 7.2 release can be completed on the **System > Settings** page.

Stop the Analyzer services on Analyzer server before completing an upgrade. You must upgrade the Analyzer server in your deployment to the same version of Analyzer 7.2. You cannot have some servers running version 7.0 and others running 7.2.

To upgrade, complete the following:

Step 1 Download the respective file from the MySonicWALL.com Software Download Center to your workstation: **sw_gmsvp_vm_eng_7.2.xxxx.yyyy.gmsvp-updater.64bit.sh (**where “xxxx” represent the exact version numbers)

Step 2 Open the Analyzer Virtual Appliance console.

Step 3 Navigate to the **System > Settings** page.

Step 4 Click **Browse**, navigate to the location where you saved the file, and then select it.

Step 5 Click **Apply** to begin the firmware upgrade installation.

Chapter 4

Performing Basic Tasks and Host Configuration

This section describes how to power on and configure basic settings on the Dell SonicWALL Analyzer Virtual Appliance, including virtual hardware settings and networking settings.

The following tasks are required to configure your SonicWALL Analyzer Virtual Appliance before registering it:

1. Power the Virtual Appliance On on page 22
2. Configure Host Settings on the Console on page 23
3. Configure Host Settings on the Appliance Management Interface on page 24

This chapter also contains information on:

- Viewing the Settings Summary on page 25
- Editing The Virtual Machine Settings on page 27

Power the Virtual Appliance On

There are multiple ways to power the Dell SonicWALL Analyzer Virtual Appliance on (or off).

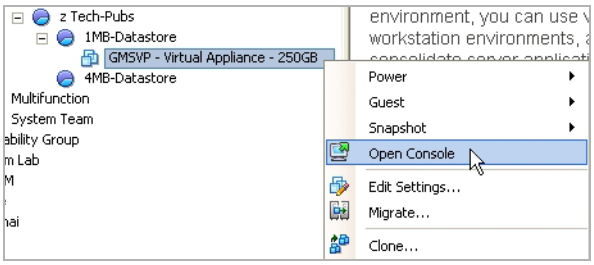
To power the virtual appliance on (or off), complete one of the following:

- Right-click the Analyzer Virtual Appliance in the left pane and navigate to **Power > Power On** (or **Power > Power Off**) in the right-click menu.
- Select the Analyzer Virtual Appliance in the left pane and then click **Power on the virtual machine** (or **Shut down the virtual machine**) on the Getting Started tab in the right pane.
- Select the Analyzer Virtual Appliance in the left pane and then click **Power On** (or **Shut down guest**) on the Summary tab in the right pane.

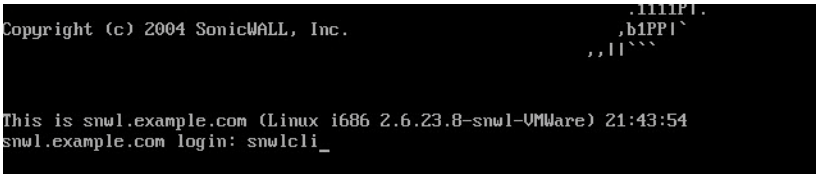
Configure Host Settings on the Console

After powering on the Analyzer Virtual Appliance, complete the following steps to open the console and configure the IP address and default route settings:

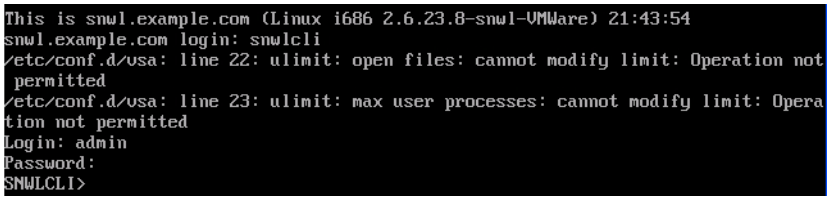
Step 1 In vSphere, right-click the Analyzer Virtual Appliance in the left pane and select **Open Console** in the right-click menu.



Step 2 When the console window opens, click inside the window, type *snwlcli* at the **login:** prompt and then press **Enter**. Your mouse pointer disappears when you click in the console window. To release it, press **Ctrl+Alt**.



Step 3 The console might display warning messages that can be ignored, and then displays a second **Login:** prompt. Type *admin* at the **Login:** prompt and press **Enter**, and then type *password* at the **Password:** prompt and press **Enter**. The “SNWLCLI>” prompt is displayed.



Step 4 Configure the local IP address for the virtual appliance by typing the following command, substituting your IP address and subnet mask for the values shown here:

```
interface eth0 10.208.112.175 255.255.255.0
```

Step 5 Configure the default route for the virtual appliance by typing the following command, substituting your gateway IP address for the value shown here:

```
route --add default --destination 10.208.112.1
```

You can test connectivity by pinging another server or your main gateway, for example:

```
ping 10.208.111.1
```

```
ping 10.0.0.1
```

Press **Ctrl+c** to stop pinging.

Step 6 Type *exit* to exit the CLI, and close the console window by clicking the **X**.

Configure Host Settings on the Appliance Management Interface

After configuring the IP address and default route settings on the Analyzer Virtual Appliance console, the next steps are to change the admin password and configure host name, network, and time settings in the appliance management interface. The password is changed during the login process, and the Host Configuration Tool changes the other settings.

The Host Configuration Tool is a wizard that takes you through several basic steps to get your Analyzer Virtual Appliance configured for your network.

The wizard starts automatically after you log in for the first time and change the admin password. You can cancel the wizard at this time that leaves the default configuration on the virtual appliance and prevents the wizard from automatically starting again.

Note: If you log out of the appliance management interface without actually cancelling the wizard, it starts automatically on your next login.

You can manually start the wizard at any time by clicking **Wizards** at the top-right corner of the page.

To complete host configuration for the virtual appliance, complete the following steps:

Step 1 Launch a browser and enter the URL of the virtual appliance, such as:

http://10.208.112.175

Step 2 On the appliance interface login page, type in the default credentials and then click **Submit** to log in.

The default credentials are:

User—*admin*

Password—*password*

Step 3 The first time you log in to the appliance, you must change the password. The login page re-displays with the default login credentials pre-populated. Enter a new password for the admin account in the **New Password** field, and enter it again in the **Confirm New Password** field. Click **Submit**.

Note: The new password must be at least seven characters.

Be sure to save or write this password down in a secure location, as it is encrypted and is difficult to recover if you forget it.

Step 4 The Host Configuration Tool wizard starts automatically. In the Introduction screen, click **Next**.

Step 5 In the Network Settings screen, configure the following network settings for the Analyzer Virtual Appliance, and then click **Next**:

- **Name** – A descriptive name for this virtual appliance
- **Domain** – In the form of “sonicwall.com;” this domain is not used for authentication
- **Host IP Address** – The static IP address for the eth0 interface of the virtual appliance
- **Subnet Mask** – In the form of “255.255.255.0”

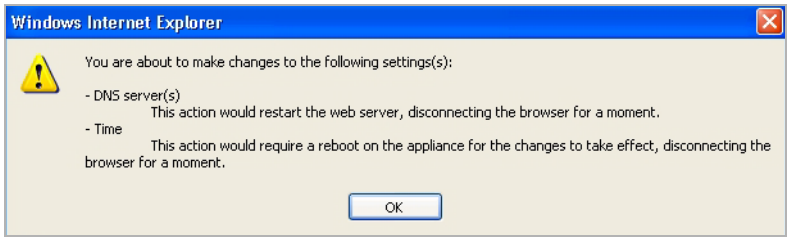
- **Default Gateway** – The IP address of the network gateway – this is the default gateway and is required for networking purposes.
- **DNS Server 1** – The IP address of the primary DNS server
- **DNS Server 2** (Optional) – The IP address of the secondary DNS server

Step 6 In the Time Settings screen, select values for the following system settings on the virtual appliance, and then click **Next**:

- **Time (hh:mm:ss)** – Hours, minutes, and seconds of current time; this field is disabled if the NTP option is selected
- **Date** – Month, day, and year of current date; this field is disabled if the NTP option is selected
- **TimeZone** – Select from the drop-down list
- **Set time automatically using NTP** – Select this checkbox to use an NTP server to set the virtual appliance time; a default NTP server is pre-configured

Step 7 In the **Summary** screen, verify the settings. Click **Back** to make changes on a previous screen, or click **Apply** to accept the settings.

Step 8 A dialog box warns you that the virtual appliance reboots. Click **OK**.



Step 9 Wait for the settings to be applied, possibly for a few minutes. The screen displays a progress bar until it finishes, and then displays the status.

Note If you modified the DNS settings, the services on the appliance restarts when the changes are applied, causing a momentary connectivity loss to the Web server. Your browser is redirected to the appliance management interface login page.

If you modified the Time settings, the virtual appliance reboots. Use your browser to reconnect to the appliance management interface.

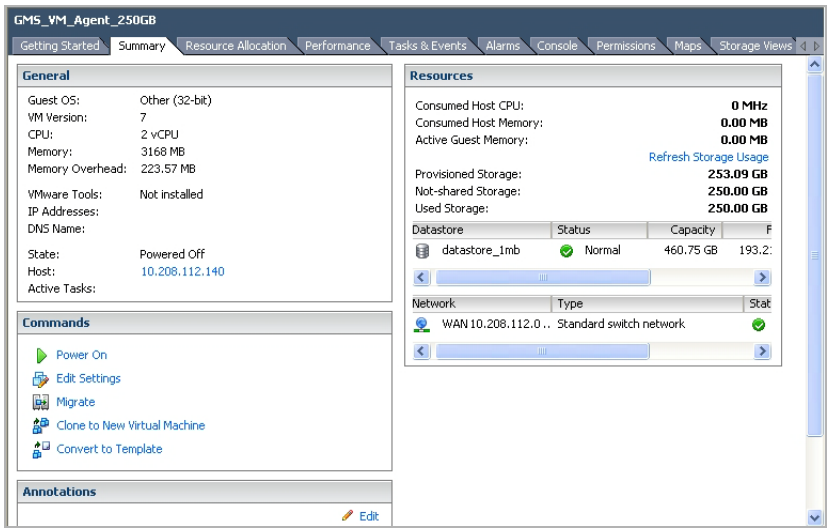
Viewing the Settings Summary

When the Dell SonicWALL Analyzer Virtual Appliance is selected in the left pane, the Summary tab of the vSphere interface displays pertinent information such as memory, powered on/off state, hard disk storage usage, network subnet settings, and other settings.

Note This page might incorrectly indicate that VMware Tools are not installed.

A short list of commands is also provided on this page, including Power On and Edit Settings.

When using vSphere with vCenter Server, the Migrate and Clone commands are also available.



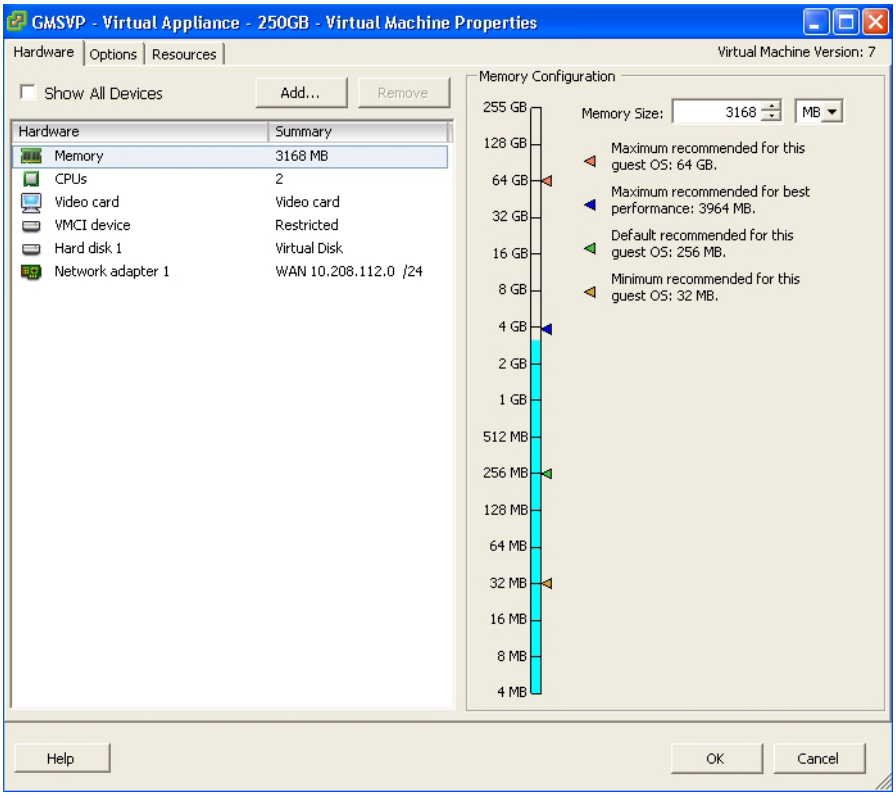
Editing The Virtual Machine Settings

You can use the vSphere client to edit settings for the Dell SonicWALL Analyzer Virtual Appliance, including memory, CPUs, descriptive name, datastore, and resource allocation.

To edit virtual machine settings:

Step 1 In the vSphere client, right-click the Analyzer Virtual Appliance in the left navigation pane and select **Edit Settings** from the right-click menu.

Step 2 In the Virtual Machine Properties window, the **Hardware** tab displays the settings for memory, CPU, hard disk, and other hardware. Click on the row in the table to access the editable settings in the right pane.



Step 3 Click the **Options** tab to view and edit the Analyzer Virtual Appliance name, location (datastore), guest power management (for standby), and other settings.

Step 4 Click the **Resources** tab to view and edit the resource allocation settings.

Step 5 When finished, click **OK**.

Chapter 5

Registering and Licensing

All instances of the Dell SonicWALL Analyzer Virtual Appliance must be registered and licensed before use. This requirement applies to single server deployments, to fresh or upgraded installations, and to Virtual Appliance installations on Windows servers or to Dell SonicWALL UMA appliances.

Registering/Licensing After a Fresh Install

The Analyzer Virtual Appliance registration is completed using the Dell SonicWALL Universal Management Host (UMH) system interface. When installing the Universal Management Suite on a server or host, a Web server is installed to provide the UMH system interface. The system interface is available by default after restarting the system at: *http://localhost/*

On Dell SonicWALL appliances that send reporting data to the Analyzer, Analyzer is licensed and activated separately from the Dell SonicWALL appliances. MySonicWALL provides a way to associate Dell SonicWALL appliances with the Analyzer instance installed on the Windows system. Licensing your Analyzer application requires:

- **A MySonicWALL account**—allows you to manage your Dell SonicWALL products and purchase licenses for various services. Creating a MySonicWALL account is fast, simple, and free. Simply complete an online registration form directly from your Dell SonicWALL security appliance management interface. Your MySonicWALL account is also accessible at https://www.mysonicwall.com from any Internet connection with a Web browser. After you have an account, you can purchase Analyzer Virtual Appliance and other licenses for your registered Dell SonicWALL security appliances.
- **A registered Dell SonicWALL security appliance with active Internet connection**—you need to register your Dell SonicWALL security appliance to activate Analyzer. Registering your Dell SonicWALL security appliance is a simple procedure done directly from the management interface. After your Dell SonicWALL security appliance is registered, you can activate Analyzer Virtual Appliance by using an activation key or by synchronizing with mysonicwall.com.

Note MySonicWALL registration information is not sold or shared with any other company.

To register and license Analyzer Virtual Appliance on a server, complete the following steps:

Step 1 Double-click the Universal Management Suite desktop icon or open a Web browser and enter *http://localhost/* to launch the UMH system interface.

Note If you specified a custom port (a port other than the default port 80), modify the URL as follows:
http://localhost:<port>/

For example, if you specified port 8080, the URL would be: *http://localhost:8080/*

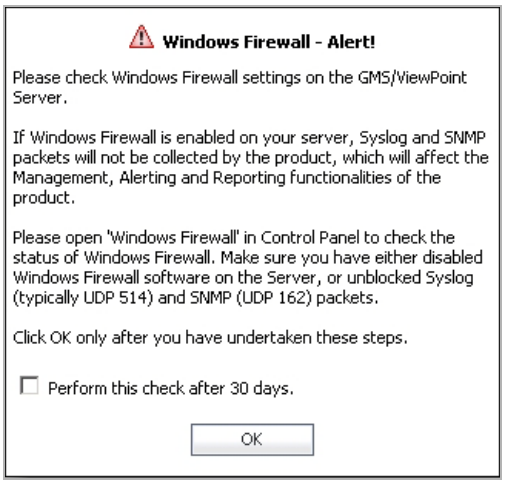
Step 2 The login page loads by default in English, type *admin* in the **User** field, and *password* in the **Password** field and then click **Submit**.

Analyzer Virtual Appliance includes language support for English, Japanese, Simplified Chinese, Traditional Chinese. Click the language of your choice at the bottom of this page.

Step 3 The Login page reloads to force a password change. Type a new password into both the **New Password** and **Confirm New Password** fields, and then click **Submit**.

Step 4 If the software detects that the Windows Firewall is enabled on the system, a warning dialog box is displayed on top of the System > Status page. To receive syslog and SNMP packets, either disable the Windows Firewall or configure it to open these ports (default syslog port is UDP 514 and default SNMP port is UDP 162). When ready, click **OK**.

Step 5 Optionally, you can select **Perform this check after 30 days** if you do not plan to disable the Windows Firewall immediately, and do not wish to see this warning every time you login. The check for Windows Firewall cannot be disabled completely, and if you leave it running you will see this alert after the 30-day delay. You can repeat the delay as many times as needed.



Step 6 On the **System > Status** page, the **Registration Pending** notification across the top of the screen indicates that the system is not registered, the Serial Number status is **UNKNOWN**, and the License status displays **Not Licensed**. To begin registration, click **Register** in the top, right corner.

Step 7 On the License Management page, type your MySonicWALL user name and password into the appropriate fields and then click **Submit**.

Note If you do not have a MySonicWALL account, you must create one before continuing. Click the link to create a MySonicWALL account.

Step 8 On the second License Management page, type your 12-character software serial number into the **Serial Number** field and your authentication code into the **Authentication Code** field.

Step 9 Type a friendly name for the system into the **Friendly Name** field. The friendly name is displayed on MySonicWALL to more easily identify the installation on this system.

Step 10 Click **Submit**, the License Management page displays a completion screen.

Step 11 Click **Continue**, the License Management page displays license summary information.

When registration is complete, the **Deployment > Roles** page is displayed. Although there is only one possible role for a Analyzer Virtual Appliance deployment, you must still configure certain fields on this page and then click **Update** to fully activate the application. For instructions on configuring these settings, see the Configuring UMH Deployment Options on page 31.

Chapter 6

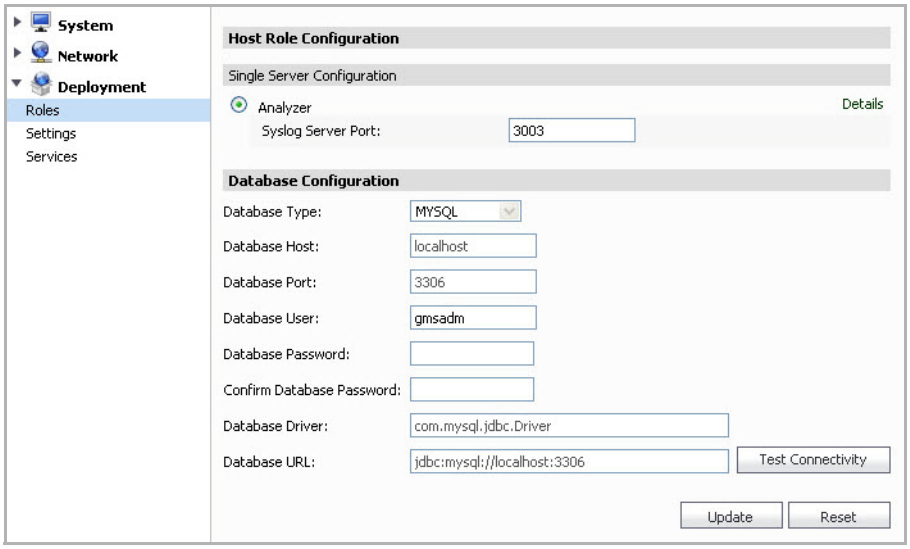
Configuring UMH Deployment Options

The Analyzer single server configuration (default) is an All in One role and is the only role available for Analyzer. All services of Analyzer run on a single server, including the MySQL database. The role that you assign to your Dell SonicWALL Analyzer Virtual Appliance defines the Dell SonicWALL Universal Management Suite services that it provides. The following Dell SonicWALL Universal Management Suite services run in the Analyzer “All in One” system:

- Database
- Reports Database
- Reports Scheduler
- Reports Summarizer
- Scheduler
- Syslog Collector
- Update Manager
- Web Server

Configuring the Deployment Role

In a Analyzer Virtual Appliance installation, the **Deployment > Roles** page provides a way to configure the syslog port and the database settings, and to test database connectivity.



To configure the deployment role, complete the following steps:

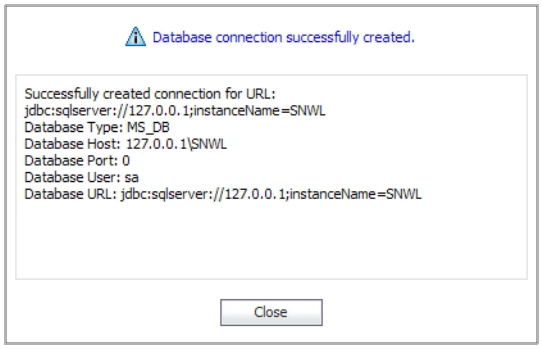
Step 1 To set the syslog port, enter the port number into the **Syslog Server Port** field.

Step 2 Under Database Configuration, to provide credentials with which Analyzer Virtual Appliance accesses the database, enter the account user name into the **Database User** field.

Step 3 Enter the account password into both the **Database Password** and **Confirm Database Password** fields.

Step 4 Additionally, you can enter a **Database Driver** file name and the **Database URL** for an explicit directory path location.

Step 5 To test connectivity to the database server, click **Test Connectivity**. A pop-up message displays the database connectivity status.



Step 6 When finished, click **Update** to apply the changes. To revert the fields on the page to their default settings, click **Reset**.

Configuring Deployment Settings

This section describes the UMH/UMA **Deployment > Settings** page, used for Web port, SMTP, and SSL access configuration.

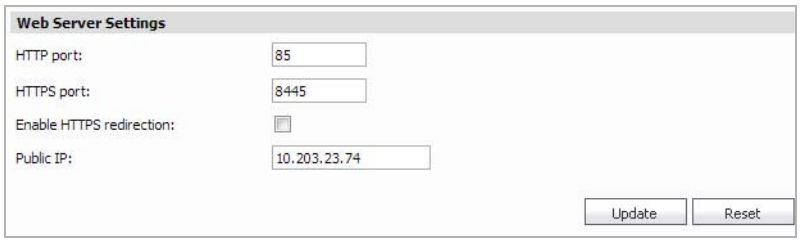
See the following sections:

- Configuring Web Server Settings on page 33
- Configuring SMTP Settings on page 34
- Configuring SSL Access on page 35

Configuring Web Server Settings

Web Server Settings configuration is largely the same on any role:

Step 1 Navigate to **Deployment > Settings > Web Server Settings** in the /appliance management interface.



Step 2 To use a different port for HTTP access to the Dell SonicWALL Analyzer Virtual Appliance, type the port number into the **HTTP Port** field. The default port is 80.

Step 3 If you enter another port in this field, the port number must be specified when accessing the appliance management interface or Analyzer Virtual Appliance management interface. For example, if port 8080 is entered here, the appliance management interface would be accessed with the URL: http://<*IP Address*>:8080/appliance/.

Step 4 To use a different port for HTTPS access to the Dell SonicWALL Analyzer Virtual Appliance, type the port number into the **HTTPS Port** field. The default port is 443.

Step 5 If you enter another port in this field, the port number must be specified when accessing the appliance management interface or Analyzer Virtual Appliance management interface. For example, if port 4430 is entered here, the appliance management interface would be accessed with the URL: https://<*IP Address*>:4430/appliance/.

Step 6 Click **Enable HTTPS Redirection** to redirect HTTP to HTTPS when accessing the Analyzer management interface.

Step 7 In the **Public IP** text-field, enter the public IP or FQDN of the outside web services.

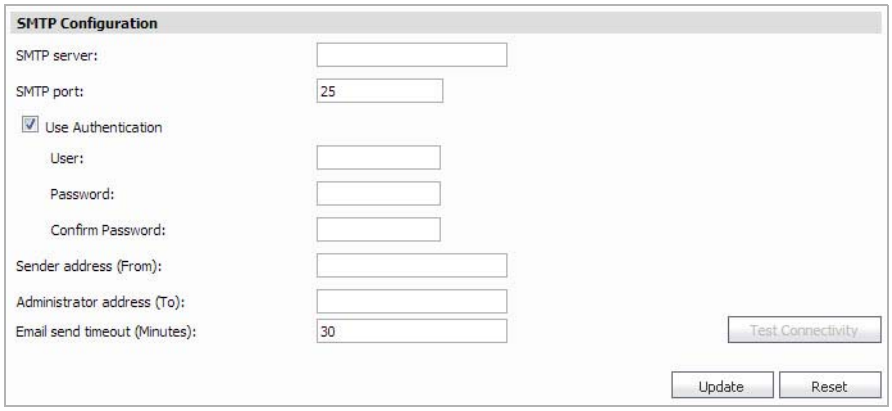
Step 8 When you are finished configuring the Web Server Settings, click **Update**.

Configuring SMTP Settings

The SMTP Configuration section allows you to configure an SMTP server name or IP address, a sender email address, and an administrator email address. You can test connectivity to the configured server.

To configure SMTP settings:

Step 1 Navigate to the **Deployment > Settings** page under the **SMTP Configuration** section.



Step 2 Type the FQDN or IP address of the SMTP server into the **SMTP server** field.

Step 3 Type the SMTP port number into the **SMTP port** field.

Step 4 If the SMTP server in your deployment is set to use authentication, click **Use Authentication**. This option is necessary for all outgoing Analyzer emails to properly send to the intended recipients. Enter the username in the **User** field, and enter/confirm the password in the **Password** and **Confirm Password** fields. This is the username/password that is used to authenticate against the SMTP server.

Step 5 Type the email address from which mail is sent into the **Sender address** field.

Step 6 Type the email address of the system administrator into the **Administrator address** field.

Step 7 In the **Email send timeout** field, enter a timeout interval (in minutes). If the server does not respond within the specified interval, the Email send action is stopped and an error is reported.

Step 8 To test connectivity to the SMTP server, click **Test Connectivity**.

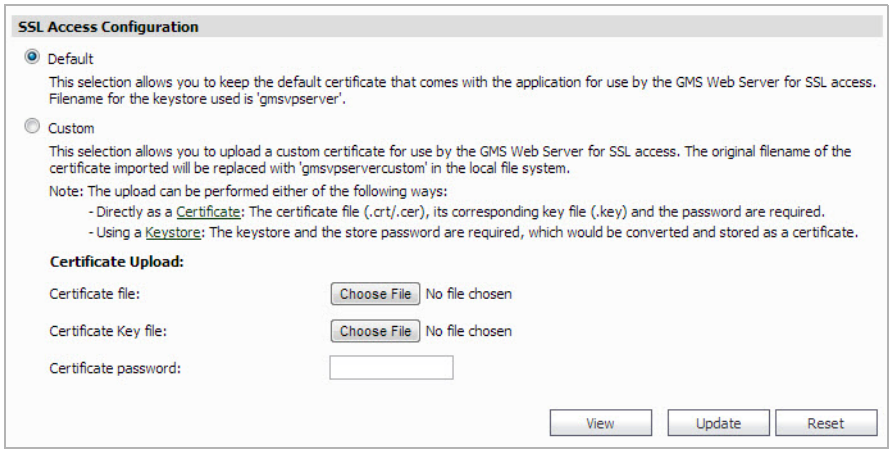
Step 9 To apply your changes, click **Update**.

Configuring SSL Access

The SSL Access Configuration section allows you to configure and upload a custom Keystore/ Certificate file for SSL access to the appliance, or select the default local keystore.

To configure SSL access:

Step 1 Navigate to the **Deployment > Settings** page under **SSL Access Configuration** section.



Step 2 Select **Default** to keep, or revert to, the default settings, where the default GMS Web Server certificate with 'gmsvpserverks' keystore is used.

Step 3 Select **Custom** to upload a custom certificate for GMS SSL access.

Step 4 In the **Certificate file** field, click **Choose File** to select your certificate file.

Step 5 In the **Certificate Key file** field, click **Choose File** to select your certificate key file.

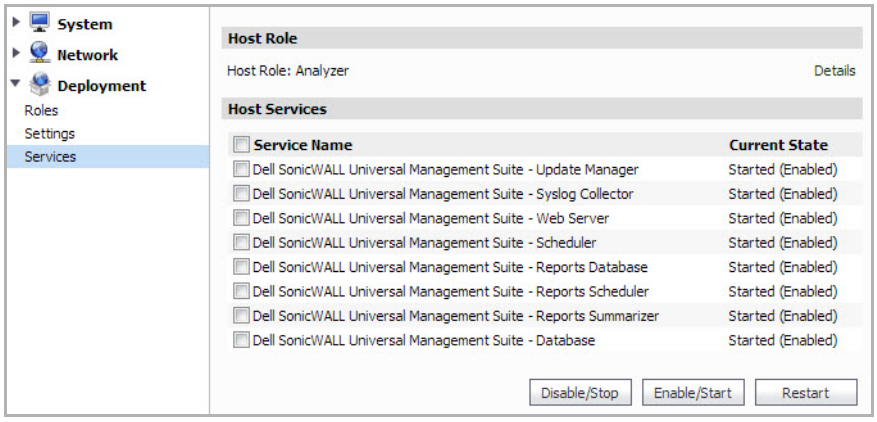
Step 6 Type the password for the certificate into the **Certificate password** field.

Step 7 Click **View** to display details about your certificate.

Step 8 Click **Update** to submit your changes.

Controlling Deployment Services

The **Deployment > Services** page provides a list of the services that are running on your system as part of Analyzer Virtual Appliance. It also provides a way to stop or start any of the services.



To stop a service that is currently Enabled, select the checkbox for that service and then click **Disable/Stop**.

To start a service that is currently Disabled, select the checkbox for that service and then click **Enable/Start**.

To restart a service that is either Enabled or Disabled, select the checkbox for that service and then click **Restart**.

Chapter 7

Provisioning and Adding Appliances

After installation, registration, and role configuration, the next steps in setting up your Dell SonicWALL Analyzer Virtual Appliance are provisioning Dell SonicWALL appliances to support Analyzer and adding them to the Dell SonicWALL Analyzer. All Dell SonicWALL appliances must be provisioned before adding them to the Dell SonicWALL Analyzer. Make sure the provisioned Dell SonicWALL appliances have a valid Analyzer license, one Analyzer license for each Dell SonicWALL appliance.

This chapter contains the following sections:

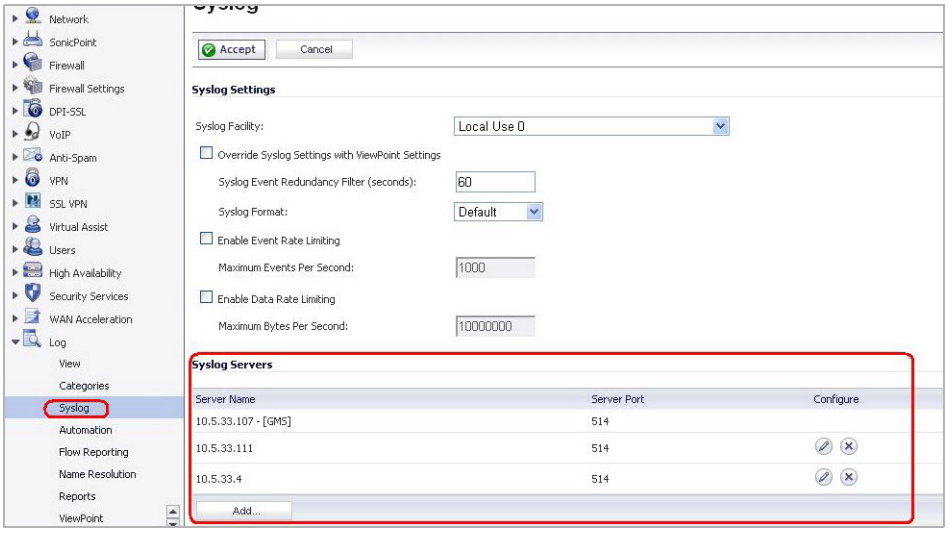
Provisioning a Dell SonicWALL Firewall Appliance

To provision a Dell SonicWALL firewall appliance to support Analyzer, complete the following steps:

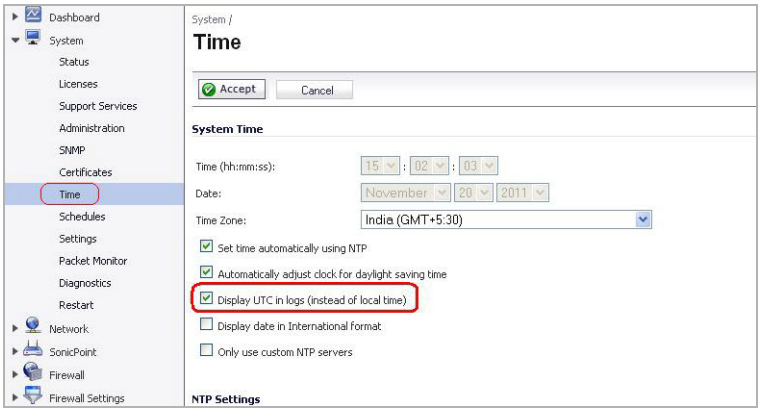
Step 1 Log in to the firewall appliance. Navigate to the **Log > Syslog** page.

Step 2 In Syslog Servers, click **Add**.

Step 3 Enter the Analyzer IP address to start sending syslogs. The Analyzer service should be activated. Set the log in UTC format and log category.



Step 4 Navigate to the **System > Time** page, and enable **Display UTC in logs (instead of local time)**.



Provisioning a Dell SonicWALL SRA SMB Appliance

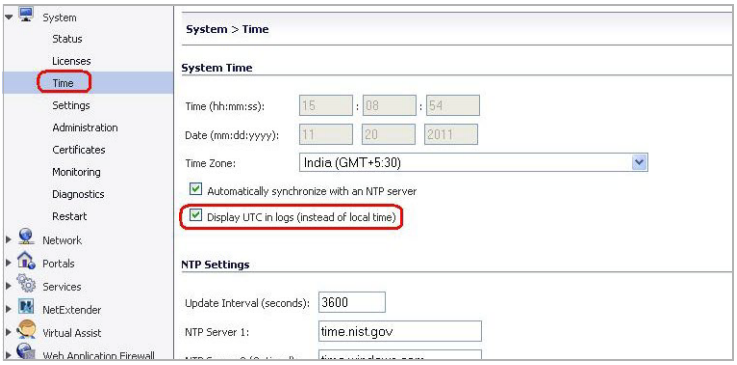
To provision a Dell SonicWALL SRA SMB appliance to support Analyzer, complete the following steps:

Step 1 Log in to the SRA SMB appliance. Navigate to the **Log > Analyzer** page.

Step 2 In Analyzer Settings, click **Enable Analyzer**.

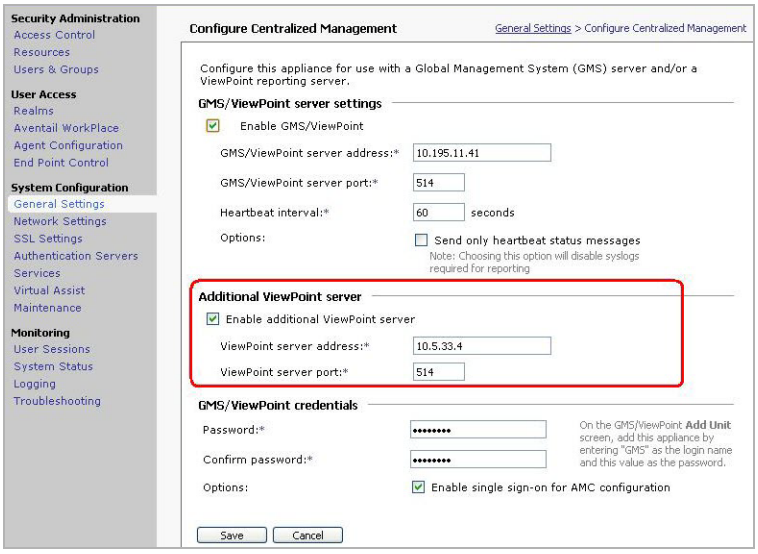
Step 3 Click **Add** to add the Analyzer IP address. This starts sending syslogs.

Step 4 Navigate to the **System > Time** page, and enable **Display UTC in logs (instead of local time)**.



Provisioning a Dell SonicWALL E-Class SRA Series Appliance

Currently there is no Analyzer settings implementation in SonicWALL E-Class SRA series appliances. To add Analyzer reporting support, use the **Additional ViewPoint** settings in the **General Settings > Configure Centralized Management** screen, and enter the Analyzer IP address and port number to start sending syslog.



Provisioning a Dell SonicWALL CDP Appliance

Currently there is no Analyzer settings implementation in Dell SonicWALL CDP appliances. To add Analyzer reporting support, use the **Analyzer** settings in the **Settings > SMB** screen. In Active Report, select **Enable**, and enter the Analyzer IP address and port number to start sending CDP syslog.

Adding Dell SonicWALL Appliances

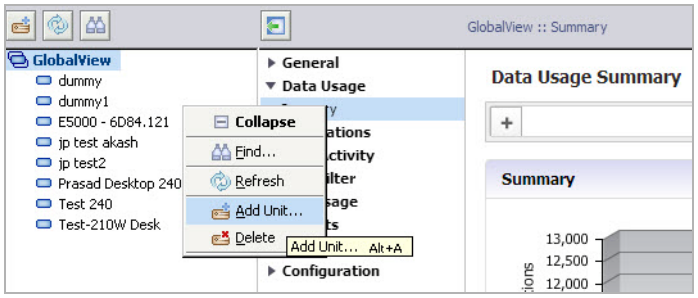
This section describes how to add Dell SonicWALL appliances to the Dell SonicWALL Analyzer. Analyzer Virtual Appliance checks with the Dell SonicWALL licensing server when you add an appliance, so it is important that Dell SonicWALL Analyzer has Internet access to the server. Analyzer Virtual Appliance can communicate with Dell SonicWALL appliances through HTTP or HTTPS.

To add a Dell SonicWALL appliance using the Analyzer Virtual Appliance management interface, complete the following steps:

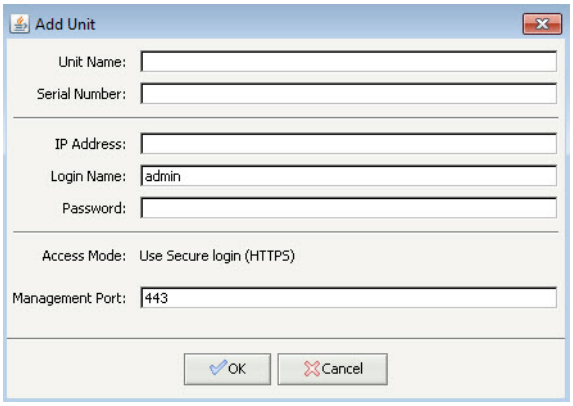
Step 1 Click the appliance tab that corresponds to the type of appliance that you want to add:

- **Firewall**
- **SRA**
- **CDP**

Step 2 Expand the Analyzer Virtual Appliance tree and select the group to which you are adding the Dell SonicWALL appliance. Then, right-click the group and select **Add Unit** from the pop-up menu. To not specify a group, right-click an open area in the left pane (TreeControl pane) of the Analyzer Virtual Appliance management interface and select **Add Unit** or click the **Add Unit i**con in the tool bar.



The Add Unit dialog box appears:



Step 3 Enter a descriptive name for the Dell SonicWALL appliance in the **Unit Name** field. Do not enter the single quote character (‘) in the **Unit Name** field.

Step 4 Enter the serial number of the Dell SonicWALL appliance in the **Serial Number** field.

Step 5 Enter the IP address of the Dell SonicWALL appliance in the **IP Address** field.

Step 6 Enter the administrator login name for the Dell SonicWALL appliance in the **Login Name** field.

Step 7 Enter the password used to access the Dell SonicWALL appliance in the **Password** field.

Step 8 For Access **Mode**, select from the following:

Step 9 The Dell SonicWALL appliance is connected with HTTPS by default.

Step 10 Enter the port used to connect to the Dell SonicWALL appliance in the **Management Port** field (default port for is HTTPS: 443).

Step 11 Click **OK**. The new Dell SonicWALL appliance appears in the Analyzer management interface. It has a yellow icon that indicates it has not yet been successfully acquired.

Step 12 Analyzer then attempts to set up an HTTPS connection to access the appliance. Analyzer then reads the appliance configuration and acquires the SonicWALL appliance for reporting. This might take a few minutes.

Note After the Dell SonicWALL appliance is successfully acquired, its icon turns blue, its configuration settings are displayed at the unit level, and its settings are saved to the database.

Chapter 8

Support

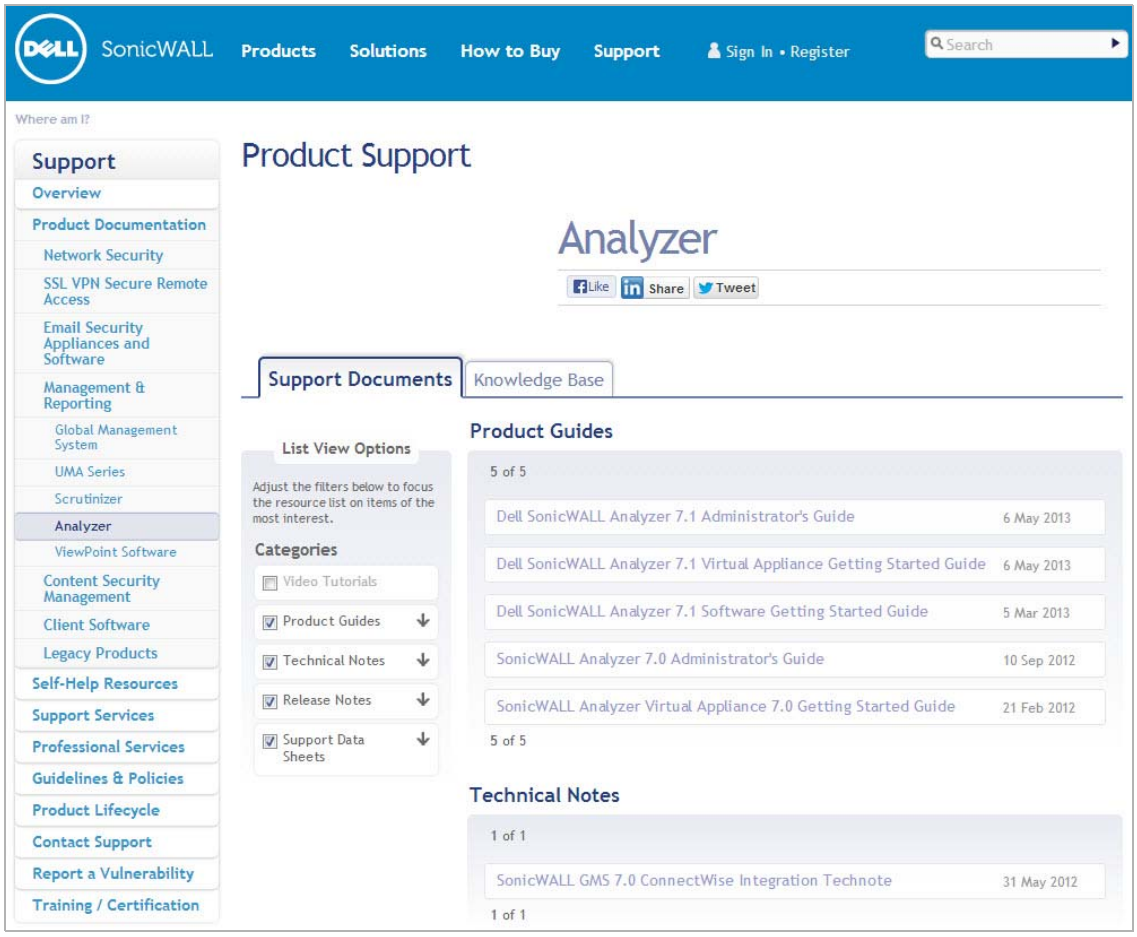
Related Technical Documentation

Dell SonicWALL reference documentation is available at the Dell SonicWALL Technical Documentation Online Library:
https://support.software.dell.com/

Dell SonicWALL Analyzer video training is available from the Analyzer Development Team:
http://software.sonicwall.com/gmsvp/Dev-Training/

The Dell SonicWALL Analyzer 7.2 documentation set includes the following:

- Dell SonicWALL Analyzer 7.2 Release Notes
- Dell SonicWALL Analyzer 7.2 Software Getting Started Guide
- Dell SonicWALL Analyzer 7.2 Virtual Appliance Getting Started Guide
- Dell SonicWALL Analyzer 7.2 Administrator's Guide



Live Product Demos

Get the most out of your Analyzer with the complete line of Dell SonicWALL products. The Dell SonicWALL Live Demo Site provides free test drives of Dell SonicWALL security products and services through interactive live product installations:

- UTM/Firewall/VPN
- Continuous Data Protection
- SSL VPN Secure Remote Access
- Content Filtering
- Email Security
- GMS and Analyzer

For more information, visit:
http://livedemo.sonicwall.com/