SonicWALL Global Management System Installation Guide

Standard Edition

Version 2.3

Copyright Information

Part Number: 232-000184-00 Rev D

Software License Agreement for
SonicWALL Global Management System

To review the SonicWALL Global Management System Software License Agreement, see the *SonicWALL Global Management System Introduction Guide*.

Introduction

This guide is designed to help you install the SonicWALL Global Management System (SonicWALL GMS). If you have not used SonicWALL GMS before, you might want to familiarize yourself with SonicWALL GMS concepts and features. For more information, see the *SonicWALL Global Management System Introduction Guide*.

After installing SonicWALL GMS, it must be properly configured. For more information, see the *SonicWALL Global Management System Configuration Guide*.

When you are ready to install SonicWALL GMS, perform the following tasks:

- Install SonicWALL GMS. See Chapter 2, "Installing SonicWALL GMS."
- Register SonicWALL GMS. See Chapter 3, "Registering SonicWALL GMS."

Installing SonicWALL GMS

This chapter describes how to install or upgrade SonicWALL Global Management System (SonicWALL GMS) in a two-tier distributed environment, or as a stand-alone SonicWALL GMS.

Note: For more information on two-tier distributed environments, see the SonicWALL Global Management System Introduction Guide.

To install or upgrade SonicWALL GMS, complete the following procedures:

- Review the installation requirements. See "Installation Overview" on page 10.
- Perform any pre-installation tasks. See "Pre-Installation" on page 13.
- Do one of the following:
    - To install SonicWALL GMS as a Console SonicWALL GMS in a two-tier distributed environment or as a stand-alone SonicWALL GMS, see "Console or Stand-Alone Installation" on page 15.
    - To install SonicWALL GMS as an Agent SonicWALL GMS in a two-tier distributed environment, see "Agent Installation" on page 20.
    - To upgrade SonicWALL GMS from Version 2.2, see "Upgrading from SonicWALL GMS Version 2.2" on page 24.

Installation Overview

The SonicWALL GMS Installation program is an HTML-launched installer that automatically detects whether you are installing on a Windows NT/2000/XP Professional or Solaris server. After the installation program detects the operating system, the installation procedure is identical.

Before installing SonicWALL GMS, review the following requirements.

- Database and driver requirements—see "Database and Driver Requirements," below.
- SGMS gateway requirements—see "SGMS Gateway Requirements," below.
- Operating system requirements:
    - Windows NT/2000/XP Professional—see "Windows NT/2000/XP Requirements" on page 10.
    - Solaris Requirements—see "Solaris Requirements" on page 11.

Database and Driver Requirements

To use SonicWALL GMS, you must have an Oracle 9i or Microsoft SQL Server 2000 SP2 database.

SonicWALL GMS also requires a Java Database Connectivity (JDBC) driver to access the database. Oracle 9i includes a JDBC driver. For Microsoft SQL Server 2000 database, SonicWALL GMS 2.3 installs the i-net SPRINTA(tm) JDBC driver for each new SonicWALL GMS installation. This driver is from i-net software GmbH.

Note: A copy of the i-net SPRINTA(tm) JDBC driver is included on the SonicWALL GMS 2.3 CD-ROM.

System

The SonicWALL GMS database server must meet the following minimum requirements:

- 750 MHz processor
- 512 MB RAM
- 2 GB of free disk space

Note: It is highly recommended that you install the database on a separate server.

SGMS Gateway Requirements

To use SonicWALL GMS, an SGMS gateway must reside between each SonicWALL GMS agent server and the SonicWALL appliances and/or Ravlin devices that it manages. The SGMS gateway allows each SonicWALL GMS agent server to securely communicate with its managed devices over VPN tunnels. SonicWALL GMS can use two types of VPN tunnels to communicate with the managed devices:

- Management VPN tunnel—the security association (SA) for this type of VPN tunnel must be configured in the managed SonicWALL appliance or Ravlin device. For more information, see Chapter 4 of the *SonicWALL Global Management Configuration Guide*.

  The security association (SA) must also be created in the SGMS gateway when adding a SonicWALL appliance or Ravlin device to SonicWALL GMS. For more information, see Chapter 2 of the *SonicWALL Global Management Configuration Guide*.

  For this configuration, the SGMS gateway must be a SonicWALL VPN-based appliance. The SGMS gateway can be configured in NAT-Enabled or Standard mode.

- Site-to-site VPN tunnel—SonicWALL GMS can use VPN tunnels that already exist in the network to communicate with the managed devices. For more information, see Chapter 4 of the *SonicWALL Global Management Configuration Guide*.

  For this configuration, the SGMS gateway can be a SonicWALL VPN-based appliance or another VPN device that is interoperable with SonicWALL VPN.

Windows NT/2000/XP Requirements

Installing SonicWALL GMS involves several steps. To successfully install SonicWALL GMS, do the following:

- Review the database requirements.
- Review the SGMS gateway requirements.
- Review the system and network requirements.

- Install SonicWALL GMS. See "Console or Stand-Alone Installation" on page 15 or "Agent Installation" on page 20.

System

In order to install and run SonicWALL GMS, you must be logged in as the administrator and the SonicWALL GMS server must meet the following requirements:

- Windows NT 4.0 with Service Pack 4 (or later), Windows 2000, or Windows XP Professional.
- Local and remote browser access: Microsoft Internet Explorer 6.x and Netscape 4.7.
- If using Oracle 9i as the database, the Oracle Client must be installed on each Windows-based SonicWALL GMS server. This installs the JDBC driver on the SonicWALL GMS server.
- If using Microsoft SQL Server 2000 as the database, the JDBC driver must be installed on each Windows-based SonicWALL GMS server. For new installations, SonicWALL GMS 2.3 installs the i-net SPRINTA(tm) JDBC driver.
- 750 MHz or faster processor.
- Minimum 512 MB RAM.
- At least 85 MB of free disk space.

Network

In order to install and run SonicWALL GMS, the following network requirements must be met:

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

Note: Depending on the configuration of SonicWALL log settings and the amount of traffic handled by each device, the network traffic can vary dramatically. The 1 KB/s for each device is a general recommendation. Your installation may vary.

Solaris Requirements

To successfully install SonicWALL GMS for Solaris, do the following:

- Review the database requirements.
- Review the SGMS gateway requirements.
- Review the system and network requirements below.
- Run the SonicWALL GMS installation wizard. See "Console or Stand-Alone Installation" on page 15 or "Agent Installation" on page 20.

System

In order to install and run SonicWALL GMS, you must be logged in as the sgmsadm user. For information on creating the sgmsadm user, see "Pre-Installation" on page 13.

The SonicWALL GMS server must meet the following requirements:

- Solaris 8 (English Operating System).
- Local browser access: Netscape Navigator 4.7.
- Remote browser access: Microsoft Internet Explorer 6.x and Netscape 4.7.
- If using Oracle 9i as the database, the Oracle Client must be installed on each Solaris-based SonicWALL GMS server. This installs the JDBC driver on the SonicWALL GMS server.
- If using Microsoft SQL Server 2000 as the database, the JDBC driver must be installed on each Solaris-based SonicWALL GMS server. For new SonicWALL GMS installations, SonicWALL GMS 2.3 installs the i-net SPRINTA(tm) JDBC driver.
- Minimum 512 MB RAM.
- At least 115 MB of free disk space.

Network

In order to install and run SonicWALL GMS, the following network requirements must be met:

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

Note: Depending on the configuration of SonicWALL log settings and the amount of traffic handled by each device, the network traffic can vary dramatically. The 1 KB/s for each device is a general recommendation. Your installation requirements may vary.

Pre-Installation

Select from the following:

- For Oracle installations, see "Oracle Database" on page 13.
- For SQL Server installations, see "SQL Server 2000 Database" on page 13.
- To create the sgmsadm user on Solaris, see "Creating the sgmsadm User" on page 14.

Oracle Database

Before installing SonicWALL GMS using Oracle, you must install the Oracle Server and Oracle Client. To install the Oracle Server, see "Installing the Oracle Server on Solaris" on page 31 or "Installing the Oracle Server on Windows NT/2000/XP" on page 35. To install the Oracle Client, see "Installing the Oracle Client on Solaris" on page 34 or "Installing the Oracle Client on Windows NT/2000/XP" on page 37.

SQL Server 2000 Database

Before installing SonicWALL GMS using Microsoft SQL Server 2000, complete the following procedure:

1. Install Microsoft SQL Server 2000 on a server.

2. When prompted, select the "Create a new instance of SQL Server, or install Client Tools" option.

3. When prompted, select the "Server and Client Tools" option.

4. When prompted, select the "Typical" setup type.

5. When prompted for an authentication mode during SQL Server 2000 installation, make sure to select **Mixed Mode**. Do not select **Windows Authentication Mode**.

6. Once the database it installed, click **Start**, point to **Programs**, point to **Microsoft SQL Server**, and click **Enterprise Manager**.

7. Expand the Security tree. Right-click **Logins** and select **New Login**.

8. Create a SonicWALL GMS database user (for example, SGMSUser).

   For this database user, select the **SQL Server Authentication** mode option and enter a password. Make sure to assign this user the Database Creators server role.

9. Exit from the SQL Server Enterprise Manager.

10. If you plan to install the SonicWALL GMS Console on the same server as Microsoft SQL Server 2000, skip to "Java Database Connectivity (JDBC) Driver" on page 14.

SQL Server 2000 Client Tools

If you plan to install the SonicWALL GMS Console on a different server than the Microsoft SQL Server 2000 database server, you must install the Microsoft SQL Server 2000 Client Tools on the SonicWALL GMS Console server. To do this, run the Microsoft SQL Server 2000 database installation again and do the following:

1. When prompted, select the "Create a new instance of SQL Server, or install Client Tools" option.

2. When prompted, select the "Client Tools Only" option.

3. When prompted, select all components.

Note: It is not necessary to install the SQL Server 2000 Client Tools on each SonicWALL GMS agent server.

Java Database Connectivity (JDBC) Driver

To install the JDBC driver on a SonicWALL GMS server, follow these steps:

1. If using Oracle 9i as the database, install Oracle Client on each SonicWALL GMS server.

2. If using Microsoft SQL Server 2000 as the database for new SonicWALL GMS installations, SonicWALL GMS 2.3 installs the i-net SPRINTA(tm) 2000 JDBC driver on each SonicWALL GMS server. It copies the JDBC driver jar file (Sprinta2000.jar) to <sgms_directory>:\etc directory and configures the CLASSPATH on your SonicWALL GMS system.

Creating the sgmsadm User

In the Solaris environment, the sgmsadm user must install SonicWALL GMS. To create the sgmsadm user, follow these steps:

1. Log into the Solaris server as root.

2. Enter the following command:

   `# ./admintool`

   The Admintool starts.

3. From the Users Menu, select **Edit** and click **Add**. The Add User dialog box appears.

4. Enter the following information:

   - Enter sgmsadm in the **User Name** field.
   - For the User ID, accept the default value.
   - Enter 10 in the **Primary Group** field.
   - Enter any comments about this account in the **Comments** field (i.e., SGMS Install Account).
   - From the Login Shell pull-down menu, choose **Bourne**.
   - From the Password pull-down menu, choose **Cleared until first login**.
   - Enter a path for this account's home directory in the **Path** field (i.e., /export/home/sgmsadm).

5. Click **Apply**.

6. Click **OK**.

7. Exit from the Admintool: Users menu.

You also need to create the empty files sgmsConfig.xml and sgmsConfigBkp.xml. To do this, login as root and follow these steps:

1. Change to the root directory by entering:

   `# cd /`

2. Create the files by entering:

   `# touch sgmsConfig.xml sgmsConfigBkp.xml`

3. Change the permissions of the files by entering:

   `# chmod 666 sgmsConfig.xml sgmsConfigBkp.xml`

Console or Stand-Alone Installation

SonicWALL GMS Installation is a two-phase installation: Phase 1 installs SonicWALL GMS, and Phase 2 sets up the SonicWALL GMS database, installs the SonicWALL GMS services, and installs the JDBC driver for using MS SQL Server 2000. Before installing SonicWALL GMS, review the system and network requirements for the Phase 1 installation, and perform any required pre-installation tasks. When you are ready to install SonicWALL GMS, follow these steps:

1. Log on to the computer as sgmsadm (Solaris system) or administrator (Windows system).

2. Insert the SonicWALL GMS CD-ROM or locate the SonicWALL GMS install file on the network. Open the install.htm file with a browser. The SonicWALL GMS installation Welcome screen appears (Figure 1).
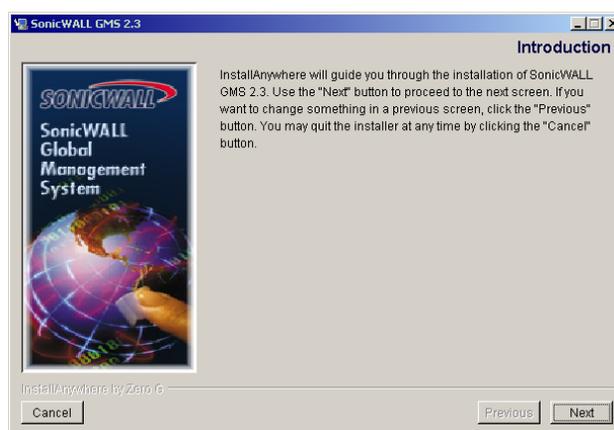
Figure 1: SonicWALL GMS Welcome Screen
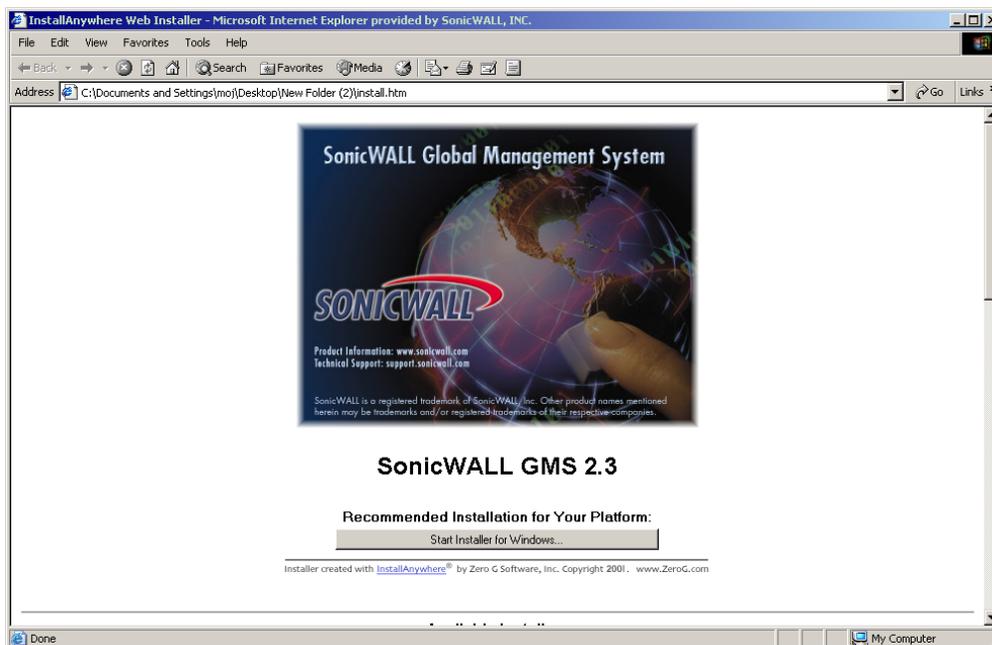
The installation program automatically detects whether this is a Windows or Solaris installation.

3. Click the **Start Installer** button. The Introduction screen appears (Figure 2).

Figure 2: Introduction Screen

4. Click **Next**. The License Agreement screen appears (Figure 3).

Figure 3: License Agreement Screen

5. Select from the following:

  - To accept the terms of the license agreement, select **I accept the terms of the License Agreement** and click **Next**. If there is any important installation information, the Important Database Information screen appears (Figure 4).
  - To not accept the terms, select **I do NOT accept the terms of the License Agreement** and click **Next**. The SonicWALL GMS installation program closes and the product will not install.

Figure 4: Important Database Information Screen
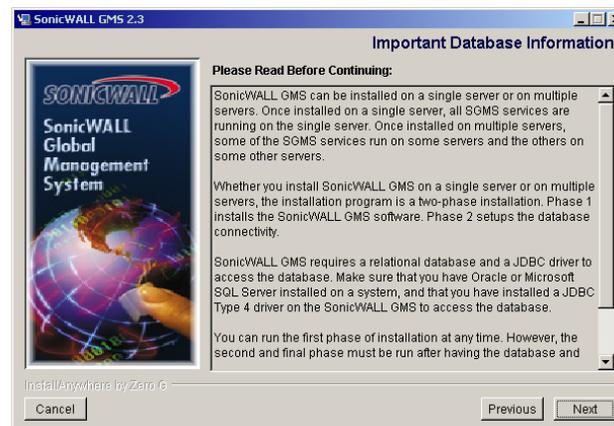
6. Read the Important Database Information screen and click **Next**.

  The Choose Install Folder screen appears (Figure 5).

Figure 5: Choose Install Folder Screen
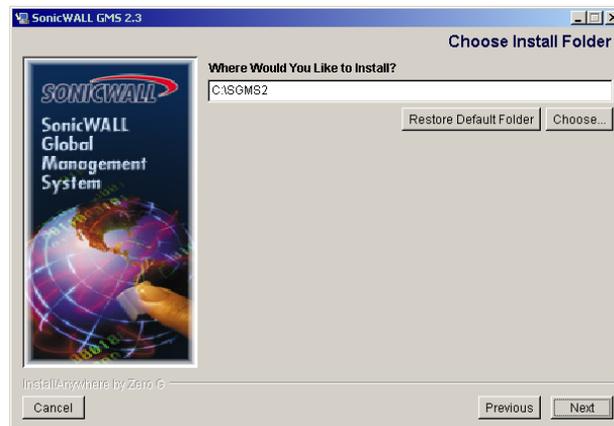
7. To accept the default location, click **Next**. To select a different location, click **Choose** and select a folder. The SGMS Installation Options screen appears (Figure 6).

Figure 6: SonicWALL GMS Installation Options Screen

8. Select **Install SGMS Console System** and click **Next**.

The SonicWALL GMS Installation Options screen appears (Figure 7).

Figure 7: SonicWALL GMS Settings Screen

9. The SonicWALL GMS Console server can also be used as an Agent. To remove the agent functionality, select the **Disable Console Agent** check box.

10. If you will use SonicWALL GMS to manage Ravlin devices, select the **Manage Ravlin Devices** check box.

Click **Next**. The SonicWALL GMS Settings screen appears (Figure 8).

Figure 8: SonicWALL GMS Installation Options Screen

Do the following:

- Enter the IP address or host name of the Simple Mail Transfer Protocol (SMTP) server in the **SMTP Server Address** field.
- Enter the number of the web server port in the **Web Server Port** field (default: 80).
- Enter the e-mail addresses of SGMS administrators who will receive e-mail notifications from SonicWALL GMS.
- Enter the IP address of the SGMS gateway between the SonicWALL GMS and the network.
- Enter the password of the SGMS gateway.

Click **Install**. The installation program begins copying SonicWALL GMS files (Figure 9).

Figure 9: Installation Status Screen

11. After the Phase 1 installation is completed, close the web browser session and continue with Phase 2 of the installation.

12. Perform the Phase 2 installation database configuration procedure by opening the command-line prompt and entering the following:
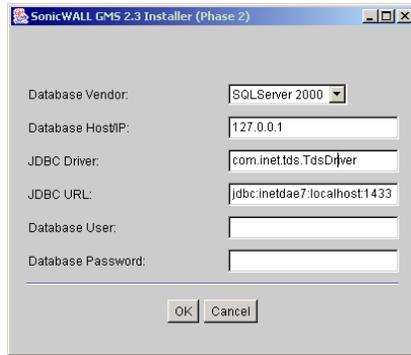
c:**_sgms_directory_\bin\postInstall**

or

_/sgms_directory_**/bin/postInstall**

where _sgms_directory_ is the location where you installed SonicWALL GMS.

The Database Settings dialog box appears (Figure 10).

Figure 10: Database Settings Dialog Box

13. Do the following:

- Select the type of database from the **Database Vendor** list box.
- Enter the IP address or name of the database host in the **Database Host/IP** field.
- Accept the default value for JDBC driver.

  Note: If you are using the Oracle thin driver, append the IP address and port. For example: `jdbc:oracle:thin:@ip_address:port`

- Accept the default value for JDBC URL.
- For Oracle Installations, enter the SID in the **TNS Name** field.
- Enter the database username in the **Database User** field.
- Enter the database user password in the **Database Pasword** field.

Click OK. The post-installation procedure is complete.

Note: The installation program will create a minimal SGMS database. Depending on the number of devices that will be managed, you may have to use database tools such as Microsoft SQL Server Enterprise Manager to change the database sizes.

14. Restart the server.

15. If this is a Windows-based Console server, ensure that the following SonicWALL GMS services have started:

- SGMS Scheduler
- SGMS ViewPoint Scheduler
- SGMS ViewPoint Summarizer
- SGMS Web Server

If this is a Solaris-based Console, ensure the following SonicWALL GMS daemons have started:

- sgmsvp1.sh
- sgmsvp2.sh
- sgmssched.sh
- tomcat.sh

Note: In addition to verifying these services, ensure that the sgmsConfig.xml file is in the C:\ or root directory. On Solaris systems, also ensure that the sgmsConfigBkp.xml file is in the root directory.

After installing SonicWALL GMS, you must register the product with the SonicWALL registration site. For more information, see Chapter 3, "Registering SonicWALL GMS."

Agent Installation

SonicWALL GMS Installation is a two-phase installation: Phase 1 installs SonicWALL GMS, and Phase 2 installs the SGMS Scheduler service and the SPRINTA(tm) 2000 driver for MS SQL Server 2000. Before installing SonicWALL GMS, review the system and network requirements and perform any required pre-installation tasks.

When you are ready to install SonicWALL GMS, follow these steps for the Phase 1 installation:

1. Log on to the computer as sgmsadm (Solaris system) or administrator (Windows system).

2. Insert the SonicWALL GMS CD-ROM or locate the SonicWALL GMS installation file on the network. Open the install.htm file with a browser. The SonicWALL GMS installation Welcome screen appears (Figure 11).

Figure 11: SonicWALL GMS Welcome Screen
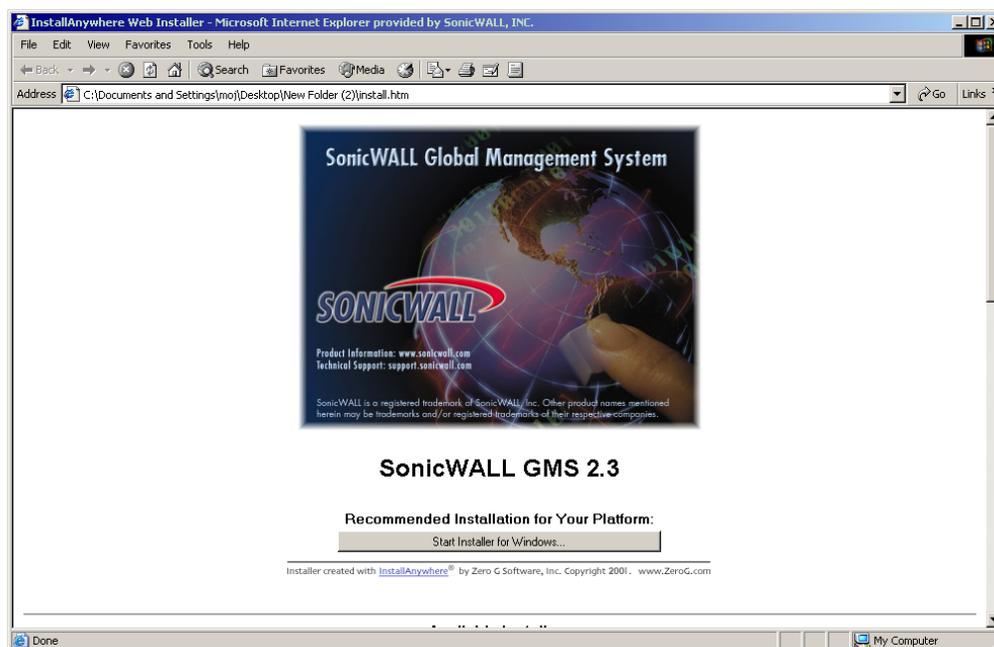
The installation program automatically detects the operating system.

3. Click the **Start Installer for** button. The Introduction screen appears (Figure 12).

Figure 12: Introduction Screen
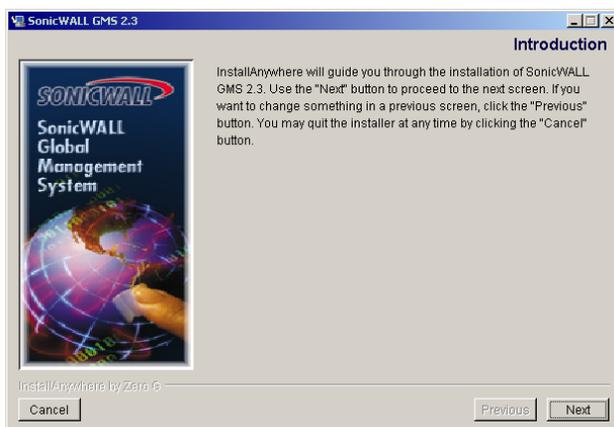
4. Click **Next**. The License Agreement screen appears (Figure 13).

Figure 13: License Agreement Screen
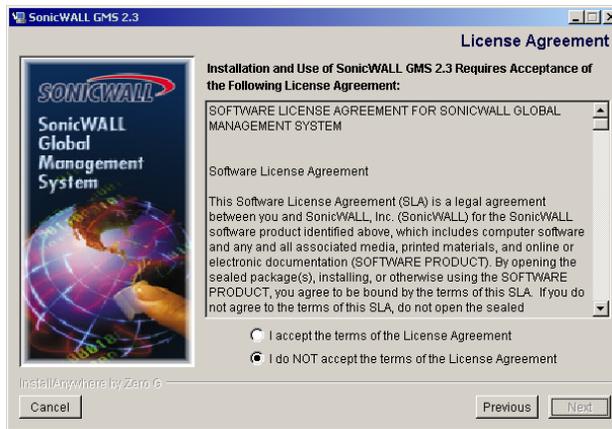
5. Select from the following:

   - To accept the terms of the license agreement, select **I accept the terms of the License Agreement** and click **Next**. The Important Database Information screen appears (Figure 14).
   - To not accept the terms, select **I do NOT accept the terms of the License Agreement** and click **Next**. The SonicWALL GMS installation program closes and the product will not install.

Figure 14: Important Database Information Screen
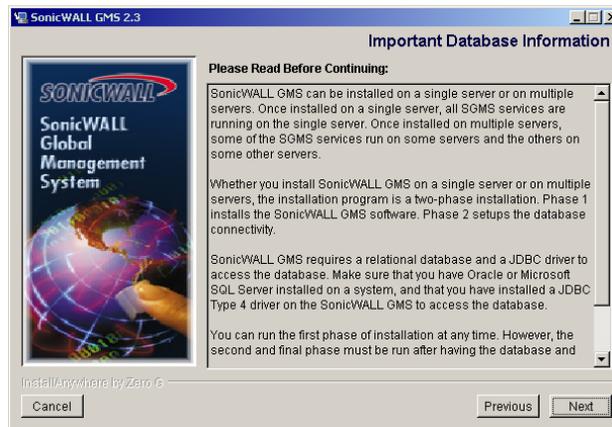
6. Read the Important Database Information screen and click **Next**.

   The Choose Install Folder screen appears (Figure 15).

Figure 15: Choose Install Folder Screen
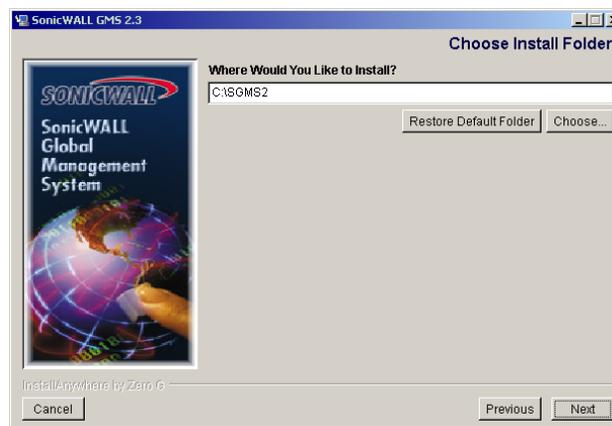
7. To accept the default location, click **Next**. To select a different location, click **Choose** and locate a folder. The SGMS Installation Options screen appears (Figure 16).

Figure 16: SGMS Installation Options Screen

8. Select **Install SGMS Agent System** and click **Next**. The SGMS Settings screen appears (Figure 17).

Figure 17: SGMS Settings Screen

9. Do the following:

- Enter the IP address of the SonicWALL GMS gateway between the SonicWALL GMS and the network.
- Enter the password of the SonicWALL GMS gateway.

Click **Install**. The installation program begins installing SonicWALL GMS (Figure 18).

Figure 18: Installation Status Screen

10. After the Phase 1 installation is completed, close the web browser session and continue with the Phase 2 installation.

11. Perform the Phase 2 Installation database configuration procedure by opening the command-line prompt and entering the following:

c:**_sgms_directory_\bin\postInstall**

or

/_sgms_directory_**/bin/postInstall**

where _sgms_directory_ is the location where you installed SonicWALL GMS.

The Database Settings dialog box appears (Figure 19).

Figure 19: Database Settings Dialog Box

12. Do the following:

- Select the type of database from the **Database Vendor** list box.
- Enter the IP address or name of the database host in the **Database Host/IP** field.
- Accept the default value for the JDBC driver.

  _Note: If you are using the thin driver, append the IP address and port. For example: jdbc:oracle:thin:@ip_address:port._

- Accept the default value for the JDBC URL.
- For Oracle Installations, enter the SID name in the **TNS** Field.
- Enter the database username in the **Database User** field.
- Enter the database user password in the **Database Pasword** field.

Click OK. The post-installation procedure is complete.

Note: The installation program will create a minimal SGMS database. Depending on the number of devices that will be managed, you may have to use database tools such as Microsoft SQL Server Enterprise Manager to change the database sizes.

13. Restart the server. Ensure that the SGMS Scheduler service has started on the Windows-based SonicWALL GMS Agent.

The SonicWALL GMS daemon on a Solaris-based Agent is sgmssched.sh.

Upgrading from SonicWALL GMS Version 2.2

Upgrading SonicWALL GMS occurs in two phases. Phase 1 upgrades the SonicWALL GMS software and Phase 2 updates the SonicWALL GMS database.

Note: Make sure to perform the upgrade procedure on the SonicWALL GMS Console and all Agent servers. Before performing the SonicWALL GMS 2.3 upgrade, ensure that all the files in the SonicWALL GMS 2.2 directory have read and write permissions.

To upgrade from SonicWALL GMS Version 2.2, follow these steps:

1. Log on to the computer as sgmsadm (Solaris system) or administrator (Windows system).

2. Insert the SonicWALL GMS CD-ROM or locate the SonicWALL GMS installation file on the network. Open the install.htm file with a browser. The SonicWALL GMS installation Welcome screen appears (Figure 20).

   Figure 20: SonicWALL GMS Welcome Screen
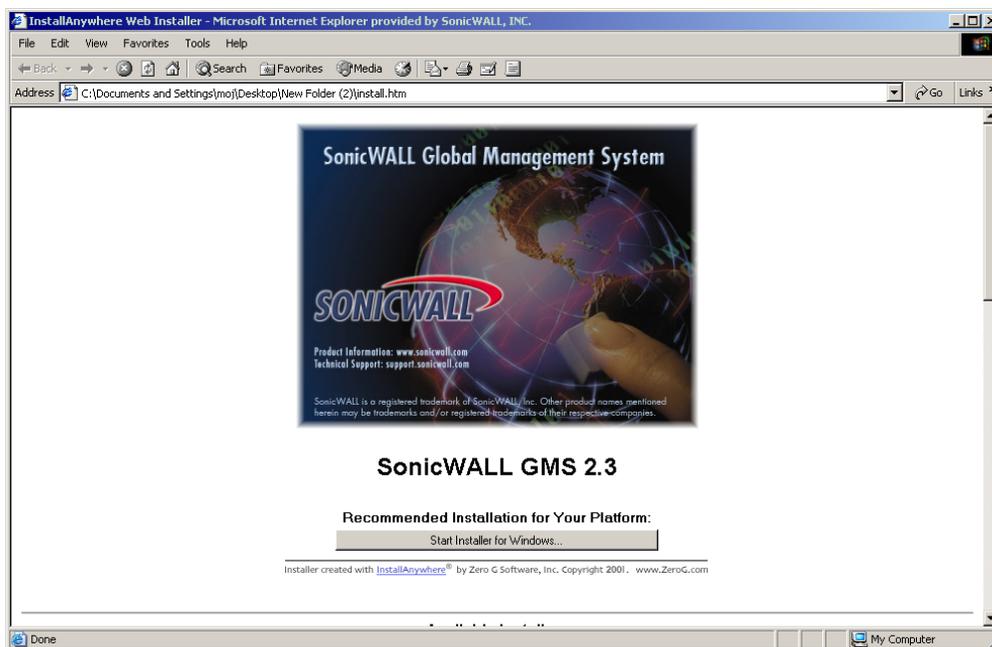
   The installation program automatically detects whether this is a Windows or Solaris installation.

3. Click the **Start Installer** button. The Introduction screen appears (Figure 21).

   Figure 21: Introduction Screen
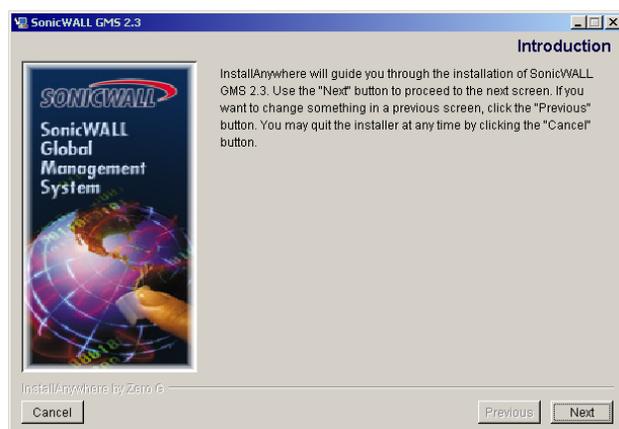
4. Click **Next**. The License Agreement screen appears (Figure 22).

Figure 22: License Agreement Screen

5. Select from the following:

- To accept the terms of the license agreement, select **I accept the terms of the License Agreement** and click **Next**. The SonicWALL GMS Upgrade screen appears (Figure 23).
- To not accept the terms, select **I do NOT accept the terms of the License Agreement** and click **Next**. The SonicWALL GMS installation program closes and the product will not install.

The SonicWALL GMS Upgrade screen appears (Figure 23).

Figure 23: SonicWALL GMS Upgrade Screen
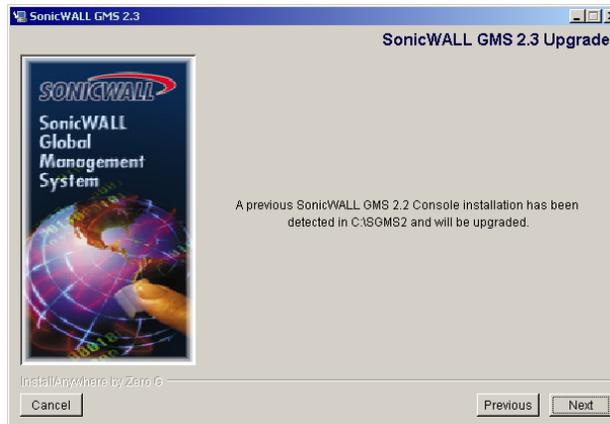
6. Click **Next**. The SonicWALL GMS Installation Options screen appears (Figure 24).

Figure 24: SonicWALL GMS Installation Options Screen

7. The SonicWALL GMS Console server can also be used as an Agent. To remove the agent functionality, select the **Disable Console Agent** check box.

8. If you will use SonicWALL GMS to manage Ravlin devices, select the **Manage Ravlin Devices** check box. Click **Install**. The installation program begins installing SonicWALL GMS (Figure 25).

Figure 25: Installation Status Screen

9. After the Phase 1 installation is completed, close the web browser session and continue with the Phase 2 installation.

10. Perform the Phase 2 Installation database configuration procedure by opening the command-line prompt and entering the following:

c:**sgms_directory**bin\postInstall

or

/sgms_directory/**bin/postInstall**

where sgms_directory is the location where you installed SonicWALL GMS.

The Database Settings dialog box appears with the current settings (Figure 26).

Figure 26: Database Settings Dialog Box
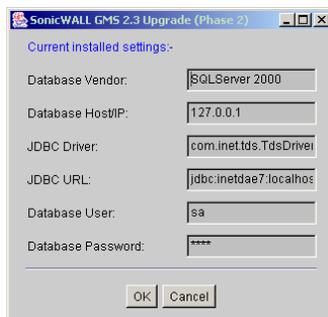
11. Click **OK**. The post-installation procedure is complete.

12. Restart the server. Installation is complete.

13. If this is a Windows-based Console server, ensure that the following SonicWALL GMS services have started:

- SGMS Scheduler
- SGMS ViewPoint Scheduler
- SGMS ViewPoint Summarizer
- SGMS Web Server

If this is a Solaris-based Console, ensure the following SonicWALL GMS daemons have started:

- sgmsvp1.sh
- sgmsvp2.sh
- sgmssched.sh
- tomcat.sh

14. Ensure that the SGMS Scheduler service or the sgmssched.sh daemon has started on the SonicWALL GMS Agent.

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

    The SonicWALL GMS registration screen appears (Figure 27).

    Figure 27: Registration Page

2. Enter your contact information in the appropriate fields.

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 28.

    Note: If registration fails, see Appendix B, "Miscellaneous Procedures and Troubleshooting Tips." If the problem is not documented, 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` or `http://sgms_ipaddress` or `http://localhost.`

   - 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` or `http://sgms_ipaddress`.

   The SonicWALL GMS login page appears (Figure 28).

   Figure 28: SonicWALL GMS Login Page
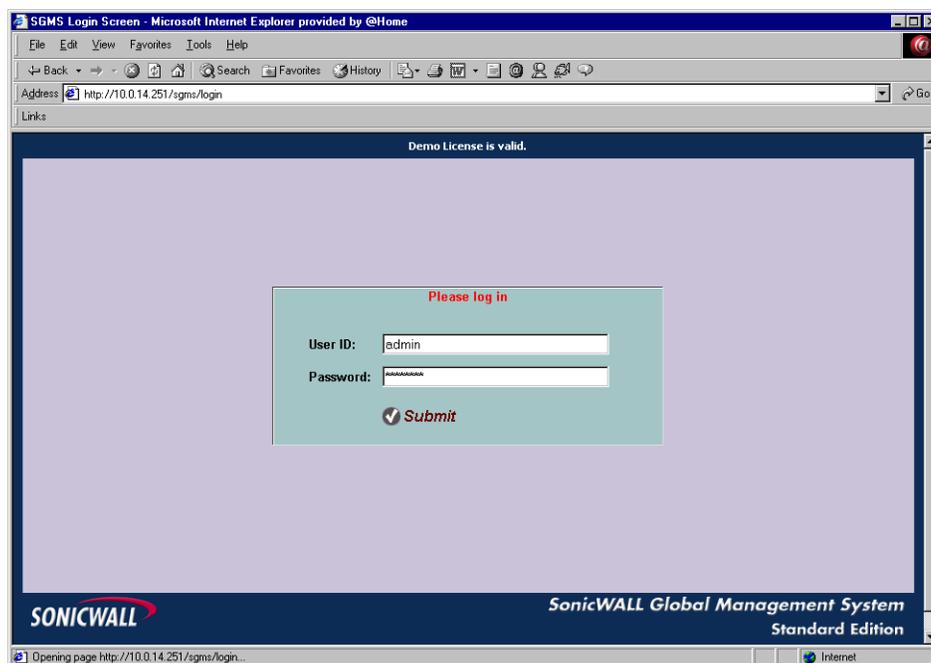
2. Enter the SonicWALL user ID (default: admin) and password (default: password).

   Note: After the password is entered, an authenticated management session is established that times out after 5 minutes of inactivity. The default time-out can be changed from the General/SGMS Password page on the Console Panel.
   *For the security purposes, it is highly recommended to change the default password for the user **admin**. The maximum size of the SonicWALL GMS User ID is 24 alphanumeric characters. If the password is more than 32 characters long, it will automatically be truncated.*

3. Click **Submit**. The SonicWALL GMS UI opens (Figure 29).

Figure 29: SonicWALL GMS UI
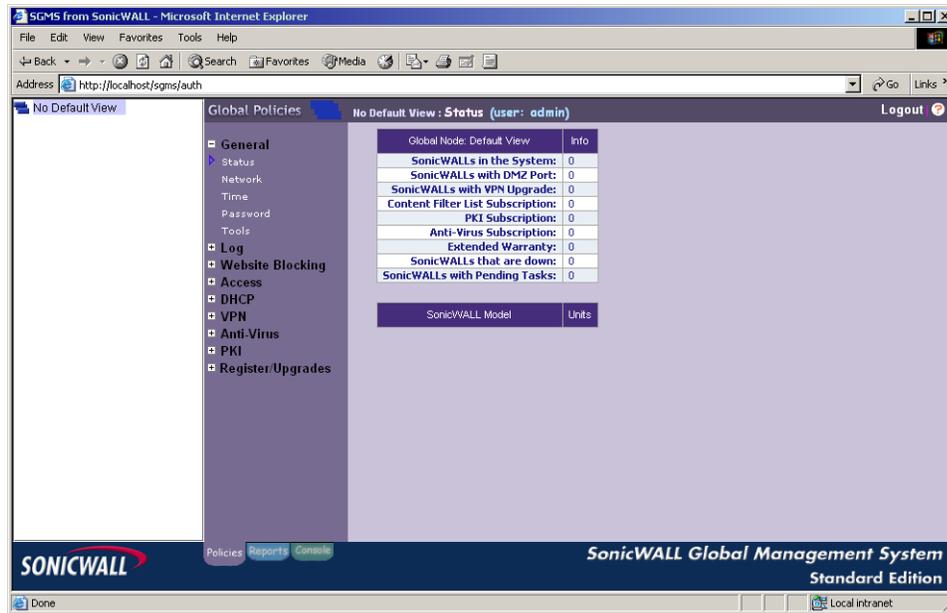
For information on using the SonicWALL GMS UI , see the *SonicWALL Global Management System Configuration Guide*.

Configuring an Oracle Database

This appendix describes how to install the Oracle 9i Server and the Oracle Client on a Solaris workstation or a Windows 2000, NT, or XP workstation.

For more information, see the Oracle website at `http://docs.oracle.com/database_mp_9i.html`.

Solaris

This section describes how to install the Oracle Server and the Oracle Client on a Solaris workstation. Select from the following:

- To install Oracle Server, see "Installing the Oracle Server on Solaris," below.
- To install the Oracle Client, see "Installing the Oracle Client on Solaris" on page 34.

Installing the Oracle Server on Solaris

This section describes how to install the Oracle 9i Server on a Solaris workstation.

Pre-Installation

Before installing the Oracle 9i Server on a Solaris workstation, follow these steps:

1. Log in as root.

2. Open the `/etc/system` file with a text editor.

3. Change the SHMMAX kernel parameter to at least 4294967295:

   `set shmsys:shminfo_shmmax=4294967295`

4. Save and close the file.

5. Reboot the system.

6. Log in as root.

7. Create the /space/u01 and /space/u02 directories by entering:

   ```
   # mkdir /space/u01
   # mkdir /space/u02
   ```

8. Ensure that the /space/u01 directory has approximately 820 MB.

9. Ensure that the /space/u01 directory has at least 410 MB and space to grow as the database size increases.

10. Create UNIX groups and users and the Oracle configuration directory with the following commands:

    ```
    groupadd dba
    groupadd oinstall
    useradd -g oinstall -G dba -d /space/u01 -s /bin/sh oracle
    passwd oracle (set default password - e.g. oracle)
    mkdir /var/opt/oracle
    chown oracle /space/u01 /space/u02 /var/opt/oracle
    chgrp oinstall /space/u01 /space/u02 /var/opt/oracle
    ```

11. Log in as the Oracle user.

12. Edit or create the `$HOME/.profile` and add the following lines:

```
umask 022
DISPLAY=:0; export DISPLAY
ORACLE_BASE=/space/u01/app/oracle; export ORACLE_BASE
ORACLE_HOME=$ORACLE_BASE/product/9.0.1.1; export ORACLE_HOME
ORACLE_SID=solaris1 (change to your machine-name)
CLASSPATH=$ORACLE_HOME/JRE:$ORACLE_HOME/jlib:$CLASSPATH
LD_LIBRARY_PATH=$ORACLE_HOME/lib:$LD_LIBRARY_PATH; export LD_LIBRARY_PATH
PATH=$ORACLE_HOME/bin:/usr/bin:/usr/ccs/bin:/usr/openwin/bin:/usr/ucb:/etc;
export PATH
```

   Note: Make sure ORACLE_BASE *points to the Oracle home directory and* ORACLE_HOME *reflects the Oracle version that is installed.*

13. Save and close the file.

14. Execute the new .profile.

```
. ./.profile
```

Installation

To install the Oracle 9i Server on a Solaris workstation, follow these steps:

1. Insert the Oracle Installation CD.

2. Log in as root.

3. Open a terminal window and enter the following command:

```
xhost +
```

4. Open another terminal window, switch to the Oracle user, and start the installation:

```
su - oracle
cd /cdrom/oracle9i
./runInstaller
```

   The installation program starts.

5. Select the default choices, except for the following:

   • When prompted for the UNIX Group Name, enter oinstall.

   • When prompted for which product to install, select **Oracle9i Enterprise Edition**.

   • When prompted for an installation type, select the "typical" installation.

   • When prompted for the Global Database Name and SID, use your fully qualified machine name (e.g., solaris1.sonicwall.com). The SID will automatically default to your hostname (e.g., solaris1).

   • When prompted for the Directory for Database Files, enter the mount point that you created (e.g. /space/u02).

6. During installation, the installation program will prompt you to run a generated script as root. When this occurs, simply follow the on-screen instructions.

Post-Installation

After installing the Oracle 9i Server, configure the Oracle server to automatically start during system boot:

1. Login as root.

2. Open the `/var/opt/oracle/oratab` file with a text editor.

3. Change the ending 'N' to 'Y' so the dbstart script will restart it.

4. Save and close the file.

5. Create the `/etc/init.d/dbora` file:

```
touch /etc/init.d/dbora
```

6. Open the `/etc/init.d/dbora` with a text editor and add the following:

```
#!/bin/sh
ORA_HOME=/space/u01/app/oracle/product/9.0.1.1
ORA_OWNER=oracle
if [! -f $ORA_HOME/bin/dbstart]
then
echo "Oracle startup: cannot find start script"
```

```
exit
fi
case "$1" in
'start')
su - $ORA_OWNER -c $ORA_HOME/bin/dbstart &
su - $ORA_OWNER -c "lsnrctl start"
;;
'stop')
su - $ORA_OWNER -c $ORA_HOME/bin/dbshut &
;;
esac
```

Note: Make sure ORA_HOME *points to the Oracle home directory and reflects the Oracle version that is installed.*

7. Link the newly created script into startup sequence using the following commands:

```
ln -s /etc/init.d/dbora /etc/rc0.d/K10dbora
ln -s /etc/init.d/dbora /etc/rc2.d/S99dbora
```

8. The dbstart script has some awk code that does not identify the Oracle version correctly. Change to the directory where dbstart is located:

```
cd /ORACLE_HOME/app/oracle/product/9.0.1.1/bin/
```

9. Enter the following command:

```
$ diff -c dbstart.save dbstart
```

10. Open the dbstart file with a text editor and add the two lines as shown in the following "diff -c" report:

```
$ diff -c dbstart.save dbstart
*** dbstart.save        Tue Jan 30 17:32:26 2001
--- dbstart     Tue Jan 30 17:40:30 2001
***************
*** 69,73 ****
--- 69,75 ----
            fi
            STATUS=1
+ # awk script above is not working right, so hard-coding VERSION
+           VERSION=9.1
            if [ "$VERSION" = "9.1" ]
                then
```

11. Save and close the file.

12. Make sure you are logged in as root and open /etc/services file with a text editor.

13. Add the Oracle Server listener to the file by adding the following:

```
listener        1521/tcp                        # Net8 listener
```

14. Save and close the file.

Starting Oracle

After you have completed all installation steps, do the following:

- Start Oracle by entering the following command:
  ```
  dbstart
  ```
- Start the TNS listener by entering the following command:
  ```
  lsnrctl start
  ```

Making Sure Oracle is Running

After you have started Oracle, make sure it is running by doing the following:

- Test Oracle by entering the following command:
  ```
  ps -ef | grep ora_
  ```
- Test the TNS listener by entering the following command:
  ```
  ps -ef | tns
  ```

Installing the Oracle Client on Solaris

To install the Oracle Client, simply load the CD-ROM and follow the on-screen instructions. However, make sure to select the following:

- Make sure to select the **Administration** option. This will allow you to add tables and perform other tasks without having to go to the Oracle Server.
- Make sure to use the default port (1521).

After installing the Oracle Client, follow these steps:

1. Log in as the Oracle user.

2. Modify the $ORACLE_HOME/dbs/<instancename>.ora file to increase the levels to a MEDIUM size database. Use init.ora as an example that also contains all information about each variable.

3. Configure the following in the .profile for the user who will install SonicWALL GMS:

```
ORACLE_HOME
ORACLE_SID
LD_LIBRARY_PATH=$ORACLE_HOME/lib:
CLASSPATH=$ORACLE_HOME/jdbc/lib/classes12.zip: $ORACLE_HOME/jdbc/lib/nls_charset12.zip:
```

4. Set the number of open cursors to at least 200.

Windows NT/2000/XP

This section describes how to install the Oracle Server and the Oracle Client on a Windows NT or Windows 2000 workstation. Select from the following:

- To install Oracle Server, see "Installing the Oracle Server on Windows NT/2000/XP," below.
- To install the Oracle Client, see "Installing the Oracle Client on Windows NT/2000/XP" on page 37.

Installing the Oracle Server on Windows NT/2000/XP

To install Oracle Server, follow these steps:

1. Load the CD-ROM and follow the on-screen instructions for a Typical Installation.

2. When prompted, it is recommended to select c:\Oracle\Ora91 as the installation directory.

3. When prompted, do the following:

   - Global Database Name—enter **sgmsdb.*company*.com** where *company* is the name of your organization.
   - SID—ensure that **sgmsdb** is entered in the SID field.

4. When you are finished, click **Install**.

   Oracle 8.1 begins installing. At the end of the installation, a dialog box appears that contains information about the installation (Figure 30). This information includes database settings, user account names, and passwords.

   Figure 30: Oracle Database Configuration Assistant Alert Dialog Box
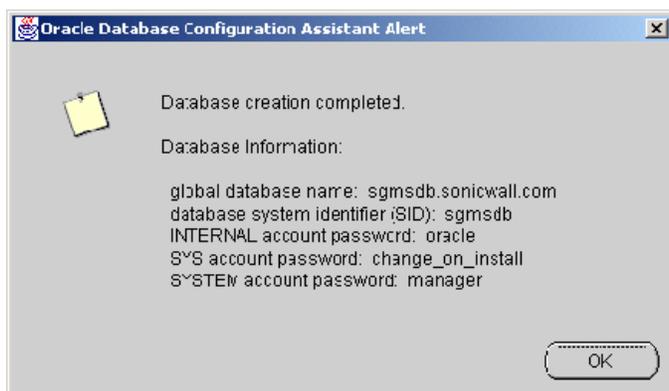
5. Write down the information. When you are finished, click **OK**.

6. Click **Start**, point to **Programs**, point to **Oracle**, point to **Application Development**, and click **SQL Plus**. The Log On dialog box appears (Figure 31).

   Figure 31: Logon Dialog Box
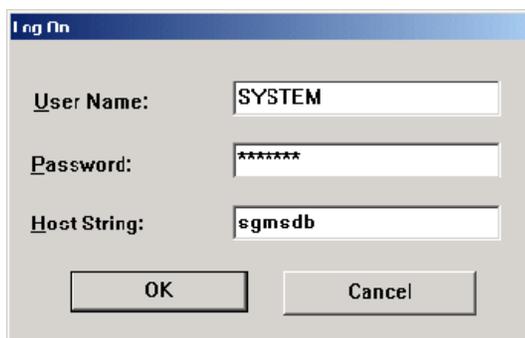
7. Enter "SYSTEM" in the **User Name** field, "manager**"** in the **Password** field, and "sgmsdb" in the **Host String** field. SQL Plus opens (Figure 32).

Figure 32: SQL Plus
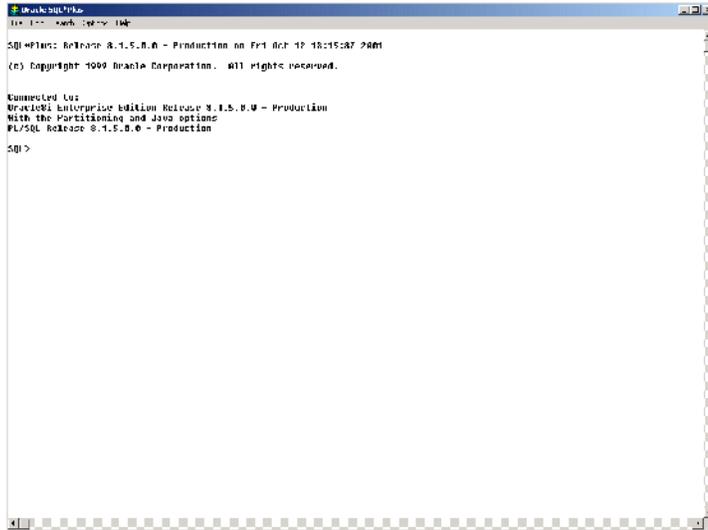
8. Create a SonicWALL GMS user by entering the following command:

```
create user username identified by password;
commit;
```

For example, to create the user "sgms" with the password "sgms," enter the following:

```
create user sgms identified by sgms;
commit;
```

9. Give the SonicWALL GMS user connect, resource, and database administrator (DBA) access by entering the following:

```
grant CONNECT, RESOURCE, DBA to username;
commit;
```

For example, to grant access to the user "sgms", enter the following:

```
grant CONNECT, RESOURCE, DBA to sgms;
commit;
```

10. Exit SQL Plus.

11. Open the `init.ora` file with a text editor. If you selected the recommended installation directory, the file will be located in the `C:\Oracle\ADMIN\sgmsdb\pfidle` directory.

12. Locate the **db_files** parameter and change its value to 1500. For example:

```
db_files=1500
```

13. Locate the **db_file_multiblock_read_count** parameter and change its value to 32. For example:

```
db_file_multiblock_read_count=32
```

14. Save the changes and close the file.

15. Click **Start**, point to **Settings**, point to **Control Panel**, and click **System**. The System Properties page appears (Figure 33).

Figure 33: System Properties Page
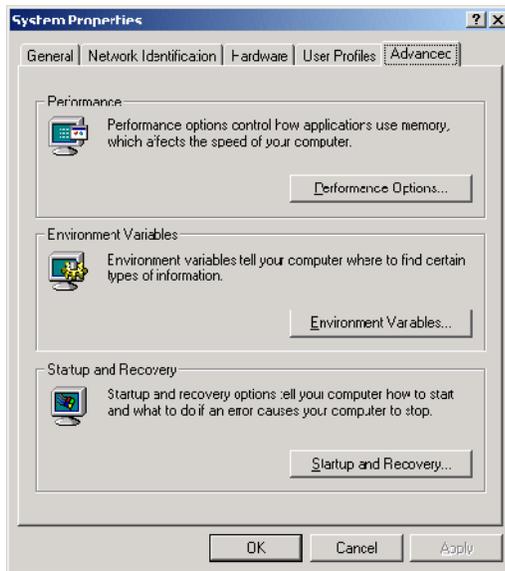
16. Click the **Advanced** tab. The Advanced page appears.

17. Click **Environmental Variables**. The Environmental Variables page appears.

18. Double-click the CLASSPATH variable. If the variable does not exist, click **New**. The Edit System Variable or the New System Variable dialog box appears (Figure 34).

Figure 34: Edit System Variable Dialog Box

19. Append the following to the Variable Value:

    `C:\Oracle\Ora81\jdbc\lib\classes12.zip; C:\Oracle\Ora81\jdbc\lib\nls_charset12.zip;`

    *Note: Do not delete any other entries in the **Variable Value** field.*

20. Click **OK**.

21. Reboot the system. Oracle is installed and configured.

Installing the Oracle Client on Windows NT/2000/XP

To install the Oracle Client, simply load the CD-ROM and follow the on-screen instructions. However, make sure to select the following:

- To add tables and perform other tasks without having to go to the Oracle Server, make sure to select the **Administration** option.
- Make sure to use the default port (1521).

To use the administration tool, click **Start**, point to **Programs**, point to **Oracle for Windows NT**, point to **Database Administration**, and select **DBA Studio**. The username is **SYSTEM** and the password is **manager**.

To test queries on your databases, click **Start**, point to **Programs**, point to **Oracle for Windows NT**, point to **Application Development**, and click **SQL Plus**. You can use **scott** as the username and **tiger** as the password (defaults shipped with system samples) and the hostname where the Oracle Server is located as the Hostname. To see if everything is working properly, select * from depts as the sample query.

Note: After installing Oracle Client or other tools that include their own JRE, the registry is sometimes updated with that JRE information. Subsequent attempts to use javac, start TomCat, or other applications or utilities might

result in error messages about version number mismatches in the registry. Reinstalling the JRE 1.3 should fix these problems.

After installing the Oracle Client, follow these steps:

1. Log in as the Oracle user.

2. Modify the `$ORACLE_HOME/dbs/<instancename>.ora` file to increase the levels to a MEDIUM size database. Use init.ora as an example that also contains all information about each variable.

3. Configure the following for the user that will install SonicWALL GMS:

   ```
   ORACLE_HOME
   ORACLE_SID
   LD_LIBRARY_PATH=$ORACLE_HOME/lib:
   CLASSPATH=$ORACLE_HOME/jdbc/lib/classes12.zip: $ORACLE_HOME/jdbc/lib/nls_charset12.zip:
   ```

4. Set the number of open cursors to at least 200.

Miscellaneous Procedures and Troubleshooting Tips

This chapter contains miscellaneous SonicWALL Global Management System (SonicWALL GMS) procedures and troubleshooting tips.

Miscellaneous Procedures

This section contains information on procedures that you may need to perform. Select from the following:

- It is highly recommended that you regularly back up the SonicWALL GMS data. For more information, see "Backing up SonicWALL GMS Data" on page 39.
- SonicWALL GMS requires Mixed Mode authentication when using SQL Server 2000. To change the authentication mode, see "Changing the SQL Server Authentication Mode" on page 39.
- If you are reinstalling SonicWALL GMS, preserving the previous configuration settings can save a lot of time. To reinstall SonicWALL GMS using an existing SonicWALL GMS database, see "Reinstalling SonicWALL GMS Using an Existing Database" on page 39.
- If you need to unistall SonicWALL GMS from a server, it is important to do it correctly. To uninstall SonicWALL GMS, see "Uninstalling SonicWALL GMS" on page 40.

Backing up SonicWALL GMS Data

SonicWALL GMS stores its configuration data in the SGMS database, SGMSDB. It is important to back up this database and the individual ViewPoint databases (sgmsvp_yyyy_mm_dd) on a regular basis.

This can be accomplished by backing up the entire Oracle or MS SQL Server 2000 using the database backup tool. When using this tool, there is no need to stop the SonicWALL GMS services for database backup. However, make sure that the backup occurs when SonicWALL GMS activity is the lowest and that the backup operation schedule does not clash with the SonicWALL GMS scheduler.

Note: It is also recommended to regularly back up the entire contents of the SonicWALL GMS directory, the sgmsConfig.xml file, and the sgmsConfigBkp.xml file (Solaris only).

Changing the SQL Server Authentication Mode

SonicWALL GMS requires the Mixed Mode authentication mode. To change the authentication mode from Windows Mode to Mixed Mode, follow these steps:

1. Start the Microsoft SQL Server Enterprise Manager.
2. Right-click the appropriate SQL Server Group and select **Properties** from the pop-up menu.
3. Click the **Security** tab.
4. Change the Authentication mode from **Windows only** to **SQL Server and Windows**.
5. Click **OK**.

Reinstalling SonicWALL GMS Using an Existing Database

If you need to reinstall SonicWALL GMS, but want to preserve the settings in an existing SonicWALL GMS database, follow these steps:

1. Install a new database, using the same username and password that you used for the existing SonicWALL GMS database.

2. Install SonicWALL GMS using this new database. For more information, see Chapter 2, "Installing SonicWALL GMS."

3. Stop all SonicWALL GMS services.

4. Open the sgmsConfig.xml and web.xml files with a text editor. Change the values for the dbhost and dburl parameters to match the existing SonicWALL GMS database.

5. Restart the SonicWALL GMS services.

6. Uninstall the new database.

Uninstalling SonicWALL GMS

This section describes how to uninstall SonicWALL GMS and its components. Select from the following:

- To uninstall SonicWALL GMS on the Windows platform, see "Windows" on page 40.
- To uninstall SonicWALL GMS on the Solaris platform, see "Solaris" on page 40.
- To uninstall SonicWALL GMS databases from Microsoft SQL Server 2000, see "MS SQL Server 2000" on page 41.
- To uninstall SonicWALL GMS databases from Oracle, see "Oracle" on page 41.

Windows

To uninstall SonicWALL GMS from a Windows system, follow these steps:

1. Click Start, point to Settings, and click **Control Panel**.

2. Double-click **Add/Remove Programs**. The Add/Remove Programs Properties window appears (Figure 35).

   Figure 35: Add/Remove Programs Properties
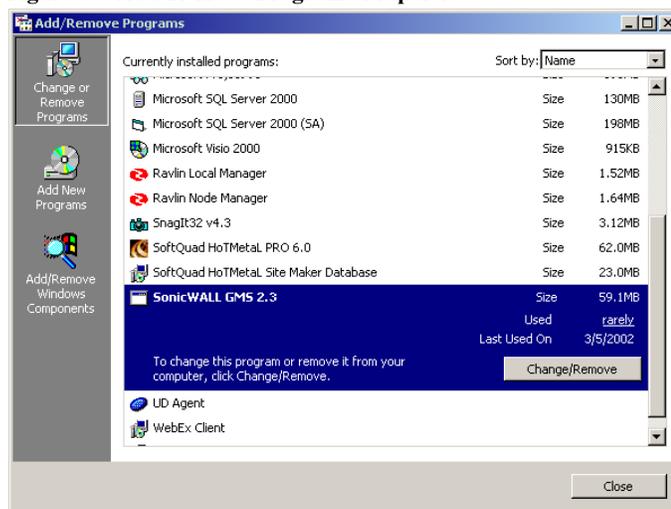
3. Select SonicWALL Global Management System and click **Change/Remove**. The SonicWALL GMS Uninstall program starts.

4. Follow the on-screen prompts.

5. Restart the system. SonicWALL GMS is uninstalled.

Solaris

To uninstall SonicWALL GMS from a Solaris system, follow these steps:

1. Change to the *<sgms_directory>*/UninstallerData directory.

2. Enter the following command:

   Uninstaller_SGMS

3. Follow the on-screen prompts to remove SonicWALL GMS.

4. Restart the system. SonicWALL GMS is uninstalled.

MS SQL Server 2000

To uninstall or remove the SonicWALL GMS databases in the MS SQL Server 2000, you can execute the following DOS command from any SonicWALL GMS server:

```
osql -U username -P password -S dbHost_IP -q "drop database SGMSDB"
osql -U username -P password -S dbHost_IP -q "drop database sgmsvp_yyyy_mm_dd"
```

Or you can use the MS SQL Server's Enterprise Manager and delete the SGMSDB and sgmsvp_ databases.

Oracle

To uninstall or remove the SonicWALL GMS databases in the Oracle, use the Oracle Database Configuration Assistant. Once the databases are removed, the associated services will also be removed. You can also do the following:

1. Log into sqlplus as SYSTEM/MANAGER (password 'manager' is the default provided at the time of server install).

2. Execute the following commands:

```
drop user sgms cascade; /* Deletes the user sgms */
create user sgms identified as sgms;  /* Creates a user sgms with password sgms */
grant CONNECT, RESOURCE, DBA to sgms; /* Grants rights to the user sgms */
select username from all_users where username like 'SGMSVP_%'; /* Retrieves a list of VP data-
bases */
drop user SGMSVP_2001_11_15; /* Repeat this for the usernames that the step iv displays */
exit;
```

Troubleshooting Tips

This section contains SonicWALL GMS troubleshooting tips.

Phase 2 Installation Hangs

Problem: Phase 2 installation hangs on the SonicWALL GMS Console. During the Phase 2 installation, SonicWALL GMS connects to the MS-SQL 2000 database server and creates the SGMSDB, but then hangs on sgms_sessions.sql.

Solution: Install Microsoft SQL Server 2000 Client Tools on the SonicWALL GMS Console system.

Registration Fails

Problem: Registration of SonicWALL GMS, activation of SonicWALL GMS node license upgrades, or activation of SonicWALL GMS service contact fails with the following error message:

"Upgrade failed: Error During Impersonation of user".

Cause: The password for the SonicWALL GMS account on mysonicwall.com (as mysonicwall thinks it is) does not match the password in the SGMSDB database.

Solution: Edit the SonicWALL GMS account on mysonicwall.com to use the password from SGMSDB database.

Installing the Console in Redundancy Mode

To configure the SonicWALL GMS Console in redundancy mode, follow these steps:

1. Complete Phase 1 & Phase 2 installations on the first SonicWALL GMS Console.

2. Complete Phase 1 & Phase 2 installations on the second SonicWALL GMS Console.

3. Register SonicWALL GMS from the first SonicWALL GMS Console.

4. Copy the sgms.o file to the second SonicWALL GMS Console.

No Agent functionality on the Console

If during the installation, you have selected not to install the Agent functionality on the GMS Console, you can do the following to retrieve the Agent functionality after installation:

1. Go to the <sgms_directory>\Temp folder.

2. Open the file shedInstall.bat with a text editor.

3. Remove "REM" from the file.

4. Save the file and exit.

5. Execute the batch file.

   The SGMS Scheduler service starts installing.

6. Start the SGMS Scheduler service.

Uninstalling the SGMS Web Server from the DOS Prompt

To uninstall the SonicWALL GMS Web Server from the DOS prompt, go to the <sgms_directory>:\Tomcat\bin folder and run enter the following command:

```
service -uninstall 'SGMS Web Server'
```

Securing Access to the SGMS Web Server

This section describes how to configure SonicWALL GMS to run using HTTPS.

Creating a Keystore with a Valid Test Certificate

To configure SonicWALL GMS to use HTTPS, you must create a keystore with a valid test certificate. To do this, follow these steps:

1. From the command-line on the SonicWALL GMS Console, change to the following directory:

   ```
   sgms_directory\jre\bin
   ```

   where *sgms_directory* is the directory where SonicWALL GMS was installed.

2. Enter the following command:

   ```
   .\keytool -genkey -alias spcert -keyalg RSA -keystore sgms_directory\etc\keystore
   ```

3. You are prompted to enter the keystore password and other information.

4. When prompted to confirm the information, type yes and press Enter.

5. Enter key password for <spcert>. If the password is the same as the keystore password, hit Enter.

   The certificate is issued for evaluation and testing purposes. To create a secure website using this certificate, see "Creating a Secure Website" on page 42. To use HTTPS with a valid certificate, you will need to obtain a certificate through a valid certificate authority (e.g., Verisign and Thawte) and store the certificate in the keystore that you just created.

   Note: For information on getting a certificate from Thawte, visit http://www.orionserver.com/docs/ssl-howto.html.

Creating a Secure Website

This section describes how to create a secure website with server side authentication. To do this, follow these steps:

1. Open the <sgms_directory>\jre\lib\security\java.security file with a text editor.

2. Locate the following entry:

   ```
   provider.2
   ```

3. Replace it with the following:

   ```
   provider.3
   ```

4. Insert the following line above the line that you just edited:

   ```
   security.provider.2=com.sun.net.ssl.internal.ssl.Provider
   ```

5. Save the file and exit.

6. Open the <sgms_directory>\Tomcat\conf\server.xml file with a text editor.

7. Locate the following entry:

```
<!--
        <Connector className="org.apache.tomcat.service.PoolTcpConnector">
            <Parameter name="handler"
                value="org.apache.tomcat.service.http.HttpConnectionHandler"/>
            <Parameter name="port"
                value="8443"/>
            <Parameter name="socketFactory"
                value="org.apache.tomcat.net.SSLSocketFactory" />
        </Connector>
        -->
```

8. Remove the comment characters (`<!--`, `-->`) .

9. Change the port value from 8443 to 443.

10. Enter the following lines below the port entry:

```
<Parameter name="keypass" value="keystore_password"/>
<Parameter name="keystore" value="sgms_directory\etc\keystore"/>
<Parameter name="clientAuth" value="false"/>
```

where *keystore_password* is the keystore password that you entered when creating the certificate and *sgms_directory* is the directory where SonicWALL GMS was installed.

The following is an example of a modified server.xml entry:

```
<Connector className="org.apache.tomcat.service.PoolTcpConnector">
        <Parameter name="handler"
            value="org.apache.tomcat.service.http.HttpConnectionHandler"/>
        <Parameter name="port"
            value="443"/>
    <Parameter name="keypass" value="sgms11"/>
    <Parameter name="keystore" value="D:\SGMS2\etc\keystore"/>
    <Parameter name="clientAuth" value="false"/>
        <Parameter name="socketFactory"
            value="org.apache.tomcat.net.SSLSocketFactory" />
    </Connector>
```

11. To disallow normal HTTP traffic, locate and comment out the following section:

```
<!-- Normal HTTP -->

        <Connector className="org.apache.tomcat.service.PoolTcpConnector">
            <Parameter name="handler"
                value="org.apache.tomcat.service.http.HttpConnectionHandler"/>
            <Parameter name="port" value="80"/>
        </Connector>
```

When you are finished, it should look like the following:

```
<!-- Normal HTTP -->
<!--
        <Connector className="org.apache.tomcat.service.PoolTcpConnector">
            <Parameter name="handler"
                value="org.apache.tomcat.service.http.HttpConnectionHandler"/>
            <Parameter name="port" value="80"/>
        </Connector>
-->
```

12. Save the file and exit.

13. Restart the SGMS Web Server service.

Securely Accessing SonicWALL GMS

To securely access SonicWALL GMS, open a web browser and enter `https://sgms_address` where *sgms_address* is the address of the SonicWALL GMS server.

If you are using a Windows server, modify the desktop shortcut. Make sure it points to `https://localhost`.

Changing the SGMS Web Server Port Number

During installation, you can specify a different port number for the SGMS Web Server. After installation, follow these steps:

1. Open the following file:

   ```
   <sgms_directory>:/Tomcat/conf/server.xml
   ```

2. Locate the following line:

   ```
   Parameter name="port" value="80"
   ```

3. Change the default value of 80 to another port number:

4. Save the file and exit.

Changing a SonicWALL GMS Agent IP Address

If you have changed the IP address of the SonicWALL GMS Agent, follow these steps:

1. Stop all SonicWALL GMS services.

2. Change the "SGMS Scheduler" service status to manual mode (Windows only).

3. If you are using MS SQL Server, execute the following SQL commands from a DOS window:

   ```
   osql -U <userid> -P <password> -Q "update sgmsdb.dbo.schedulers set ipAddress = 'new ip' where
   ipAddress = 'old ip'"
   ```

4. If you are using Oracle, execute the following SQL commands as root:

   ```
   sqlplus <userid>/<password>@<sid>
   ```

   ```
   update schedulers set ipAddress = 'new ip' where ipAddress = 'old ip';
   ```

   ```
   commit;
   ```

5. Change the "SGMS Scheuler" service status to Automatic mode (Windows only).

6. Restart all SonicWALL GMS services.

Changing the Default Syslog Server Port Number

By default, the SonicWALL GMS syslog server default port number is 514 on Windows systems. To change the port number, follow these steps:

1. Open the sgmsConfig.xml file with a text editor.

2. Add the following line to the end of the file before the </Configuration> section:

   Parameter name="syslog.syslogServerPort" value="*port_number*"

   where *port_number* is the new port number.

3. Save the file and exit.

By default, the SonicWALL GMS' syslog server default port number is 3003 on Solaris systems. To change the port number, follow these steps:

1. Open the sgmsConfig.xml file with a text editor.

2. Locate the following parameter:

   ```
   syslog.syslogServerPort" value="3003"
   ```

3. Change the syslog server port value to another number.

4. Save the file and exit.