

SonicWALL Global Management System Introduction Guide

Standard Edition

Version 2.0

Copyright Information

© 2001 SonicWALL, Inc. All rights reserved.

Under the copyright laws, this manual or the software described within, may not be copied, in whole or part, without the written consent of the manufacturer, except in the normal use of the software to make a backup copy. The same proprietary and copyright notices must be affixed to any permitted copies as were affixed to the original. Under the law, copying includes translating into another language or format.

SonicWALL is a registered trademark of SonicWALL, Inc.

Other product and company names mentioned herein may be trademarks and/or registered trademarks of their respective companies.

Specifications and descriptions subject to change without notice.

Part Number: 232-000183-00 Rev A

Software License Agreement for SonicWALL Global Management System

Software License Agreement

This Software License Agreement (SLA) is a legal agreement between you and SonicWALL, Inc. (SonicWALL) for the SonicWALL software product identified above, which includes computer software and any and all associated media, printed materials, and online or electronic documentation (SOFTWARE PRODUCT). By opening the sealed package(s), installing, or otherwise using the SOFTWARE PRODUCT, you agree to be bound by the terms of this SLA. If you do not agree to the terms of this SLA, do not open the sealed package(s), install or use the SOFTWARE PRODUCT. You may however return the unopened SOFTWARE PRODUCT to your place of purchase for a full refund.

The SOFTWARE PRODUCT is licensed, not sold.

You acknowledge and agree that all right, title, and interest in and to the SOFTWARE PRODUCT, including all associated intellectual property rights, are and shall remain with SonicWALL. This SLA does not convey to you an interest in or to the SOFTWARE PRODUCT, but only a limited right of use revocable in accordance with the terms of this SLA.

- The SOFTWARE PRODUCT is licensed as a single product.
- You may also store or install a copy of the SOFTWARE PRODUCT on a storage device, such as a network server, used only to install or run the SOFTWARE PRODUCT on your other computers over an internal network.
- You may not resell, or otherwise transfer for value, rent, lease, or lend the SOFTWARE PRODUCT.
- The SOFTWARE PRODUCT is trade secret or confidential information of SonicWALL or its licensors. You shall take appropriate action to protect the confidentiality of the SOFTWARE PRODUCT. You shall not reverse-engineer, de-compile, or disassemble the SOFTWARE PRODUCT, in whole or in part. The provisions of this section will survive the termination of this SLA.
- You agree and certify that neither the SOFTWARE PRODUCT nor any other technical data received from SonicWALL, nor the direct product thereof, will be exported outside the United States except as permitted by the laws and regulations of the United States, which may require U.S. Government export approval/licensing. Failure to strictly comply with this provision shall automatically invalidate this License.

License

SonicWALL grants you a non-exclusive license to use the SOFTWARE PRODUCT for a number of SonicWALL Internet Security Appliances. This number is specified and shipped with the SOFTWARE PRODUCT. Support for additional SonicWALL Internet Security Appliances is subject to a separate upgrade license.

OEM - If the SOFTWARE PRODUCT is modified and enhanced for a SonicWALL OEM partner, you must adhere to the software license agreement of the SonicWALL OEM partner.

Upgrades

If the SOFTWARE PRODUCT is labeled as an upgrade, you must be properly licensed to use a product identified by SonicWALL as being eligible for the upgrade in order to use the SOFTWARE PRODUCT. A SOFTWARE PRODUCT labeled as an upgrade replaces and/or supplements the product that formed the basis for your eligibility for the upgrade. You may use the resulting upgraded product only in accordance with the terms of this SLA. If the SOFTWARE PRODUCT is an upgrade of a component of a package of software programs that you licensed as a single product, the SOFTWARE PRODUCT may be used and transferred only as part of that single product package and may not be separated for use on more than one computer.

Support Services

SonicWALL may provide you with support services related to the SOFTWARE PRODUCT ("Support Services"). Use of Support Services is governed by the SonicWALL policies and programs described in the user manual, in "online" documentation, and/or in other SonicWALL-provided materials. Any supplemental software code provided to you as part of the Support Services shall be considered part of the SOFTWARE PRODUCT and subject to terms and conditions of this SLA. With respect to technical information you provide to SonicWALL as part of the Support Services, SonicWALL may use such information for its business purposes, including for product support and development. SonicWALL shall not utilize such technical information in a form that identifies its source.

Ownership

As between the parties, SonicWALL retains all title to, ownership of, and all proprietary rights with respect to the SOFTWARE PRODUCT (including but not limited to any images, photographs, animations, video, audio, music, text, and "applets" incorporated into the SOFTWARE PRODUCT), the accompanying printed materials, and any copies of the SOFTWARE PRODUCT. The SOFTWARE PRODUCT is protected by copyright laws and interna-

tional treaty provisions. The SOFTWARE PRODUCT is licensed, not sold. This SLA does not convey to you an interest in or to the SOFTWARE PRODUCT, but only a limited right of use revocable in accordance with the terms of this SLA.

U.S. Government Restricted Rights

If you are acquiring the Software including accompanying documentation on behalf of the U.S. Government, the following provisions apply. If the Software is supplied to the Department of Defense (“DoD”), the Software is subject to “Restricted Rights”, as that term is defined in the DOD Supplement to the Federal Acquisition Regulations (“DFAR”) in paragraph 252.227 7013(c) (1). If the Software is supplied to any unit or agency of the United States Government other than DOD, the Government's rights in the Software will be as defined in paragraph 52.227 19(c) (2) of the Federal Acquisition Regulations (“FAR”). Use, duplication, reproduction or disclosure by the Government is subject to such restrictions or successor provisions. Contractor/Manufacturer is: SonicWALL, Inc. 1160 Bordeaux Drive, Sunnyvale, California 94089.

Miscellaneous

This SLA represents the entire agreement concerning the subject matter hereof between the parties and supersedes all prior agreements and representations between them. It may be amended only in writing executed by both parties. This SLA shall be governed by and construed under the laws of the State of California as if entirely performed within the State and without regard for conflicts of laws. Should any term of this SLA be declared void or unenforceable by any court of competent jurisdiction, such declaration shall have no effect on the remaining terms hereof. The failure of either party to enforce any rights granted hereunder or to take action against the other party in the event of any breach hereunder shall not be deemed a waiver by that party as to subsequent enforcement of rights or subsequent actions in the event of future breaches.

Termination

This SLA is effective upon your opening of the sealed package(s), installing or otherwise using the SOFTWARE PRODUCT, and shall continue until terminated. Without prejudice to any other rights, SonicWALL may terminate this SLA if you fail to comply with the terms and conditions of this SLA. In such event, you agree to return or destroy the SOFTWARE PRODUCT (including all related documents and components items as defined above) and any and all copies of same.

Limited Warranty

SONICWALL WARRANTS THAT A) THE SOFTWARE PRODUCT WILL PERFORM SUBSTANTIALLY IN ACCORDANCE WITH THE ACCOMPANYING WRITTEN MATERIALS FOR A PERIOD OF NINETY (90) DAYS FROM THE DATE OF PRODUCT REGISTRATION, AND B) ANY SUPPORT SERVICES PROVIDED BY SONICWALL SHALL BE SUBSTANTIALLY AS DESCRIBED IN APPLICABLE WRITTEN MATERIALS PROVIDED TO YOU BY SONICWALL. ANY IMPLIED WARRANTIES ON THE SOFTWARE PRODUCT ARE LIMITED TO NINETY (90) DAYS. SOME STATES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON DURATION OF AN IMPLIED WARRANTY, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

Customer Remedies

SonicWALL's and its suppliers' entire liability and your exclusive remedy shall be, at SonicWALL's option, either a) return of the price paid, or b) repair or replacement of the SOFTWARE PRODUCT that does not meet SonicWALL's Limited Warranty and which is returned to SonicWALL with a copy of your receipt. This Limited Warranty is void if failure of the SOFTWARE PRODUCT has resulted from accident, abuse, or misapplication. Any replacement SOFTWARE PRODUCT shall be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Outside of the United States, neither these remedies nor any product Support Services offered by SonicWALL are available without proof of purchase from an authorized SonicWALL international reseller or distributor.

No Other Warranties

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, SONICWALL AND ITS SUPPLIERS/ LICENSORS DISCLAIM ALL OTHER WARRANTIES AND CONDITIONS, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT, WITH REGARD TO THE SOFTWARE PRODUCT, AND THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHERS, WHICH VARY FROM STATE/JURISDICTION TO STATE/JURISDICTION.

Limitation Of Liability

EXCEPT FOR THE WARRANTIES PROVIDED HEREUNDER, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL SONICWALL OR ITS SUPPLIERS/LICENSORS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES FOR LOST BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE PRODUCT OR THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES, EVEN IF SONICWALL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, SONICWALL'S ENTIRE LIABILITY UNDER ANY PROVISION OF THIS SLA SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE SOFTWARE PRODUCT PROVIDED, HOWEVER, IF YOU HAVE ENTERED INTO A SONICWALL SUPPORT SERVICES AGREEMENT, SONICWALL'S ENTIRE LIABILITY REGARDING SUPPORT SERVICES SHALL BE GOVERNED BY THE TERMS OF THAT AGREEMENT. BECAUSE SOME STATES AND JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

Manufacturer is SonicWALL, Inc. with headquarters located at 1160 Bordeaux Drive, Sunnyvale, CA 94089-1209, USA.

Chapter 1 Introducing SonicWALL GMS	9
Overview	9
SonicWALL GMS Applications	9
Features	9
Deployment Requirements	11
Scaling SonicWALL GMS	12
Chapter 2 Using and Navigating SonicWALL GMS	13
Registering SonicWALL GMS	14
Logging In	15
SonicWALL GMS Panels	17
Policies Panel	17
Console Panel	18
Views	19
Global View	19
Group View	20
Unit View	21
SonicWALL GMS Menus	22
SonicWALL GMS Icons	22
Getting Help	24
Chapter 3 Planning	25
Creating Custom Fields	26
SonicWALL Fields	27
Setting Up Views	28
Standard Geographic Views	28
Firmware Views	28
Registration Views	28
Upgrade View	28

Introducing SonicWALL GMS

Overview

The SonicWALL Global Management System (SonicWALL GMS) is a browser-based client/server application that can configure and manage thousands of SonicWALL Internet security appliances.

SonicWALL GMS is capable of managing large networks that use SonicWALL appliances. This dramatically lowers the cost of managing a secure distributed network. SonicWALL GMS does this by enabling administrators to centrally monitor the status of and apply configurations to all SonicWALL appliances under management. SonicWALL GMS further enables finer control by allowing the management of SonicWALL groups and individual SonicWALL appliances.

SonicWALL GMS can also configure multiple site virtual private networks (VPNs). From the SonicWALL GMS user interface (UI), you can add VPN licenses to SonicWALL appliances, configure VPN settings, and enable or disable remote-client access for each network.

SonicWALL GMS provides monitoring features which enable you to view the current status of SonicWALL appliances, pending tasks, and log messages.

SonicWALL GMS Applications

SonicWALL GMS is designed to be used within any organization that needs to centrally manage and configure multiple SonicWALL appliances. Some of the major uses for SonicWALL GMS include:

- Remote site management for distributed organizations—enables medium- to large-sized enterprises with multiple sites to centrally administer Internet security policies.
- Managed security services for system integrators—enables system integrators to offer turnkey managed security services to small- to medium-sized enterprises (SMEs).
- Managed security services for service providers—enables service providers to offer managed security services to SMEs.

Features

SonicWALL GMS offers the following features:

- Policy Based Management

SonicWALL GMS enables network administrators to globally define, distribute, enforce and deploy network security policies for managed SonicWALL appliances, creating a highly secure and controllable firewall configuration environment.

- Managed VPN Services

SonicWALL GMS simplifies the task of globally defining, distributing, enforcing and deploying VPN policies for managed VPN gateways, making it easy to manage a global VPN network.

- Comprehensive Security Service Management

In addition to managing security and VPN policies, SonicWALL GMS enables network administrators to globally define, distribute, enforce and deploy all the firewall settings for managed SonicWALL appliances.

It also enables network administrators to remotely upgrade SonicWALL appliances and add subscription services such as content filtering and virus scanning.

- **License Management**
SonicWALL GMS provides centralized license management of SonicWALL upgrade and subscription services. This makes it easy to store, apply, track, and update upgrade and subscription license information for all managed SonicWALL appliances.
- **Multi-Tier Policy Hierarchy Architecture**
SonicWALL GMS enables administrators to define and distribute one or more policies to an individual or a group of managed SonicWALL appliances. The policies can be executed immediately or can be scheduled to run at a later time.
SonicWALL GMS supports up to seven levels of groups. Policies can be applied at any level.
- **Scalable Architecture**
The SonicWALL GMS distributed architecture scales to support thousands of SonicWALL appliances, making large-scale deployments a reality. It allows network administrators to deploy a management architecture that scales to support a rapidly growing customer base while minimizing support staff and hardware.
Note: SonicWALL GMS can support a mixture of Windows-based and Solaris-based SGMS servers in the multi-server distributed architecture.
- **Load balancing and Redundancy for Security Management**
In a SonicWALL GMS multi-server configuration, each Agent is responsible for a set of SonicWALL appliances. If an Agent fails, peer SonicWALL GMS Agents will manage the SonicWALL appliances for the failed Agent.
To ensure redundancy for the Console, it can be installed in a cluster environment.
- **Role Based Management**
SonicWALL GMS provides a multi-user architecture with customizable views. Multiple users with different management privileges can be defined to distribute management tasks across a group of administrators and operators.
- **Command-line Interface**
SonicWALL features a command line interface that can provide integration with network database systems. It can be used to add multiple SonicWALL appliances at once, to configure security and VPN policies, to change SonicWALL appliance settings, and to display product-related status.
- **Database support**
SonicWALL GMS supports access to industry-leading relational databases for highly efficient and reliable data storage and retrieval.
- **Audit Trailing**
All changes made in SonicWALL GMS are automatically logged, along with the identity of the individuals making the changes.
- **GUI-based Architecture**
The SonicWALL GMS GUI is easy to use and enables administrators to navigate through the managed SonicWALL appliances, view their settings, and make changes.
- **Advanced Security Features**
 - A random password is assigned to each SonicWALL appliance. All passwords are encrypted and stored in the database.
 - SonicWALL GMS communicates with managed SonicWALL appliances using IPSec VPN tunnels.
 - SonicWALL GMS communicates with the SonicWALL registration database using HTTPS.
 - The SonicWALL GMS login password is encrypted.
- **Enhanced Search Features**
SonicWALL GMS enables you to locate task or log entries by entering search criteria.
- **Upgrade and Subscription Expiration Notices**
SonicWALL GMS sends an alert to the SGMS administrator when upgrade and subscription services are about to expire for the managed SonicWALL appliances.

Deployment Requirements

SonicWALL GMS requires a number of deployment components. Before installing SonicWALL GMS, review the following deployment requirements.

- Supported Platforms

- Solaris 8
- Windows NT 4.0
- Windows 2000.

- Supported Databases

- Oracle version 8.1i
- Microsoft SQL Server 2000.

- Supported Drivers

SonicWALL GMS requires a JDBC driver to communicate with the database. For Oracle, the JDBC driver is included with the Oracle database. For Microsoft SQL Server 2000, a JDBC driver must be supplied separately.

- Secure Communications Link

SonicWALL GMS communicates with the managed SonicWALL appliances using IPSec VPN tunnels. These tunnels are created between the SGMS gateway that resides between the SonicWALL GMS server(s) and the managed SonicWALL appliances. An SGMS gateway can be any VPN-enabled SonicWALL appliance. A SonicWALL PRO-VX is recommended.

- Supported SonicWALL Models

- SonicWALL TELE2
- SOHO2
- XPRS
- XPRS2
- PRO
- PRO-VX
- GX Series.

- Supported Firmware

The SonicWALL appliances and the SGMS gateway must run firmware version 6.1.1.0 or later. No earlier versions of the firmware are supported.

- SonicWALL GMS Installation

SonicWALL GMS can be installed on one server (one-tier installation) or multiple servers (two-tier installation).

When SonicWALL GMS is installed on one system, there is no system management redundancy and load balancing is not available for the managed SonicWALL appliances.

When SonicWALL GMS is installed on multiple systems, system management redundancy and load balancing is available for the managed SonicWALL appliances.

Note: The SonicWALL GMS console and agent servers must use static IP addresses.

- Database Installation

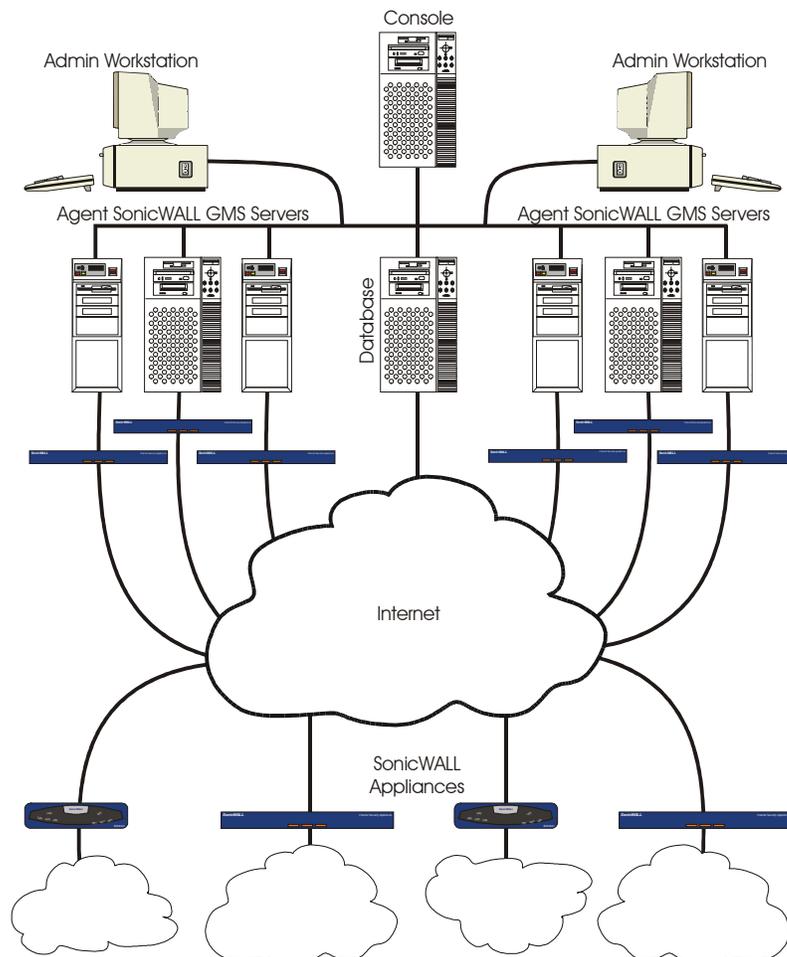
Installing the database on a separate system is highly recommended.

Scaling SonicWALL GMS

The SonicWALL Global Management System (SonicWALL GMS) is designed to be highly scalable to support service providers and enterprise customers with large numbers of SonicWALL appliances.

SonicWALL GMS offers a new two-tier management architecture, consisting of multiple servers: One Console and several Agents. Each Agent server can manage a number of SonicWALL appliances. Additional capacity can be added to the management system by adding new Agent servers. This two-tier architecture also provides redundancy and load balancing, assuring reliable connections to the SonicWALL appliances under management (Figure 1).

Figure 1: SonicWALL GMS Two-Tier Distributed Configuration



The two-tier architecture uses multiple SonicWALL GMS servers. The console server provides the user a single interface to the management system. Each agent server can manage a number of SonicWALL appliances. This number depends on the SGMS gateway that resides between the agent server and the SonicWALL appliances. If it is PRO-VX, the agent server can manage up to 1000 SonicWALL appliances.

- The SGMS gateway that resides between a SGMS agent server and the SonicWALL appliances provides the secure communications.
- Each SonicWALL appliance can have a primary agent server and a standby server. And each agent server can be a primary server for some SonicWALL appliances and a standby server for other SonicWALL appliances.
- Configuration of and changes to the SonicWALL GMS and the SonicWALL appliances are written into the database.
- The users at the Admin Workstations can access the SonicWALL GMS console through a Web browser from any location.

Using and Navigating SonicWALL GMS

The SonicWALL Global Management System (SonicWALL GMS) has an easy-to-use web browser-based user interface (UI) which is very similar to the standard SonicWALL firewall UI. However, the SonicWALL GMS UI is much more powerful. SonicWALL GMS can manage thousands of SonicWALL appliances and through its interface, you can configure individual SonicWALL appliances, groups of SonicWALL appliances, or all SonicWALL appliances within the network.

This chapter describes the following:

- SonicWALL GMS registration process. See “Registering SonicWALL GMS” on page 14.
- SonicWALL GMS login process. See “Logging In” on page 15.
- SonicWALL GMS Policies and Console panels. See “SonicWALL GMS Panels” on page 17.
- SonicWALL GMS global, group, and individual appliance views. See “Views” on page 19.
- SonicWALL GMS menus. See “SonicWALL GMS Menus” on page 22.
- SonicWALL GMS icons. See “SonicWALL GMS Icons” on page 22.

Registering SonicWALL GMS

The first time you start SonicWALL GMS, the Registration page will appear. To register SonicWALL GMS, follow these steps:

Note: SonicWALL GMS must be registered before you can use it. To complete registration, SonicWALL GMS must have direct access to the Internet.

1. Select from the following:

- For Windows, click the SGMS icon on your desktop.
- For Solaris, open a browser and enter `http://localhost/sgms/login`.

The SonicWALL GMS registration screen appears (Figure 2).

Figure 2: Registration Page

SGMS Product Registration Screen - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://localhost/sgms/login> Go Links >>

No license exists.

Please register your SGMS product
The information you supply will be used for registration purposes only and will not be given to a third party.

Fields marked by arrows (➤) are required.

First Name: ➤ Last Name: ➤
Title: ➤ Company: ➤
Street Address: ➤ City: ➤
State or Province: ➤ Postal Code: ➤
Country: ➤ Phone: ➤
Fax: E-mail: ➤
SGMS Serial Number: ➤

update reset

SONICWALL SonicWALL Global Management System
Standard Edition

Done Local intranet

2. Enter your contact information.
3. Enter the SonicWALL GMS serial number in the **SGMS Serial Number** field.
4. When you are finished, click **Update**.

SonicWALL GMS will contact the SonicWALL registration site. After SonicWALL GMS is successfully registered, the Login page appears. For more information, see “Logging In” on page 15.

Note: If registration fails, contact SonicWALL technical support.

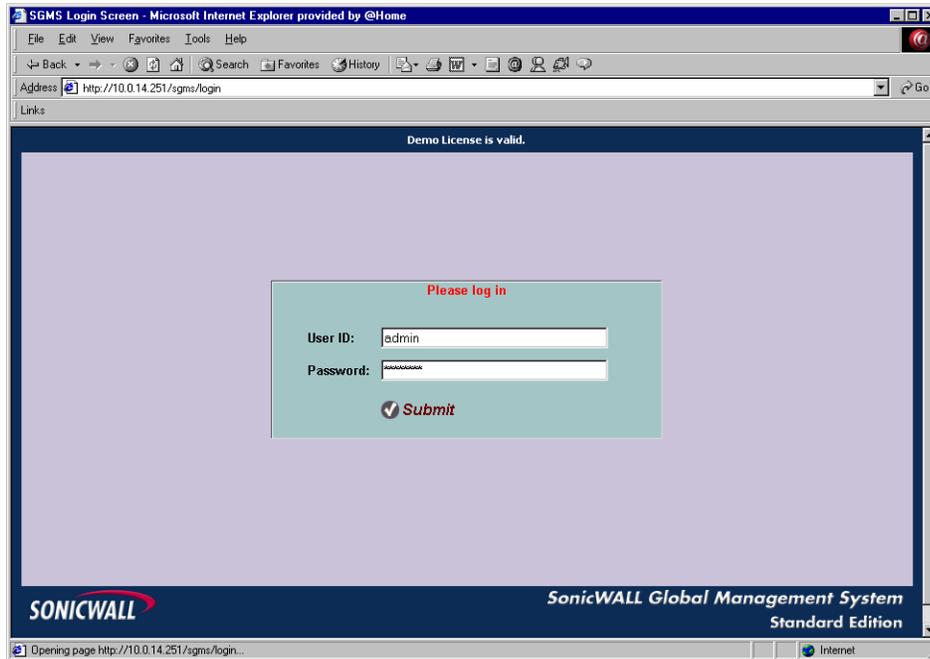
Logging In

To start SonicWALL GMS and log in, follow these steps:

1. Select from the following:
 - For Windows, double-click the SGMS icon on your desktop. If you are logging in from a remote location, open a web browser and enter `http://sgms_ipaddress/sgms/login`.
 - For Solaris, open a browser and enter `http://localhost/sgms/login`. If you are logging in from a remote location, open a web browser and enter `http://sgms_ipaddress/sgms/login`.

The SonicWALL GMS login page appears (Figure 3).

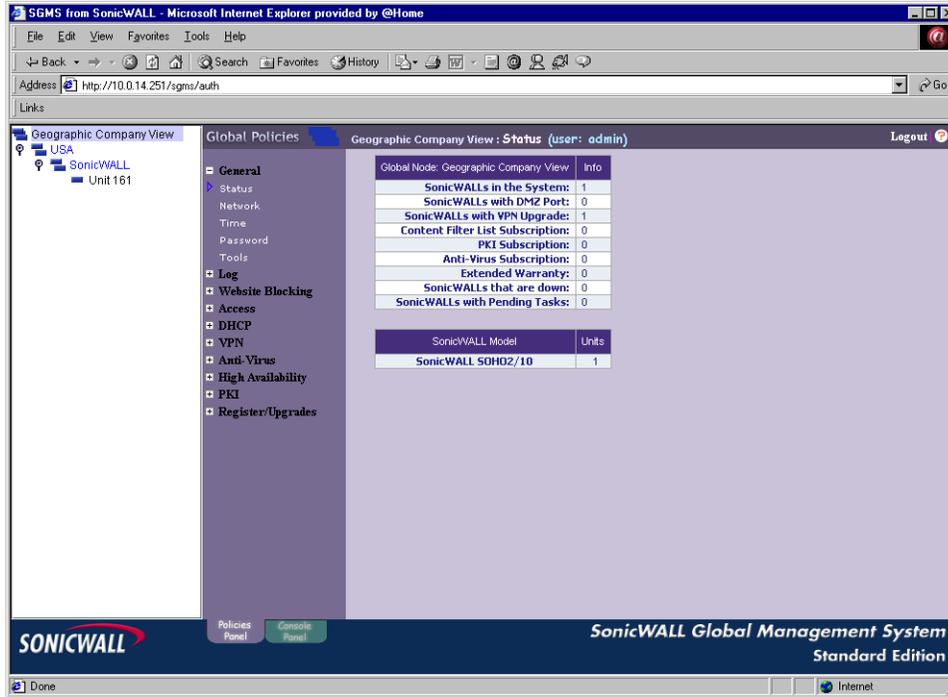
Figure 3: SonicWALL GMS Login Page



2. Enter the SonicWALL user ID (default: admin) and password (default: password).

3. Click **Submit**. If another user is already accessing the interface using the admin account, you will receive a multiple login error and will not be able to log in. Otherwise, the SonicWALL GMS UI opens (Figure 4).

Figure 4: SonicWALL GMS UI



SonicWALL GMS Panels

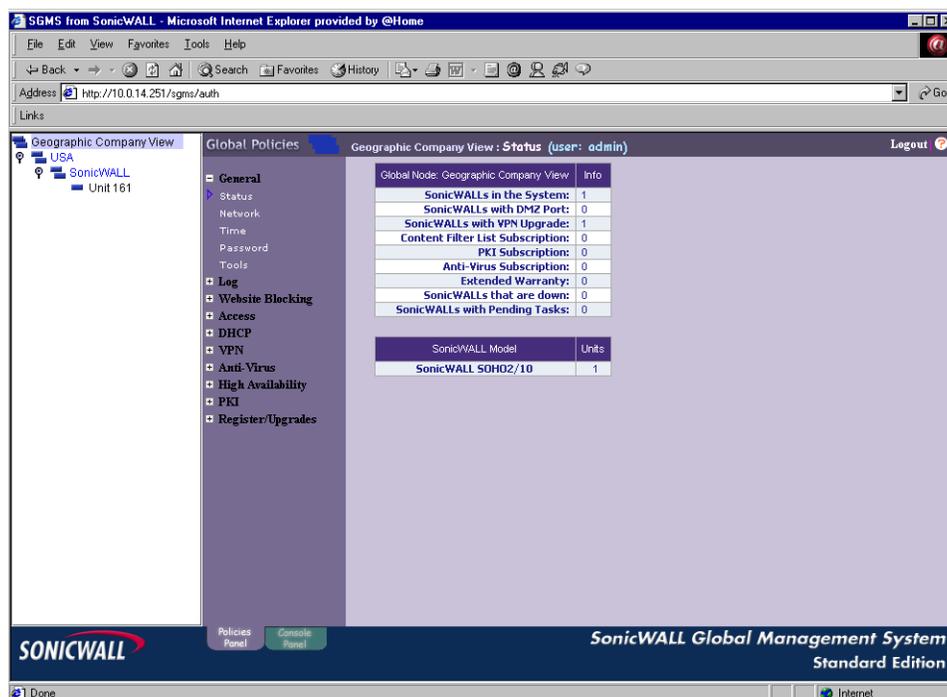
SonicWALL GMS has two major configuration panels: the Policies Panel and the Console Panel. The Policies Panel configures SonicWALL appliances. The Console Panel configures SonicWALL GMS settings. For information on the Policies Panel, see “Policies Panel,” on this page. For information on the Console Panel, see “Console Panel” on page 18.

Policies Panel

The Policies Panel is used to configure SonicWALL appliances. From this page, you can apply settings to all SonicWALL appliances being managed by SonicWALL GMS, all SonicWALL appliances within a group, or individual SonicWALL appliances.

To open the Policies Panel, click the **Policies Panel** tab at the bottom of the SonicWALL GMS UI (Figure 5).

Figure 5: SonicWALL GMS UI: Policies Panel



From the Policies Panel, you can do the following:

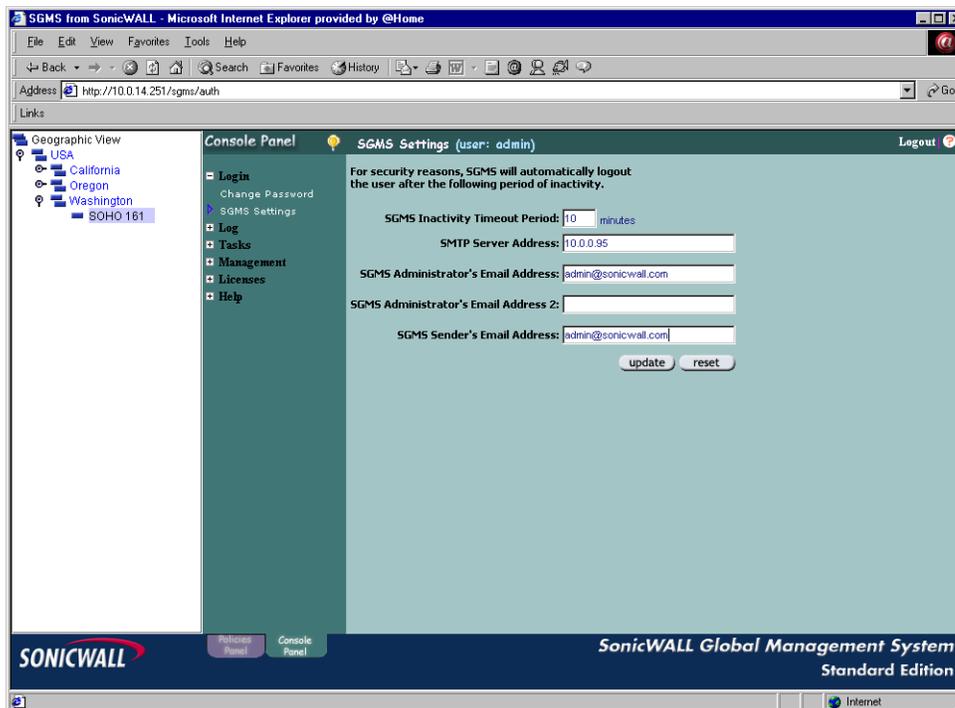
- View the status of a SonicWALL appliance or group.
- Change general settings such as the network settings, the time, and the SonicWALL passwords.
- Configure the SonicWALL log settings.
- Configure website blocking options.
- Configure firewall options.
- Configure advanced settings, such as proxy settings, intranet settings, routes, DMZ addresses, one-to-one network address translation (NAT), and Ethernet settings.
- Configure DHCP settings.
- Create Virtual Private Networking (VPN) Security Associations (SAs).
- Configure RADIUS, anti-virus, and high availability settings.
- Register SonicWALL appliances.
- Update SonicWALL firmware.
- Activate PKI certificates, other feature upgrades, and subscription services.

Console Panel

The Console Panel is used to configure SonicWALL GMS settings, view pending tasks, and manage SonicWALL GMS and SonicWALL appliance licenses.

To open the Console Panel, click the **Console Panel** tab at the bottom of the SonicWALL GMS UI (Figure 6).

Figure 6: SonicWALL GMS UI: Console Panel



From the Console Panel, you can do the following:

- Change the SonicWALL GMS password.
- View the SonicWALL GMS log. The SonicWALL GMS log contains information on alert notifications, failed SonicWALL GMS login attempts, and other events that apply to SonicWALL GMS.
- Manage tasks. You can view the status of SonicWALL tasks and, if necessary, delete them.
- Manage upgrade and subscription licenses for SonicWALL appliances. After loading these licenses into the license pool, you can apply them to SonicWALL appliances from the Policies Panel.
- Manage SonicWALL GMS user logins and privileges, Agents, and dynamic views of the managed SonicWALL appliances.

Views

The SonicWALL GMS UI is a robust and powerful tool you can use to apply settings to all SonicWALL appliances being managed by SonicWALL GMS, all SonicWALL appliances within a group, or individual SonicWALL appliances simply by selecting the Global, Group, or Unit view within the SonicWALL GMS UI.

The SonicWALL GMS UI supports up to seven group levels of hierarchy. As a result, you can create up to five levels of groups.

Note: Views are only applicable on the Policies Panel. They do not affect the Console Panel.

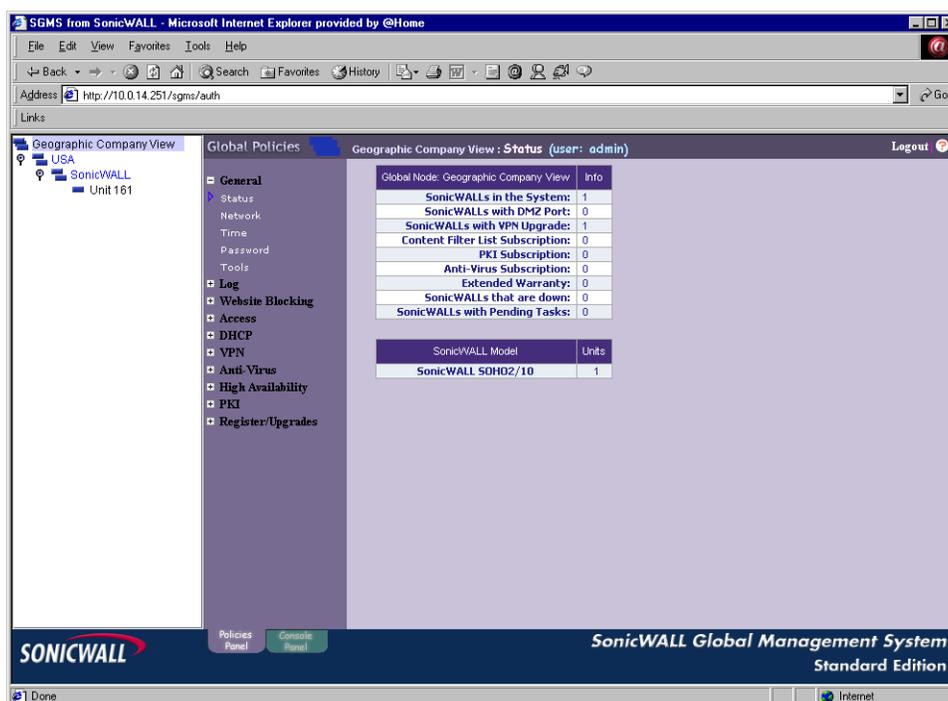
This section describes each view and what to consider when making changes. Select from the following:

- Global View—see “Global View,” below.
- Group View—see “Group View” on page 20.
- Unit View—see “Unit View” on page 21.

Global View

From the Global view, changes are applied to all SonicWALL appliances that are being managed by SonicWALL GMS. To open the Global view, click the Global View icon in the upper-left hand corner. The Global Status page appears (Figure 7).

Figure 7: Global Status Page



As you navigate the SonicWALL GMS Policies Panel screens with the Global view selected and make changes, those changes are broken down into configuration tasks and applied to each SonicWALL appliance being managed by SonicWALL GMS.

As SonicWALL GMS processes the tasks, some SonicWALL appliances may be down or offline. When this occurs, SonicWALL GMS spools the task and reattempts the update later.

Note: Depending on the page that you are configuring, the SonicWALL appliance(s) may automatically restart. We recommend scheduling the tasks to run when network activity is low. For information on which changes require restarting, refer to their configuration instructions.

Making global changes through the SonicWALL GMS UI enables you to save time by instituting changes that affect all SonicWALL appliances within the network through a single operation. Although this is very convenient, making changes to all SonicWALL appliances can have unintended consequences. Be careful when making global changes.

Global View Status Page

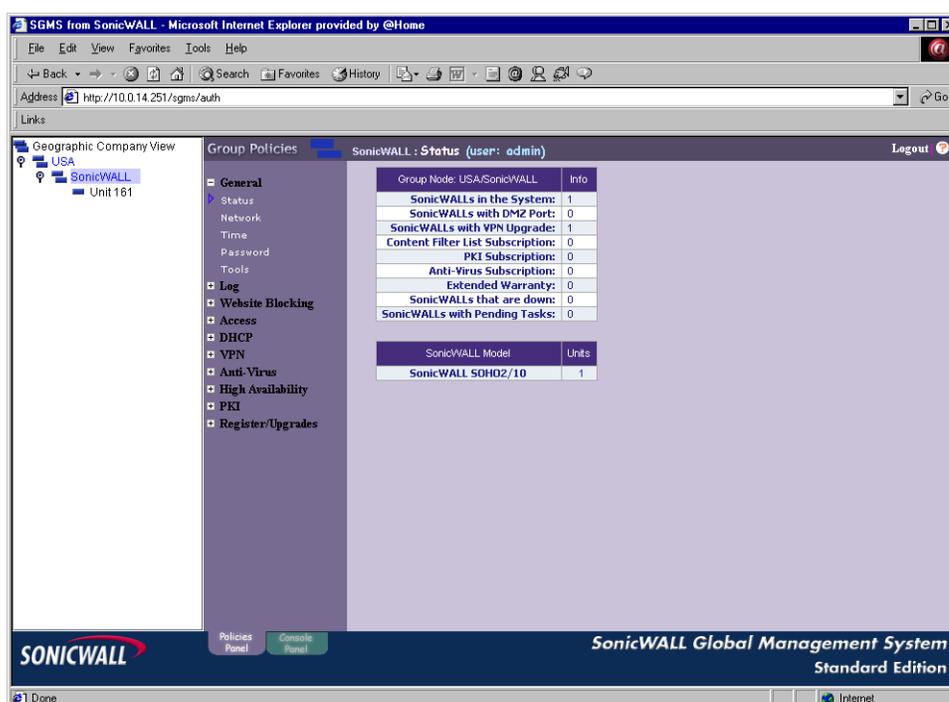
The Global View Status page contains a list of statistics for all SonicWALL appliances within the network. These include:

- SonicWALLs in the System—specifies the number of SonicWALL appliances managed by the SonicWALL GMS UI.
- SonicWALLs with DMZ Port—specifies the number of SonicWALL appliances that have a DMZ port.
- SonicWALLs with VPN Upgrade—specifies the number of SonicWALL appliances that are licensed for a VPN upgrade.
- Content Filter List Subscription—specifies the number of SonicWALL appliances that are licensed for Content Filter List subscriptions.
- PKI Subscription—specifies the number of SonicWALL appliances that have PKI subscriptions.
- Anti-Virus Subscription - specifies the number of SonicWALL appliances that have anti-virus subscriptions.
- Extended Warranty—specifies the number of SonicWALL appliances that have an extended warranty.
- SonicWALLs that are down—specifies the number of SonicWALL appliances that are down.
- SonicWALLs with Pending Tasks—specifies the number of SonicWALL appliances that have pending tasks.
- SonicWALL Models—specifies the number and types of SonicWALL appliances that are being managed by SonicWALL GMS.

Group View

From the Group view, changes you make are applied to all SonicWALL appliances within the group. To open the Group view, click a group icon in the left pane of the SonicWALL GMS UI. The Group Status page appears (Figure 8).

Figure 8: Group Status Page



As you move through the SonicWALL GMS UI with the Group view selected and make changes, those changes are broken down into configuration tasks and applied to each subgroup and each SonicWALL appliance within the group.

As SonicWALL GMS processes the tasks, some SonicWALL appliances may be down or offline. When this occurs, SonicWALL GMS spools the task and reattempts the update later.

Note: Depending on the page that you are configuring, the SonicWALL appliance(s) may automatically restart. We recommend scheduling the tasks to run when network activity is low. For information on which changes require restarting, refer to their configuration instructions.

Making group changes through the SonicWALL GMS UI enables you to save time by instituting changes that affect all SonicWALL appliances within the group through a single operation. Although this is very convenient, some changes can have unintended consequences. Be careful when making these changes.

Group View Status Page

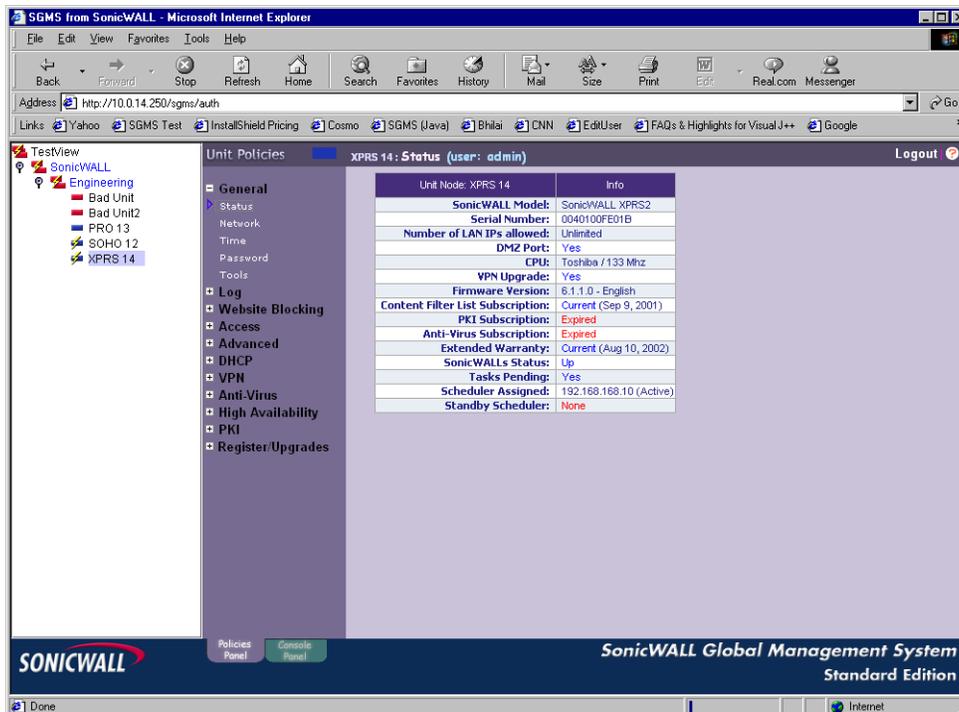
The Group View Status page contains a list of statistics for all SonicWALL appliances within the group. These include:

- SonicWALLs in the System—specifies the number of SonicWALL appliances managed by the SonicWALL GMS UI.
- SonicWALLs with DMZ Port—specifies the number of SonicWALL appliances that have a DMZ port.
- SonicWALLs with VPN Upgrade—specifies the number of SonicWALL appliances that are licensed for a VPN upgrade.
- Content Filter List Subscription—specifies the number of SonicWALL appliances that are licensed for Content Filter List subscriptions.
- PKI Subscription—specifies the number of SonicWALL appliances that have PKI subscriptions.
- Anti-Virus Subscription - specifies the number of SonicWALL appliances that have anti-virus subscriptions.
- Extended Warranty—specifies the number of SonicWALL appliances that have an extended warranty.
- SonicWALLs that are down—specifies the number of SonicWALL appliances that are down.
- SonicWALLs with Pending Tasks—specifies the number of SonicWALL appliances that have pending tasks.
- SonicWALL Models—specifies the number and types of SonicWALL appliances that are being managed by SonicWALL GMS.

Unit View

From the Unit view, changes you make are only applied to the selected SonicWALL appliance. To open the Unit view, click a SonicWALL appliance icon in the left pane of the SonicWALL GMS UI. The Status page for the SonicWALL appliance appears (Figure 9).

Figure 9: Unit Status Page



As you navigate the SonicWALL GMS UI with a single SonicWALL appliance selected and make changes, those changes are broken down into configuration tasks and sent to the selected SonicWALL appliance.

As SonicWALL GMS processes the tasks, the SonicWALL appliance may be down or offline. When this occurs, SonicWALL GMS spools the task and reattempts the update later.

Note: Depending on the page that you are configuring, the SonicWALL appliance may automatically restart. We recommend scheduling the tasks to run when network activity is low. For information on which changes require restarting, refer to their configuration instructions.

Unit View Status Page

The Unit View Status page contains a list of statistics for the selected SonicWALL appliance. These include:

- SonicWALL Model—specifies the model of the SonicWALL appliance. If the unit is not registered, “Not Registered” appears instead of a model number.
- Serial Number—specifies the serial number of the SonicWALL appliance.
- Number of LAN IPs allowed—specifies the number of IP addresses that are allowed on the LAN.
- DMZ Port—specifies whether the SonicWALL appliance has a DMZ port.
- CPU—specifies the CPU used on the SonicWALL appliance.
- VPN Upgrade—specifies whether the SonicWALL is licensed for a VPN upgrade.
- Firmware Version—specifies the version of the firmware installed on the SonicWALL appliance.
- Content Filter List Subscription—specifies whether the SonicWALL appliance is licensed for a Content Filter List subscription.
- PKI Subscription—specifies whether the SonicWALL appliance has a PKI subscription.
- Anti-Virus Subscription - specifies whether the SonicWALL appliance has an anti-virus subscription.
- Extended Warranty—specifies whether the SonicWALL appliance has an extended warranty.
- SonicWALL Status—specifies the operational status of the SonicWALL appliance.
- Tasks Pending—specifies whether the SonicWALL appliance has any pending tasks.
- Scheduler Assigned—specifies the IP address of the SGMS agent server that is the primary agent managing the SonicWALL appliance.
- Standby Scheduler—specifies the IP address of the peer SonicWALL GMS that acts as the backup agent for this SonicWALL appliance. If the primary agent fails, this SonicWALL GMS server will manage the appliance.

SonicWALL GMS Menus

This section describes the content of the menu within the SonicWALL GMS UI. To open a menu, right-click the Global icon, a Group icon, or a Unit icon and select from the following:

- Find—opens a Find dialog box where you can search for groups or units.
- Add Unit—adds a new SonicWALL appliance.
- Delete—deletes the selected group or SonicWALL appliance.
- Rename Unit—renames the selected SonicWALL appliance.
- Properties—displays the properties for the selected SonicWALL appliance.
- Edit View—opens the Edit View dialog box where you can create a new view.
- Change View—changes to another view.
- Expand All—expands the navigational tree to display all groups and SonicWALL appliances managed by SonicWALL GMS.
- Collapse All—collapses all groups and SonicWALL appliances managed by SonicWALL GMS.

SonicWALL GMS Icons

This section describes the meaning of icons that appear in the left pane of the SonicWALL GMS window.

-  Group is in the normal operational state. All units within the group are accessible from the SonicWALL GMS and no tasks are pending or scheduled (blue icons).
-  Unit is in the normal operational state. The unit is accessible from the SonicWALL GMS and no tasks are pending or scheduled (blue icon).
-  One or more units within the group has failed or is not accessible from SonicWALL GMS (red icons).
-  The unit has failed or is not accessible from SonicWALL GMS (red icon).

-  Tasks are currently scheduled or running on one or more units within the group.
-  One or more tasks is currently scheduled or running on the unit.

Getting Help

In addition to this manual, SonicWALL GMS provides on-line help resources. To get help, follow these steps:

1. Start and log into SonicWALL GMS.
2. Navigate to the page where you need help.
3. Click the Question Mark (?) in the upper right-hand corner of the window.
4. Help for the selected page appears.

Planning

The SonicWALL Global Management System (SonicWALL GMS) uses a very innovative method for organizing SonicWALL appliances.

SonicWALL appliances are not forced into specific, limited, rigid hierarchies. Simply create a set of fields that define criteria which separate SonicWALL appliances (e.g., country, city, state). Then, create and use views to display and sort appliances on the fly.

To organize SonicWALL appliances, follow these steps:

- Create custom fields that will be useful to your organization. See “Creating Custom Fields” on page 26.
- Review the standard SonicWALL fields. See “SonicWALL Fields” on page 27.
- Create views that will make you job easier. See “Setting Up Views” on page 28.

Creating Custom Fields

When you first configure SonicWALL GMS, you should create custom fields that will be entered for each SonicWALL appliance.

SonicWALL GMS supports up to ten custom fields. The following are examples of custom fields that you might want to use:

- Geographical—useful for organizing SonicWALL appliances are geographically. Especially useful when used in combination with other grouping methods. Geographic fields may include:
 - Country
 - Time Zone
 - Region
 - State
 - City
- Customer-based—useful for organizations that are providing managed security services for multiple customers. Company fields may include:
 - Company
 - Division
 - Department
- Configuration-based—useful when SonicWALL appliances will have very different configurations. For example, Filtering, No Filtering, Pornography Filtering, Violence Filtering, VPN, and so on.
- User-type—different service offerings can be made available to different user types. For example, engineering, sales, and customer service users might have very different configuration requirements. Or, if this is offered as a service to end users, you might allow or disallow network address translation (NAT) depending on the number of IP addresses that you want to make available.

SonicWALL Fields

SonicWALL GMS includes standard fields that can be used to sort SonicWALL appliances based on their model, their firmware version, and other criteria. SonicWALL GMS fields currently include:

- **AV Status**—places the SonicWALL appliances into two groups: appliances that have anti-virus subscriptions and appliances that do not.
- **CFL Status**—places the SonicWALL appliances into two groups: appliances that have content filter list subscriptions and appliances that do not
- **Firmware**—creates a group for each Firmware version and places each SonicWALL appliance into its corresponding group.
- **Model**—creates a group for each SonicWALL model and places each SonicWALL appliance into its corresponding group.
- **Nodes**—creates a group for each node range and places each SonicWALL appliance into its corresponding group.
- **PKI Status**—places the SonicWALL appliances into two groups: appliances that have PKI and appliances that do not.
- **Registered**—places the SonicWALL appliances into two groups: appliances that are registered and appliances that are not.
- **VPN Present**—places the SonicWALL appliances into two groups: appliances that have VPN and appliances that do not.
- **Warranty Status**—places the SonicWALL appliances into two groups: appliances that have current warranties and appliances that do not.

Setting Up Views

After creating custom criteria, SGMS administrators can set up views to perform different functions.

Note: Each view can show a maximum of seven fields. Multiple views can be created.

Standard Geographic Views

When the number of SonicWALL appliances managed by SonicWALL GMS becomes large, you can divide it geographically among SonicWALL administrators.

For example, if one administrator is responsible for each time zone in the United States, you can choose the following grouping methods:

- Administrator 1: Country: USA, Time Zone: Pacific, State, City.
- Administrator 2: Country: USA, Time Zone: Mountain, State, City.
- Administrator 3: Country: USA, Time Zone: Central, State, City.
- Administrator 4: Country: USA, Time Zone: Eastern, State, City.

Firmware Views

To ensure all SonicWALL appliances are using the current firmware, you can create a view to check and update firmware versions and batch process firmware upgrades when network activity is low.

For example, if a SGMS administrator wants to update all SonicWALL appliances to the latest firmware at 2:00 A.M., he or she can use the following grouping method:

- Firmware Version, Time Zone

If the SonicWALL GMS administrator wants to update SonicWALL appliances for companies that have agreed to the upgrade and he or she wants the upgrades to take place at 2:00 A.M., he or she can use the following grouping method:

- Company, Firmware Version, Time Zone

Registration Views

To ensure all SonicWALL appliances are registered, you can create a registration view and check it periodically. To create a registration view, a SGMS administrator can use the following grouping method:

- Registration Status, any other grouping fields

Upgrade View

You can create views that contain information on which upgrades customers do not have and forward this information to the Sales Department.

For example, you can choose the following grouping methods:

- Content Filter List, Company, Division, Department
- Anti-Virus, Company, Division, Department
- Warranty Status, Company, Division, Department