

# Sun HighGround™ Storage Resource Manager Release Notes

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**Part No. 816-3310-11**

This document provides late-breaking information not included in the documentation for the Sun HighGround™ Storage Resource Manager (Sun HighGround SRM) software. See the documentation provided with Sun HighGround™ Storage Resource Manager 5.0.5 for additional installation and use information.

This document provides information about the following products:

[Sun HighGround™ Storage Resource Manager \(Sun HighGround SRM\) 5.0.5](#)

[Sun HighGround™ Storage Resource Manager \(Sun HighGround SRM\) for Database Servers 5.0.5](#)

[Sun HighGround™ Storage Resource Manager \(Sun HighGround SRM\) for Exchange Servers 4.0.3](#)

## Sun HighGround SRM 5.0.5

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### Installation and Configuration Issues

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The following are known installation and configuration issues relating to this release of Sun HighGround SRM:

#### Upgrading to Sun HighGround SRM 5.0.5

Do not upgrade from the beta release software to the version 5.0.5 software.

To successfully upgrade to Sun HighGround SRM 5.0.5, you must begin from an existing Sun HighGround SRM installation of version 4.0.1 or later. To upgrade from versions older than 4.0.1, first upgrade to version 4.0.1 or 4.0.2; then upgrade to version 5.0.5.

## **Prerequisite Check Does Not Fail on Incorrect Windows NT Service Packs**

The prerequisite check fails to display an error message when it encounters a Windows NT Service Pack lower than SP5, which is the required Service Pack for Sun HighGround SRM installation.

## **Sun HighGround SRM Database and SQL Maintenance**

Upgrade to SQL 7.0 SP2 for SQL maintenance tasks to work properly. If you do not want to upgrade, use SQL Enterprise Manager to remove the CkCat qualifier from the SQLMAINT command. Contact Customer Support for more information on editing the SQL maintenance task.

## **Ksh (Korn Shell) is Required When Installing a Sun HighGround SRM Agent on a Linux Machine**

As a prerequisite, a Linux machine must have ksh installed on it before a successful Sun HighGround SRM Agent installation on that machine can occur. The latest **pdksh rpm** can be downloaded from the Red Hat website.

## **Plug-In Installation Passwords**

The following plug-in kits are password protected:

- Brocade SAN switch
- Network Appliance Filer
- Database Scanning

The password is provided with the product if you purchase these options.

## **Incorrect Version Number in Configuration and Installation Guide**

In the *Configuration and Installation Guide* for Version 5.0.5, sections 2.4.1, 4.2.1, and 4.2.2 incorrectly refer to Version 5.1. The correct version number is 5.0.5.

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## **Known Issues**

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The following are known issues relating to this release of Sun HighGround SRM:

### **Hitachi Data Systems HiCommand Server reports Storage Capacity Differently than Sun HighGround SRM**

The HiCommand Server calculates storage space as follows:

1 KB = 1000 bytes

1 MB = 1000 KB

1 GB = 1000 MB

and so on...

The Sun HighGround SRM software defines 1 KB as 1024 bytes, 1 MB as 1024 KB, and so on. Because of this difference, you will see discrepancies between storage capacity reported by the HiCommand Server and Sun HighGround SRM for a given 9900 Series RAID Array. The actual physical storage capacity of the device does not change.

### **Sun HighGround SRM and Hitachi Data Systems Terminology Difference**

The term "LUN" is used differently in Sun HighGround SRM and Hitachi Data Systems user interfaces and documentation:

- To Sun HighGround SRM, LUN refers to the virtual disk rendered by the RAID Array. The Hitachi Data Systems equivalent term is "Logical Unit".
- To Hitach Data Systems, LUN indicates a path to a "Logical Unit".

### **How to Correlate Sun HighGround SRM LUN Names and HDS LDEV Names**

To determine which Sun HighGround SRM 9900 Series RAID LUN corresponds to a particular HDS LDEV:

1. Convert the Sun HighGround SRM LUN Name from decimal to hexadecimal.
2. The first character of the hexadecimal number = the HDS "CU" number
3. The last 2 characters of the hexadecimal number = the HDS "Logical Unit"

Example: Sun HighGround SRM LUN Name 266 corresponds to 10A in hexadecimal. Therefore, the CU number is 1, and the LDEV number is 0A.

### **Refresh HDS HiCommand Server Data after Changing 9900 Series RAID Array Configuration**

Each time you change the configuration of a 9900 Series RAID Array using the HDS HiCommand Server, you must refresh the HDS HiCommand Server data for **all** HiCommand Servers attached to that 9900 Series RAID Array. Failure to do so can result in Sun HighGround SRM reporting old or obsolete 9900 Series RAID Array information.

To refresh the data on the HDS HiCommand Server:

1. On the Web Client user interface **Physical View** tab, click on the **Properties** button.
2. In the new window that displays, click on the **Refresh** button to update the HDS HiCommand Server data.

Note: The refresh operation takes some time to complete.

### **Sun HighGround Plug-In for 9900 Series RAID Array Does Not Support HTTPS Communications**

The Sun HighGround Plug-In for 9900 Series RAID Array does not support HTTPS communications to a HiCommand Server set up to operate in HTTPS mode. The plug-in does support HTTP communications.

### **Correct Procedure for Unregistering a 9900 Series RAID Array**

NOTE: This procedure must be performed **before** uninstalling Sun HighGround SRM.

When you register a 9900 Series RAID Array, Sun HighGround SRM passes information to the HiCommand Server so that the HiCommand Server can launch Sun HighGround SRM for that RAID array. If you no longer want to manage that 9900 Series RAID Array, you must use the "Unregister a managed object" function of the plug-in to remove the HiCommand Server GUI link to Sun HighGround SRM. See the *Notes on Sun HighGround SRM Plug-In for 9900 Series RAID Array* for more information.

### **The Sun StorEdge T3 Array Console Reports Storage Capacity Differently than Sun HighGround SRM**

The Sun StorEdge T3 Array console calculates storage space as follows:

1 KB = 1000 bytes

1 MB = 1000 KB

1 GB = 1000 MB

and so on...

The Sun HighGround SRM software defines 1 KB as 1024 bytes, 1 MB as 1024 KB, and so on. Because of this difference, you will see discrepancies between storage capacity reported by the T3 console and Sun HighGround SRM for a given T3 Array. The actual physical storage capacity of the device does not change.

### **Import from a Universal Security Group**

When importing User or Directory Group members from a Universal Security Group defined in Domain A, where the Universal Security Group contains users defined in Domain A and Domain B, only Users or Directories owned by accounts defined in Domain A will be imported. It is possible that Users defined in Domain A that are not part of the Universal Security Group may be imported inadvertently.

When importing User or Directory Group members from a nested Global Group only those Users or Directories listed in the parent group will be imported. Members of any 'sub groups' will not be imported.

### **Receiving "The page cannot be displayed" Error Message While Accessing Sun HighGround SRM**

While accessing Sun HighGround SRM when running IIS 5.0 in conjunction with an anti-virus software application, you may receive the "The page cannot be displayed" error message. If you encounter this error, close your browser session, and then shut down and restart the anti-virus software.

### **File Scanner Ignores Alternate Data Streams**

Files on NTFS can have an arbitrary number of independent data streams. The Sun HighGround SRM file scanner, like most programs, ignores all but the primary data stream. Alternate streams are not well known, but are occasionally used to hide information or to maliciously fill up a disk. By ignoring the alternate streams, Sun HighGround SRM ignores files that should be on the large file list and, on Windows 2000, produce per-user usage that differs from the Windows 2000 quota code.

See the Microsoft web site for more information on working with streams.

### **Missing SmartArray Logical Drive**

Sun HighGround SRM cannot detect that a logical drive has failed or disappeared until the system containing the SmartArray controller is rebooted.

### **Adding UNIX directories on the Add Directories page**

When adding UNIX directory entries on the Add Directories page, it is possible to create an entry whose path appears to be correct, but whose file system component of the path is incorrect. If this happens, the managed directory will appear to be missing after a scan occurs.

To avoid this problem, take *one* of the following actions:

- When using the Add Directories page to add a UNIX directory, be sure that the file system you select is the file system that actually contains the path you enter.

**Note:** The managed directory's path is formed by concatenating the file system with the entered directory. For example, to manage **/export/home/mbh**, if the correct file system selection is **/export**, enter **/home/mbh** as the directory entry.

Or

- Do not use the Add Directories page to add UNIX directories. Use the Directories Report to change the state of existing UNIX directories from unmanaged to managed.

### **Importing Sun HighGround SRM User and Directory Group members from ADS**

In all cases when importing User and Directory Group members from ADS "NT Style" naming conventions must be used in place of the Active Directory names. For example: SERVERNAME\Administrator is required instead of [Administrator@SERVERNAME.DOMAIN](#).

### **Uninstall/Reinstall Sun HighGround SRM Server Will Reset Sun HighGround SRM Settings**

If you uninstall/reinstall a Sun HighGround SRM Server, settings such as Remote Install Scripts and E-mail Alert text changes will be lost.

### **Upgrade Does Not Remove Backup Plug-In**

Sun HighGround SRM no longer supports the Backup Plug-In. However, if you upgrade to Version 5.0.5 from a previous version of Sun HighGround SRM, the Backup Plug-In user interface pages still display. A clean installation of Sun HighGround SRM Version 5.0.5 removes the Backup Plug-In user interface pages.

### **Automatic Deletion of Remote Install Scripts**

If you uninstall Sun HighGround SRM while keeping the database, any remote install scripts created through Sun HighGround SRM are deleted.

### **Do Not Use the Help Window's Refresh Button When Using Internet Explorer 5.5 or Internet Explorer 5.5 SP1**

Clicking **Refresh** while viewing the Help in IE 5.5 or IE 5.5 SP1 may display a run-time error and a dialog box asking if you want to debug the application. If this dialog box displays, click **No** when asked to debug the application.

This problem does not occur on IE 5.0 or IE 5.5 SP2.

### **Internet Explorer 5.0 SP1, 5.5 SP2, or 6.0 Required for Remote Installation**

To perform remote installations of the Sun HighGround SRM agent, you must use Internet Explorer 5.0 SP1, 5.5 SP2, or 6.0, with appropriate security patches for each version.

## **Mounted Volumes without Drive Letters not Reported in File System Report**

In some cases if a volume has been created but not assigned a drive letter, it may not be reported in the File System Report after a scan. To ensure that volumes are consistently reported they must be given a drive letter upon creation.

## **Disk Reports on UNIX platforms display a "Filesystem Section Start On Disk" value of 0.00MB**

The "Filesystem Section Start On Disk" value for Disk Reports on UNIX platforms shows a value of 0.00MB, which may be incorrect.

## **Sun HighGround SRM Display Name must Match Network Appliance Device Name**

When assigning a Sun HighGround SRM display name to a Network Appliance device, you must assign the Network Appliance device's true network name. Scans fail if the Sun HighGround SRM display name does not exactly match the Network Appliance device's true network name.

## **How to Get Adobe Acrobat Reader**

The documentation on the CD-ROM is in PDF format. If you do not have Adobe Acrobat Reader, go to [www.adobe.com](http://www.adobe.com) to obtain a free copy.

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# **Sun HighGround SRM for Database Servers 5.0.5**

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## **Notes on Sun HighGround SRM for Database Servers 5.0.5 Release**

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This release of Sun HighGround SRM for Database Servers adds database scanning and reporting to Sun HighGround SRM. It can be used with Sybase 11 and 12 databases running on Solaris 2.6, 7 and 8, or with Oracle 7.3.4, 8, 8i and 9i databases running on various hardware platforms.

Please keep in mind the following requirements and restrictions on the release.

## Hardware and Software Prerequisites for the Release

1. A dedicated Intel-compatible Pentium Processor server running NT 4.0 with SP 6A and security patches, or Windows 2000 with SP 2 and security patches, and at least a 266Mhz processor, 256 MB of RAM and 200MB of free disk space. If you are interested in maximizing scalability and performance (100+ managed databases) you should use a server with at least a dual 500Mhz CPU, with 1 GB of RAM, and 500MB of free disk space.
2. Microsoft Internet Information Server (IIS)
  - a. **For Windows NT:** Microsoft Internet Information Server (IIS) 4.0 (or higher) with security patches, installed on the server listed in item #1. IIS 4.0 is part of the Windows NT 4.0 Option Pack typical installation.
  - b. **For Windows 2000:** Microsoft Internet Information Server (IIS) 5.0 with security patches, installed on the server listed in item #1.
3. The appropriate Sybase or Oracle PC client, installed on the server that acts as the Sun HighGround SRM proxy agent. For details about which PC client version to install, see the *Sun HighGround™ Storage Resource Manager (Sun HighGround SRM) Plug-In for Database Scanning Notes*, located on the Sun HighGround SRM for Database Servers CD-ROM at **<SRM-install-directory> \PlugIns\Database\database\_readme.htm**.
4. Internet Explorer 5.5 SP2 or later and security patches, or Internet Explorer 6.0 and security patches, installed on the server listed in item #1.
5. Microsoft Data Access Components (MDAC) 2.5 or later installed on the server listed in item #1.
6. Microsoft SQL Server 7.0 with SP2 (or later), or SQL 2000, installed on the server listed in item #1, or a separate server.

Obtain the login ID and password for an account on the SQL server to create a database for the Sun HighGround SRM repository. This is either the SQL sa account or a Windows NT account that has SQL sa account privileges.

7. TCP/IP

## Upgrade Restrictions

You can upgrade from Sun HighGround SRM version 4.0.1 or greater.

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## Installation and Configuration Issues

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The following are known installation and configuration issues relating to this release of Sun HighGround SRM for Database Servers:

### Reporting on a Mirrored Sybase Disk Device

Sun HighGround SRM does not report on Sybase device status or on device mirror status.

### Reboot Proxy Machine after Installing Oracle PC Client

If you install the Oracle PC client on the proxy machine, you must reboot the proxy machine before scanning. Failure to do so may result in database scans hanging.

### Edit the CLASSPATH Environment Variable for Viewing Charts and Graphs (Sybase only)

If a typical Sybase PC Client installation has been performed on the same machine from which you are browsing to Sun Highground SRM for Database Servers, the charts and graphs do not display properly. This problem is caused by an older version of the graphing package embedded in certain Sybase PC Client components. The recommended solution is to browse to Sun Highground SRM for Database Servers from a machine that does not have Sybase PC Client installed. However, if this is not possible and you want to view charts and graphs, you must edit the CLASSPATH environment variable, as follows:

#### 1. For Windows NT 4.0

- a. From the Start menu, go to **Control Panel > System**.
- b. Select the **Environment** tab.
- c. Select CLASSPATH under System Variables.
- d. Remove or change all the paths to the 3pclass.zip file to prevent detecting the 3pclass.zip file, thereby preventing the old classes from being loaded.  
> **Note:** Any Sybase PC Client tools that depend on the 3pclass.zip file may fail because the 3pclass.zip file will no longer be detected in the CLASSPATH variable. To fix this problem replace the original 3pclass.zip settings in the CLASSPATH.
- e. Append the absolute path, including the filename, of the netcharts.jar file to the CLASSPATH variable. The netcharts.jar file is typically found under the \Inetpub\wwwroot\StorageResourceManager\Chart directory.

Example:

```
CLASSPATH=C:\Inetpub\wwwroot\StorageResourceManager\Chart\netcharts.jar
```

#### 2. For Windows 2000

- a. From the Start menu, go to **Control Panel > System**.

- b. Select the **Advanced** tab.
- c. Click on the **Environment Variables...** button.
- d. Select **CLASSPATH** .
- e. Click on the **Edit...** button.
- f. Remove or change all the paths to the 3pclass.zip file to prevent detecting the 3pclass.zip file, thereby preventing the old classes from being loaded.  
> **Note:** Any Sybase PC Client tools that depend on the 3pclass.zip file may fail because the 3pclass.zip file will no longer be detected in the CLASSPATH variable. To fix this problem replace the original 3pclass.zip settings in the CLASSPATH.
- g. Append the absolute path, including the filename, of the netcharts.jar file to the CLASSPATH variable. The netcharts.jar file is typically found under the \Inetpub\wwwroot\StorageResourceManager\Chart directory.

Example:

CLASSPATH= C:\Inetpub\wwwroot\StorageResourceManager\Chart\netcharts.jar

### 3. Clear the Internet Explorer cache.

- a. From the Internet Explorer Tools menu, select **Internet Options...**
- b. On the **General** tab, under **Temporary Internet files** , click on the **Delete Files...** button.

### **Charts and Graphs Do Not Print From Internet Explorer 5.5**

Due to an incompatibility with the charting software used by Sun HighGround SRM, charts and graphs do not print from Internet Explorer 5.5. However, charts and graphs do print from Internet Explorer 5.0.

### **Virtual Memory problems on Sun HighGround SRM Server**

Using equipment that does not meet specified prerequisites for Sun HighGround SRM can cause virtual memory errors. To avoid this problem, be sure your equipment meets the Sun HighGround SRM for Database Servers Prerequisites listed in [Hardware and Software Prerequisites for the Release](#) .

### **Plug-In Installation Passwords**

The following plug-in kits are password protected:

- Brocade SAN switch
- Network Appliance Filer

- Database Scanning

The password is provided with the product if you purchase these options.

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## **Known Issues**

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The following are known issues relating to this release of Sun HighGround SRM for Database Servers:

### **Use a Single Sun HighGround SRM Proxy Server to Scan Sybase Databases on the Same Database Server Instance**

Do not set up two different Sun HighGround SRM Proxy Servers to scan Sybase databases on the same database server instance. This may cause a temporary database deadlock situation, which could result in Sybase terminating the connection, thereby causing a scan failure.

### **Scan Requests Not Functioning**

Database scans may timeout. Subsequent scans should continue to function. If you want to increase the timeout value, contact Sun Support.

### **Norton AntiVirus Scanner can Interfere with Sun HighGround SRM Scanning**

The Norton AntiVirus scanner can interfere with Sun HighGround SRM scanning. To avoid this problem, disable Norton AntiVirus on the Sun HighGround SRM Server machine.

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## **Sun HighGround SRM for Exchange Servers 4.0.3**

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## Installation and Configuration Issues

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The following are known installation and configuration issues relating to this release:

### **Server Configuration with Compaq SANWorks**

Do not install Sun HighGround SRM for Exchange Servers Server and Compaq SANWorks Server on the same server.

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## Uninstall Issues

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The following are known uninstall issues relating to this release:

### **Exchange Scans Still Enabled**

If you uninstall the Sun HighGround SRM for Exchange Servers server without uninstalling the Sun HighGround SRM Server, Exchange scans are not disabled. Contact Sun Support to disable these scans.

### **Files Left Behind after Install/Uninstall**

After you install or uninstall Sun HighGround SRM for Exchange Servers, some files might be left behind in your Temp directory. At some time after a system restart, you can remove the files.

### **Automatic Deletion of Remote Install Scripts**

If you uninstall Sun HighGround SRM for Exchange Servers while keeping the database, any remote install scripts created through Sun HighGround SRM are deleted.

### **Recustomizing E-mail Alert Text**

If you uninstall Sun HighGround SRM for Exchange Servers while keeping the database, you must recustomize Sun HighGround SRM for Exchange Servers e-mail warning and disable message text.

### **Performance Counters Left Behind**

If you uninstall SQL Server from your Exchange Server, performance counters might be left behind on your system. This generates errors in the NT event log during a Quick Scan.

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## Known Issues

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The following are known issues relating to this release:

### Viewing Messages within Microsoft Exchange Folders

It is not possible to view single message information within folders considered special to Exchange, such as the EventsRoot folder.

### Scan Times Display for Newly Created Server Groups without a Scan Actually Occurring

When you first create a server group, scan times display for the group on the Sun HighGround SRM for Exchange Servers Configuration: Scans page even though a scan has not occurred. Once you scan the group, however, the accurate scan times are displayed.

### Detail Scan Issue

The first Sun HighGround SRM for Exchange Servers detail scan fails, if the Microsoft Exchange Alias Auto Naming is set to None for the Exchange service's user account on the Exchange Server. If the mailbox does not exist, it is created during the first Sun HighGround SRM for Exchange Servers detail scan. If Alias Auto Naming is set to None for the Exchange service's user account, the Sun HighGround SRM <machinename> mailbox cannot be created. However, you can turn on Alias Auto Naming temporarily before the first Sun HighGround SRM for Exchange Servers detail scan.

To turn on Alias Auto Naming:

1. From the Start menu, go to Programs > Microsoft Exchange > Microsoft Exchange Administrator.
2. From the Tools menu, select Options.
3. Go to Alias Name Generation from the Auto Naming tab and select First name and last initial.

After the first Sun HighGround SRM for Exchange Servers detail scan is run and the Sun HighGround SRM <machinename> mailbox is created, you can reset the Alias Auto Naming to None.

### Mailbox Group Error

If you use one of the standard domain groups (such as Administrators or Backup Operators) as a mailbox group's NT security group, you might receive the following error when creating a new mailbox group through Sun HighGround SRM for Exchange Servers: "cannot be authenticated". This is a known issue with Sun HighGround SRM for Exchange Servers' NT Group validation function. However, the Sun HighGround SRM for Exchange Servers Detail Scanner does correctly scan the group.

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## **Drill-Down Issues**

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The following are known drill-down issues relating to this release:

### **Only SRMLiveDrillDown Security Group Members Have Live Drill-Down Access**

Only members of both the SRMLiveDrillDown and SRMAdmin security groups have access to live drill-down information, such as mailbox and public folder message information.

### **Log Off and On Again for SRMLiveDrillDown Permissions to Take Effect**

If you are a local administrator and you grant yourself SRMLiveDrillDown permissions on a computer running both the Sun HighGround SRM Server and the Sun HighGround SRM for Exchange Servers user interface, you must log off and log on again before the permissions take effect. This situation occurs because the Microsoft IIS Server uses the locally cached security settings of the logged-on user. You do not encounter this issue if you access the web server from a remote machine.

### **No Drill-Down Information**

You cannot view drill-down information on the System Attendant mailbox.

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