Platform Compatibility

The Dell SonicWALL GMS 7.2 Service Pack 2 (SP2) release can be hosted in three deployment scenarios as follows:

- Microsoft Windows Server Software
- VMware ESX/ESXi Virtual Appliance
- UMA EM5000 Universal Management Appliance

Deployment Considerations:

- Before selecting a platform to use for your GMS deployment, please use the Capacity Calculator 2. This helps you set up the correct GMS system for your deployment.
- It is highly recommended that steps are taken to minimize abrupt shutdowns of the server hosting GMS, as this can cause corruption of the Reporting database, potentially leading to loss of data for the current month. A possible solution includes using an Uninterrupted Power Supply (UPS).

Microsoft Windows Server Operating Systems

The Dell SonicWALL GMS supports the following Microsoft Windows operating systems:

- Windows Server 2012 Standard 64-bit
- Windows Server 2012 R2 Standard 64-bit (Japanese Language Version)
- Windows Server 2012 R2 Datacenter
- Windows Server 2008 R2 Datacenter
- Windows Server 2008 SBS R2 64-bit
- Windows Server 2008 R2 Standard 64-bit
- Windows Server 2008 SP2 64-bit
- Windows Server 2003 32-bit and 64-bit (SP2)

The above Windows systems can either run in physical standalone hardware platforms, or as a virtual machine under Hyper-V or ESXi.

Tip: For best performance and scalability, it is recommended to use a 64-bit Windows operating system. Bundled databases run in 64-bit mode on 64-bit Windows operating systems. All listed operating systems are supported in both virtualized and non-virtualized environments. In a Hyper-V virtualized environment, Windows Server is a guest operating system running on Hyper-V. GMS is then installed on the Windows Server virtual machine that is layered over Hyper-V.
Hardware for Windows Server
Use the Capacity Calculator 2 to determine the hardware requirements for your deployment.

Note: A Windows 64-bit operating system with at least 8GB of RAM is highly recommended for better performance of reporting modules. Please read the “Capacity Planning and Performance Tuning” appendix in the GMS Administrator’s Guide.

Hard Drive HDD Specifications
The following hard drive HDD specifications are required when using GMS software:
- **Spindle Speed**: 7200 and higher
- **Cache**: 64MB and higher
- **Transfer rate**: 600MB/s or higher
- **Average Latency**: 4ms or lower

GMS Virtual Appliance Supported Platforms
The elements of basic VMware structure must be implemented prior to deploying the Dell SonicWALL GMS Virtual Appliance. The GMS Virtual Appliance runs on the following VMware platforms:
- ESXi 4.1, 5.0, 5.1 and 5.5
- ESXi 4.0 Update 1 (Build 208167 and newer)
- ESX 4.1
- ESX 4.0 Update 1 (Build 208167 and newer)

Virtual Appliance Deployment Considerations
Please consider the following before deploying the GMS Virtual Appliance:
- GMS management is not supported on Apple MacOS.
- All modules are 64-bit.
- Using the Flow Server Agent role requires a minimum of:
  - Quad Core
  - 16GB of memory
  - 300 HDD

GMS Virtual Appliance Hardware Resource Requirements
Use the Capacity Calculator 2 to determine the hardware requirements for your deployment.

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

Starting with GMS 7.1 the Virtual Appliances are 64-bit, which take advantage of additional RAM available to it. A minimum of 4 GB RAM is required. However, at least 8GB of RAM is highly recommended for better performance of reporting modules. Please read the “Capacity Planning and Performance Tuning” appendix in the GMS Administrator’s Guide.

Hard Drive HDD Specifications
The following hard drive HDD specifications are required when using the GMS Virtual Appliance:
- **Spindle Speed**: 7200 and higher
- **Cache**: 64MB and higher
- **Transfer rate**: 600MB/s or higher
- **Average Latency**: 4ms or lower
**UMA EM5000 Requirements**

The GMS 7.2 SP2 release is supported on the Dell SonicWALL UMA EM5000 Universal Management Appliance. The 3.1GB of RAM on the UMA EM5000 is sufficient memory to run GMS 7.2 SP2, but may not help scale GMS for high volume reporting.

**MySQL Requirements**

GMS automatically installs MySQL as part of the base installation package. Separately installed instances of MySQL are not supported with GMS.

**Microsoft SQL Server Requirements**

For SQL Server deployments in countries in which English is not the default language, set the default language to English in the Login Properties of the GMS database user in the SQL Server configuration.

The following SQL Server versions are supported:

- SQL Server 2012
- SQL Server 2008
- SQL Server 2005

**Java Support**

Download and install the latest version of the Java 7 plug-in on any system that accesses the GMS management interface. This can be downloaded from:

- [www.java.com](http://www.java.com)

**Dell SonicWALL Appliances Supported for GMS Management**

Dell SonicWALL GMS 7.2 SP2 supports the following Dell SonicWALL appliances and firmware versions:

<table>
<thead>
<tr>
<th>Dell SonicWALL Platforms</th>
<th>Dell SonicWALL Firmware Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firewall / Network Security</td>
<td></td>
</tr>
<tr>
<td>SuperMassive 10000 Series</td>
<td>SonicOS 6.0 or newer</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: Only partial policy management and reporting support is currently available. The following SuperMassive specific features are not supported for centralized policy management in GMS 7.2 SP2:</td>
</tr>
<tr>
<td></td>
<td>• Multi-blade CASS</td>
</tr>
<tr>
<td></td>
<td>• High Availability/Clustering</td>
</tr>
<tr>
<td></td>
<td>• Support for Management Interface</td>
</tr>
<tr>
<td></td>
<td>• Flow Reporting Configurations</td>
</tr>
<tr>
<td></td>
<td>• Multi-blade VPN</td>
</tr>
<tr>
<td></td>
<td>• Advanced Switching</td>
</tr>
<tr>
<td></td>
<td>• Restart: SonicOS versus Chassis</td>
</tr>
<tr>
<td></td>
<td>Contact your Dell SonicWALL Sales representative for more information.</td>
</tr>
<tr>
<td>SuperMassive 9000 Series</td>
<td>SonicOS 6.1 or newer</td>
</tr>
<tr>
<td>NSA Series</td>
<td>SonicOS Enhanced 5.0 or newer</td>
</tr>
<tr>
<td>TZ Series</td>
<td>SonicOS Enhanced 3.2 or newer</td>
</tr>
</tbody>
</table>
Release Notes

<table>
<thead>
<tr>
<th>Feature</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>SonicOS Standard 3.1</td>
<td>SonicOS Enhanced 3.2 or newer</td>
</tr>
<tr>
<td>PRO Series</td>
<td>SonicOS CF 2.0 or newer</td>
</tr>
<tr>
<td>CSM Series</td>
<td></td>
</tr>
<tr>
<td>Email Security/ Anti-Spam</td>
<td></td>
</tr>
<tr>
<td>Email Security Series</td>
<td>Email Security 7.2 or newer</td>
</tr>
<tr>
<td>Secure Remote Access</td>
<td></td>
</tr>
<tr>
<td>SRA / SSL-VPN Series</td>
<td>SonicOS SSL-VPN 2.0 or newer</td>
</tr>
<tr>
<td></td>
<td>SonicOS SSL-VPN 2.1 or newer</td>
</tr>
<tr>
<td></td>
<td>SRA 9.0 or newer</td>
</tr>
<tr>
<td>Backup and Recovery</td>
<td></td>
</tr>
<tr>
<td>CDP Series</td>
<td>CDP 2.3 or newer (management)</td>
</tr>
<tr>
<td></td>
<td>CDP 5.1 or newer (reporting)</td>
</tr>
</tbody>
</table>

Notes:

- GMS 7.2 SP2 supports Dell SonicWALL firewall App Control policy management and App Control reporting support. Please refer to the SonicOS documentation for information on the supported SonicOS firmware versions.
- Appliances running firmware newer than this GMS release can still be managed and reports can still be generated. However, the new features in the firmware release will be supported in an upcoming release of GMS.
- Legacy SonicWALL XPRS/XPRS2, SonicWALL SOHO2, SonicWALL Tele2, and SonicWALL Pro/Pro-VX models are not supported for Dell SonicWALL GMS management. Appliances running SonicWALL legacy firmware including SonicOS Standard 1.x and SonicWALL legacy firmware 6.x.x.x are not supported for GMS management.

Non-Dell SonicWALL Appliance Support

Dell SonicWALL GMS provides monitoring support for non-Dell SonicWALL TCP/IP and SNMP-enabled devices and applications.

Browser Support

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

This release supports the following Web browsers:

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

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

Mobile device browsers are not recommended for Dell SonicWALL GMS system administration.
Enhancements in GMS 7.2 SP2

This section describes the enhancements included in the GMS 7.2 SP2 release.

- **SonicOS 6.2 Support** — Supports all features and enhancements of firmware releases through SonicOS 6.2.0.0. Appliances running firmware newer than the SonicOS 6.2 release can still be managed and reports can still be generated by GMS 7.2 SP2. Some of these SonicOS enhancements include (but are not limited to):
  - **Web Proxy Support** — Supports the inclusion of certain client objects and the exclusion of certain server objects.
  - **User Settings** — New support for User Web Login Settings.
  - **Firewall Settings** — Supports firewall domain names.
  - **Secondary Management IP Address for High Availability (HA)** — Support for a secondary management IP address when High Availability is enabled.

Known Issues

This section contains a list of known issues in the GMS 7.2 SP2 release.

**Appliance**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Condition / Workaround</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS is unable to test connectivity on an SMTP server using a hostname and a custom port.</td>
<td>Occurs during an SMTP connectivity test when using any hostname and a custom port. <strong>Workaround</strong>: Telnet to the same hostname using port 25.</td>
<td>151869</td>
</tr>
</tbody>
</table>

**Policies**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Condition / Workaround</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentication of Users on a Novell eDirectory fails.</td>
<td>Occurs when the LDAPv3 option is selected on the <strong>PP &gt; Users &gt; LDAP</strong> page. The LDAPv3 users cannot be authenticated.</td>
<td>137332</td>
</tr>
<tr>
<td>A task execution error message appears when creating interconnected Security Associations (SA) from (Group) to (unit) for the <code>ipsecGwAddr</code> parameter in GMS.</td>
<td>Occurs when two SAs have the same local and destination network.</td>
<td>151356</td>
</tr>
<tr>
<td>The &quot;Add Lag Port&quot; drop-down menu does not list valid ports.</td>
<td>Occurs when upgrading from GMS 7.1.</td>
<td>151557</td>
</tr>
<tr>
<td>The <strong>Anti-Spam &gt; Settings</strong> 'Enable Anti-Spam Service' tasks and subtasks cannot be executed in the SonicOS 6.2 firmware.</td>
<td>Occurs when tasks are not created by GMS, so the firmware is automatically creating those objects.</td>
<td>151724</td>
</tr>
<tr>
<td>The VLAN table data does not appear in GMS for the Dell SonicWALL SuperMassive 9800 appliance.</td>
<td>Occurs when using the <strong>PP &gt; Switching &gt; VLAN Trunking</strong> page in GMS to view the VLAN table on the SuperMassive 9800.</td>
<td>152053</td>
</tr>
<tr>
<td>Action Objects cannot be added to a firewall from GMS and a &quot;Task execution failure&quot; message is displayed.</td>
<td>Occurs when trying to add Action Objects to a firewall running SonicOS 6.2.0.0.</td>
<td>152116</td>
</tr>
</tbody>
</table>
## Resolved Issues

This section contains a list of issues resolved in the GMS 7.2 SP2 release.

### Firewall Configuration

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Condition / Workaround</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firewalls do not display the login page.</td>
<td>Occurs when a modification is made to the login session limit.</td>
<td>147378</td>
</tr>
<tr>
<td>Port numbers cannot be added after URLs to the Allowed Domains List in GMS.</td>
<td>Occurs when trying to add the port number to an allowed domain that sends a software update using &quot;:80&quot; in the URL. The Content Filter Service blocks the update although the domain is allowed, because the port number is not part of the allowed URL. <strong>Workaround:</strong> Manually configure the URL in the firewall GUI.</td>
<td>147988</td>
</tr>
</tbody>
</table>

### Reporting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Condition / Workaround</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Reporting Database does not use the appropriate amount of memory to calculate buffer size.</td>
<td>Occurs when the Reporting Database is not taking advantage of the resources available on a Windows 64-bit server with an Intel Xeon 2.10GHz single CPU, 128GB ram, and 64-bit OS.</td>
<td>148422</td>
</tr>
</tbody>
</table>

### Policies

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Condition / Workaround</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot modify address objects from one type to another such as an FQDN to a HOST.</td>
<td>Occurs when attempting to create a new address object with the same name.</td>
<td>128624</td>
</tr>
<tr>
<td>GMS does not populate data in the CFS Categories of Match Objects.</td>
<td>Occurs when the managed firewalls are using CFS with App Rules.</td>
<td>149857</td>
</tr>
</tbody>
</table>

### Scheduler

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Condition / Workaround</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperlinks should be provided for URLs in scheduled PDF reports.</td>
<td>Occurs when viewing a PDF report generated from GMS.</td>
<td>106609</td>
</tr>
</tbody>
</table>

### Summarizer

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Condition / Workaround</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>The server locks up and fails to boot.</td>
<td>Occurs when the server’s hard disk is full.</td>
<td>143792</td>
</tr>
<tr>
<td>The Summarizer processes syslog messages intermittently.</td>
<td>Occurs when the task scheduler sends queries that take a long time to be processed.</td>
<td>149644</td>
</tr>
</tbody>
</table>
**Upgrading to GMS 7.2 SP2**

This section provides procedures for upgrading an existing Dell SonicWALL GMS 7.1 or 7.2 installation to GMS 7.2 SP2. GMS can be configured for a single server or in a distributed environment on multiple servers.

**Upgrading Considerations**

Consider the following before upgrading to GMS 7.2 SP2:

- GMS 7.2 SP2 cannot be installed as a “fresh install.” It can only be installed as an upgrade from GMS 7.2. For a fresh install of GMS 7.2, please refer to the *Dell SonicWALL GMS Getting Started Guide* that relates to your platform.

- The 40GB GMS Virtual Appliance should be installed in non-production environments only. Examples of non-production environments include those for Proof of Concept (POC), pilot, and demo deployments. Only the 250GB and 950GB virtual appliances are supported in production environments. It is not possible to upgrade a 40GB virtual appliance to a 250GB or 950GB virtual appliance. You need to download the 250GB or 950GB virtual appliance if you are planning to use this software now or in the future for a production environment.

- In non-production environments, the amount of syslog data collected by the virtual appliance may exceed the 40GB limit, in which case Dell SonicWALL will be unable to support the 40GB virtual appliance.

- You must disable the User Account Control (UAC) feature on Windows before running the GMS installer. In addition, disable Windows Firewall or your personal firewall before running this installer.

- For appliances under management using a GMS Management Tunnel or Existing Tunnel, make sure that HTTPS management is allowed from the GMS servers. This is because GMS 7.2 logs into the appliances using HTTPS only.

- In a distributed environment, stop all GMS services on all GMS servers before performing an upgrade. You must upgrade all GMS servers in your deployment to the same version of GMS. You cannot have some servers running version 7.2 and others running 7.2 SP1 or 7.2 SP2.

**Upgrading Procedure**

To upgrade to GMS 7.2 SP2, perform the following steps:

1. Navigate to [www.mysonicwall.com](http://www.mysonicwall.com).
2. In the navigation menu, click Downloads > Free Downloads.
3. Click the Software Type drop-down menu and then select GMS/Analyzer software for Windows or Virtual Appliance, or GMS UMA EM5000 Appliance Firmware, according to your installation.
4. Depending on the version you are currently running, download the following versions and install them in the recommended order, as shown below:
   - From an existing installation of version 7.1, with or without Service Packs:
     1. Download and upgrade to version 7.2.7223.1730. This is version 7.2 without Service Packs.
     2. Download and apply 7.2 Service Pack 1.
     3. Download and apply 7.2 Service Pack 2.
     4. Download and apply Hotfix 146366 (OpenSSL vulnerabilities)
     *Note: No need to apply Hotfix 150000 if starting with version 7.2.7223.1730.*
   - From an existing installation of version 7.2 with a build number lower than 7.2.7223.1730:
     1. Download and apply 7.2 Service Pack 1.
     2. Download and apply 7.2 Service Pack 2.
     3. Download and apply Hotfix 146366 (OpenSSL vulnerabilities)
     4. Download and apply Hotfix 150000 (Bash vulnerabilities)
5. To install each version in the applicable sequence shown above, log into the “/appliance” management interface of your GMS system and navigate to the System > Settings page.
6. Click the **Choose File** button, and then select the downloaded version or Hotfix file.

7. Click the **Apply** button.

8. After each version file or Hotfix is installed, reboot the system to complete the upgrade.
Online Training Materials

Dell SonicWALL Technical Training Services offers GMS software and UMA appliance eLearning for essential security administrator certification. This Certified Dell SonicWALL Security Administrator (CSSA) course provides fundamental instructions to help you understand the basic deployment best practices for Managed Security Service Providers.

The following link provides the latest information regarding Dell SonicWALL GMS eLearning courses:

http://www.sonicwall.com/us/support/eLearning.html#tab=technical

Click Global Management System Certification Training.
Related Technical Documentation

Dell SonicWALL reference documentation is available on the Dell Software Support site:
https://support.software.dell.com/sonicwall-gms/Virtual%20Appliance/release-notes-guides

Datasheets, white papers, and other product information are available on the Dell Software Products website:
http://software.dell.com/products/sonicwall-gms/

Knowledge articles and links to related community forums and other resources are available at:
https://support.software.dell.com/sonicwall-gms/

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

Last updated: 10/10/2014