



Opsware[®] SAS 6.1.2 Release Notes

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Chapter 1: What's New in Opsware SAS 6.1

IN THIS CHAPTER

This chapter contains the following topics:

- Virtualization Director
- Visual Application Manager (VAM) 2.0
- RPM Deployment
- Device Groups
- OS Provisioning
- Improvements to the Opsware SAS Client
- Improvements to the Opsware SAS Client Performance
- Windows Patch Management
- Health Check Monitor
- IDK 3.2
- Password Protection
- User ID Numbers for the OGFS Server
- Garbage Collection in Oracle Database
- Opsware Automation Platform API
- Opsware API Incompatibilities

Opsware Server Automation System (SAS) 6.1 provides a core set of features that automate critical areas of server and application operations – including the provisioning, deployment, patching, and change management of servers – across major operating systems and a wide range of software infrastructure and application products.

Opsware SAS 6.1 provides new features, performance enhancements and several bug fixes. This document describes the new features found in this release, and provides information about the most significant bug fixes, and, in some cases, workarounds for known problems.

Opsware SAS 6.1 includes the following new features:

Virtualization Director

The Virtualization feature enables you to provision and manage virtual servers for Solaris 10 local zones and VMware ESX 3 virtual machines (VMs). Using the SAS Client, you can perform the following tasks:

- View both hypervisor and virtual servers and their relationships in the SAS Client, so you can find out the hypervisors that are hosting your virtual machines and local zones.
- View virtual servers and their relationship in the Visual Application Manager (VAM). Provision VMware ESX and Solaris 10 hypervisors on bare metal servers.
- Provision VMware virtual machines (VM) using an OS sequence.
- Create, start, stop, modify, and remove Solaris local zones.
- Deploy agents on unmanaged virtual servers using the Opsware Agent Discovery and Deployment (ODAD) for VMware ESX VMs.
- Search for virtual servers in your data center using the Search tool.
- Create dynamic Device Groups based upon virtual server characteristics (zones or VMs).

Visual Application Manager (VAM) 2.0

The following new capabilities were added to the Visual Application Manager feature:

- The ability to visualize applications that run on virtual servers (Solaris 10 local zones and VMware ESX virtual machines) and display both hypervisor and guest virtual servers relationships for each technology. VAM also displays ESX 3 virtual switches (vSwitches) and port groups in both the Virtual Map and Device Map.
- The ability to create and compare VAM scan results – these results present a picture of the current state of your applications (its visual maps, structures, component signatures and process families, and so on) as viewed through VAM. You can compare differences

between past VAM scan results with current scan results and visualize meaningful differences between specific application or server components.

- The ability to display compliance information from both SAS and NAS. You can troubleshoot and remediate any out of compliance configurations by launching the appropriate server or device inside of SAS or NAS.
- The ability to filter scan results based upon all existing criteria plus new compliance criteria.
- The ability to visualize Microsoft IIS 5.0 and 6.0 as an application inside of VAM.

RPM Deployment

The new RPM Deployment feature in Opsware SAS 6.1 allows you to perform the following tasks:

- Deploy RPM packages on Red Hat Linux and SUSE Linux servers without manually specifying all the packages required for installing the RPM packages.
- Solve dependencies for RPM packages during remediation.
- Install and uninstall RPM packages on Linux servers using software policies
- Update the RPM packages in a software policy to their latest version.
- Automatically download the Red Hat Linux Errata into Opsware and convert them to software policies.

Device Groups

In Opsware SAS 6.1 you can use the Device Group feature in the SAS Client to group servers by attributes of the servers including operating systems, customer, facility, and so on. Grouping servers enables you to perform the same action such as installing patches, remediating servers on all of the servers simultaneously, instead of performing the action on individual servers, one at a time.

OS Provisioning

The following improvements were made to the OS Provisioning feature:

- Support for bare metal provisioning VMware ESX 3.0
- Support for booting a bare metal Windows server using the WinPE pre-installation environment
- Ability to create OS Installation Profiles for the Windows operating system and configuring custom disk partitioning, disk formatting and drive letter assignment
- Support for new set of Windows custom attributes
- Enhanced options for import media tool used in creating MRLs, including the --folder option. This option allows you to specify the full path to upload the OS media packages, which corresponds to a folder inside the Library in the SAS Client. These packages can be added to a software policy in the SAS Client and attached to an OS sequence and then installed (remediated) on to the server after the OS sequence is run.
- Enhanced Build Customization hooks that allow you to run scripts at all phases of the OS provisioning process (Pre-Copy, Pre-Agent)
- New Opsware Lifecycle "Planned" for unprovisioned which enables an unprovisioned server have a device record created for but without installing an Opsware build agent.
- Support to provision VMware VM bare metal servers
- Ability to work with Windows firewall settings when provisioning Windows 2003 SP1 and Windows XP SP2

Improvements to the Opsware SAS Client

For Virtualization Director, the SAS Client now shows a new Virtual Servers view, which displays all virtual servers in relation to their host (hypervisor) physical servers. Also, the Device Explorer for virtual servers and hypervisor displays virtual server information and gives access to Solaris local zones, such as starting and stopping, modifying, and so on.

Improvements to the Opsware SAS Client Performance

In Opsware SAS 6.1.1, improvements were made to the Opsware SAS Client performance. In the SAS Client packages, patches, and software policies are now loaded on demand. This results in faster start up time of the SAS Client and more efficient use of memory.

Windows Patch Management

This section describes the changes in this release to Windows Patch Management.

Multi-Locale Support

Multi-locale support has been added to Windows Patch Management. The supported locales for Windows patches are English, Japanese, and Korean. Opware SAS automatically checks the locale of the managed server to determine the locale of the patch to be installed. The same patch policy can be used to install patches on servers with different locales. In the DET (cbt) utility, the patch filter has a new nested element, patchLocale. The windows-patch-locale script is no longer needed and is deprecated. To use Patch Management on managed servers with Opware Agent versions earlier than 6.1, the locale of the managed server must be either English, Japanese, or Korean.

Change to All Patches Preview Window

Based on customer feedback, in the All Patches preview window of the SAS Client, the information in the Compliance column will no longer be set. Users will no longer see red, yellow, green icons in the All Patches preview window.

Removal of MBSA 1.2.1

Windows Patch Management no longer supports Microsoft Baseline Security Analyzer (MBSA) 1.2.1. Removal of MBSA 1.2.1 from Opware SAS simplifies the installation of an Opware SAS core and the administration of Patch Management. In earlier releases of Opware SAS, the MBSA 1.2.1 patch database was used for older Windows platforms: NT4, and Windows 2000 with SP1, SP2, or no service pack. These older Windows platforms are no longer supported by Microsoft. All other Windows platforms supported by Opware SAS use the MBSA 2.0 patch database. Support for MBSA 2.0 was added in Opware SAS 6.0.

SP4 Required for Windows 2000

For Windows 2000 managed servers, Patch Management requires the installation of SP4. Windows 2000 servers with earlier service packs (as well as NT4) are not supported by Patch Management.

Change to populate-opware-update-library Script

The populate-opware-update-library script has been updated to support multi-locale patching. This script downloads patches (and the patch database) from the Microsoft web site and uploads them into Opware SAS. Starting with this release, the populate-opware-update-library script creates a \$platform_ver/\$locale directory under <dir> when --download_only is specified. When --upload_from_update_root is specified, the script looks for patches under the \$platform_ver/\$locale directory. To support exports performed with earlier versions of the script, the --upload_from_update_root option also looks for patches in the <dir> directory if it cannot them under <dir>/\$platform_ver/\$locale.

Health Check Monitor

The Health Check Monitor (HCM) includes a suite of tests to check the state of an Opware SAS core. These tests are command-line scripts and they are automatically installed by the Opware Installer. The HCM has two types of tests: local and global. Local tests validate the health of a core on a component-by-component basis. Global tests validate the health of a core on a holistic basis. HCM provides a framework for adding local and global tests, enabling you to extend HCM with customized scripts that check the state of the core.

IDK 3.2

ZIP packages can be created by the IDK for all platforms supported by Opware SAS. Starting with Opware SAS 6.1, you cannot assign a customer with a package. Instead, you assign the customer to the folder that contains the package. As a result, customer settings have been removed from the IDK.

Password Protection

During a SAS installation or a SAS upgrade process, some cleartext passwords will be automatically obfuscated and some will not. Some passwords will be obfuscated when Opware components start up, such as the buildmgr password when the Twist server starts up. Some passwords in certain files will not be obfuscated, such as passwords in the installation logs and Opware Installer response files. In Opware SAS 6.1, there are several ways to manually secure cleartext passwords.

User ID Numbers for the OGFS Server

When you install a SAS core in Opware SAS 6.1, you can set values to control the range of UID and GID numbers used by the Opware Global File System server. These values are used to provide unique user IDs for all Opware users that are logged into the OGFS server. When the Twist creates a new user, it will use these values to determine the next available (unique) user ID that is within the range for the local data center.

Garbage Collection in Oracle Database

Opware SAS 6.1 creates four Oracle jobs for garbage collection or for deleting the old data. By default, the garbage collection is run daily. The default values for retaining the data are as follows:

DAYS_WAY = 30 days

DAYS_TRAN = 7 days

DAYS_CHANGE_LOG = 180 days

DAYS_AUDIT_LOG = 180 days

These values can be read or updated in the `AUDIT_PARAMS` table.

Opware Automation Platform API

The platform has the following new features:

- Stubs for C# Web Services clients
- Support for Pytwist (Python) clients
- Setup instructions and basic code examples for Java, Python, C#, and Perl clients

Opware API Incompatibilities

This release has bug fixes to the Opware API that can cause backwards incompatibilities. An API client might not work properly with this release if it was developed with an earlier release and it invokes a method listed in the following sections.

Bug 143424

Methods affected by this bug fix:

```
com.opsware.fido.InvalidSecureTypeException.getValidTypes  
com.opsware.fido.InvalidSecureTypeException.setValidTypes
```

Before this release: These methods get and set a Class[] array.

Starting with this release: These methods get and set a String[] array.

Bug 139495

Methods affected by this bug fix:

```
com.opsware.folder.FolderService.move  
com.opsware.pkg.UnitService.update
```

Before this release: If the operation fails because of a non-unique folder or unit name, FolderService.move throws MoveException and UnitService.update throws IllegalArgumentException.

Starting with this release: Both of these methods throw UniqueNameException.

Each subinterface of Unit that has an update method now throws UniqueNameException instead of IllegalArgumentException. Here is a complete list of these subinterfaces:

APARFilesetService, APARService, BaseFilesetService, BuildCustomizationScriptService, CustomFieldUnitService, DepotService, FilesetService, HotfixService, LPPService, MRLService, MSIService, PatchFilesetService, PatchMetaDataService, PatchProductService, ProductService, RelocatableZIPService, RPMService, ServicePackService, SolPatchClusterService, SolPatchService, SolPkgInstanceService, SolPkgService, SolResponseFileService, UnitService, UnknownPkgService, UpdateFilesetService, UpdateRollupService, WindowsUtilityService, ZIPService.

Chapter 2: Platform and Environmental Support for Opsware SAS 6.1.1 and 6.1.2

IN THIS CHAPTER

This chapter contains the following topics:

- Supported Operating Systems for Opsware SAS 6.1.1 and 6.1.2
- Supported Core Operating Systems for Opsware SAS 6.1.1 and 6.1.2
- Operating System Deprecation and End of Support in Opsware SAS 6
- Supported Installations for Opsware SAS 6.1.1
- Supported Installations for Opsware SAS 6.1.2
- Opsware SAS Web Services API 1.0 Retirement in Opsware SAS 6
- Documentation for Opsware SAS 6.1.1
- Documentation for Opsware SAS 6.1.2

Supported Operating Systems for Opsware SAS 6.1.1 and 6.1.2

The following tables identify the supported operating systems for Opsware Agents, the Opsware SAS Web Client, and the SAS Client.

This section lists the supported operating systems for Opsware Agents, the SAS Web Client, and the SAS Client.

The following table lists the supported operating systems for Opware Agents, which run on the servers managed by Opware SAS.

Table 2-1: Opware Agent Supported Operating Systems

SUPPORTED OPERATING SYSTEMS FOR OPWARE AGENT	VERSIONS	ARCHITECTURE
AIX	AIX 4.3 AIX 5.1 AIX 5.2 AIX 5.3	POWER POWER POWER POWER
HP-UX	HP-UX 10.20 HP-UX 11.00 HP-UX 11.11 HP-UX 11.23 (11i v2)	PA-RISC PA-RISC PA-RISC PA-RISC and Itanium
Sun Solaris	Solaris 6 Solaris 7 Solaris 8 Solaris 9 Solaris 10 Solaris 10 Update 2 Solaris 10 Update 3	Sun SPARC Sun SPARC Sun SPARC Sun SPARC Sun SPARC, 64 bit x86, 32 bit x86 and Niagara Sun SPARC, 64 bit x86, 32 bit x86 and Niagara Sun SPARC, 64 bit x86, 32 bit x86 and Niagara
Fujitsu Solaris	Solaris 8 Solaris 9 Solaris 10	Fujitsu SPARC Fujitsu SPARC Fujitsu SPARC
Windows	Windows NT 4.0 Windows 2000 Server Family Windows Server 2003 Windows Server 2003 x64 Windows XP Professional	32 bit x86 32 bit x86 32 bit x86 64 bit x86 32 bit x86

Table 2-1: Opware Agent Supported Operating Systems (continued)

SUPPORTED OPERATING SYSTEMS FOR OPSWARE AGENT	VERSIONS	ARCHITECTURE
Red Hat Linux	Red Hat Linux 7.3	32 bit x86
	Red Hat Linux 8.0	32 bit x86
	Red Hat Enterprise Linux 2.1 AS	32 bit x86
	Red Hat Enterprise Linux 2.1 ES	32 bit x86
	Red Hat Enterprise Linux 2.1 WS	32 bit x86
	Red Hat Enterprise Linux 3 AS	32 bit x86 and 64 bit x86 and Itanium
	Red Hat Enterprise Linux 3 ES	32 bit x86 and 64 bit x86 and Itanium
	Red Hat Enterprise Linux 3 WS	32 bit x86 and 64 bit x86 and Itanium
	Red Hat Enterprise Linux 4 AS	32 bit x86 and 64 bit x86
	Red Hat Enterprise Linux 4 ES	32 bit x86 and 64 bit x86
Red Hat Enterprise Linux 4WS	32 bit x86 and 64 bit x86	
SUSE Linux	SUSE Linux Enterprise Server 8	32 bit x86
	SUSE Linux Standard Server 8	32 bit x86
	SUSE Linux Enterprise Server 9	32 bit x86 and 64 bit x86
	SUSE Linux Enterprise Server 10	32 bit x86 and 64 bit x86
VMware	ESX Server 3	32 bit x86 and 64 bit x86

The following table lists the operating systems supported for the SAS Client.

Table 2-2: SAS Client Supported Operating Systems

SUPPORTED OPERATING SYSTEMS FOR SAS CLIENT	VERSIONS	ARCHITECTURE
Windows	Windows XP	32 bit x86
	Windows 2003	32 bit x86
	Windows 2000	32 bit x86



Java J2SE v 1.4.2_13 JRE must be installed on the system that runs on the SAS Client. To download this version of Java, go to <http://java.sun.com/j2se/1.4.2/download.html>

Supported Core Operating Systems for Opware SAS 6.1.1 and 6.1.2

This section lists the supported operating systems for Opware core components.

For a list of supported Oracle versions for the Model Repository, see Appendix A in the *Opware® SAS Planning and Installation Guide*.

The following table lists the supported operating systems for the Opware core components.

Table 2-3: Opware Core Supported Operating Systems

SUPPORTED OS FOR OPSWARE CORE	VERSIONS	ARCHITECTURE	OPSWARE COMPONENTS
Sun Solaris	Solaris 8	Sun SPARC	All components, <i>excluding</i> the Opware Global File System Server (OGFS) component
Sun Solaris	Solaris 9	Sun SPARC	All components
Sun Solaris	Solaris 10	Sun SPARC, Niagara	All components
Red Hat Linux	Red Hat Enterprise Linux 3 AS	32 bit x86	All components

The following table lists the supported operating systems for the following components of an Opware Satellite:

- Gateway
- Software Repository Cache
- Boot server (optional)

- Media server (optional)

Table 2-4: Opware Satellite Supported Operating Systems

SUPPORTED OS FOR OPWARE SATELLITE	VERSIONS	ARCHITECTURE
Sun Solaris	Solaris 9	Sun SPARC
Sun Solaris	Solaris 10	Sun SPARC
Red Hat Linux	Red Hat Enterprise Linux 3 AS	32 bit x86
SUSE Linux	SUSE Linux Enterprise Server 9	32 bit x86

Operating System Deprecation and End of Support in Opware SAS 6

When a managed operating system is "end of life" by the operating system vendor, Opware marks the operating system as deprecated as an indication that the operating system might be dropped from the list of supported managed operating systems in a future release of the SAS product.

Deprecated operating systems are supported in the current release of the product in the same way non-deprecated operating systems are.

Opware monitors operating systems usage by its customers on an ongoing basis and bases the operating system retirement decisions on operating system usage by current customers.

If you have any questions related to the Opware operating system deprecation policy, please contact Opware support or your account manager.

The following operating system versions are being deprecated in Opware SAS 6:

- Red Hat Linux 7.3
- Red Hat Linux 8.0

(These operating systems have been deprecated since Opware SAS 5.5.)

The following operating system versions are no longer supported in Opware SAS 6:

- Red Hat Linux 6.2

- Red Hat Linux 7.1
- Red Hat Linux 7.2

(These operating systems have been deprecated since Opsware SAS 5.5.)

Supported Installations for Opsware SAS 6.1.1

The Opsware SAS 6.1.1 release supports the following installations:

- New installations of a standalone core
- New installations of a multimaster mesh
- New installations of a Satellite
- Upgrading a standalone core from Opsware SAS 5.3 or 5.5.3 to 6.1.1
- Upgrading a multimaster mesh from Opsware SAS 5.3 or 5.5.3 to 6.1.1
- Upgrading an Opsware Satellite from Opsware SAS 5.3 or 5.5.3 to 6.1.1
- Upgrading a standalone core from Opsware SAS 6.0.1, 6.0.2, or 6.1 to 6.1.1
- Upgrading a multimaster mesh from Opsware SAS 6.0.1, 6.0.2, or 6.1 to 6.1.1
- Upgrading an Opsware Satellite from Opsware SAS 6.0.1, 6.0.2, or 6.1 to 6.1.1

Supported Installations for Opsware SAS 6.1.2

Opsware SAS 6.1.2 is available only as a patch to a 6.1.1 core. Opsware Agents and Satellites do not have to be patched.

Opsware SAS Web Services API 1.0 Retirement in Opsware SAS 6

Beginning with Opsware SAS 6.0, the Opsware SAS Web Services API 1.0 has been retired and is no longer available. Customers using Web Services API 1.0 have been contacted individually.

Documentation for Opsware SAS 6.1.1

This release comes with the following documentation:

- *Opsware SAS 6.1.1 Release Notes*
- *Opsware SAS 6.1 Planning and Installation Guide*
- *Opsware SAS 6.1 Policy Setter's Guide*
- *Opsware SAS 6.1 Administration Guide*
- *Opsware SAS 6.1 User's Guide: Server Automation*
- *Opsware SAS 6.1 User's Guide: Application Automation*
- *Opsware SAS 6.1 Oracle Setup for the Model Repository*
- *Opsware SAS 6.1 Content Utilities Guide*
- *Opsware SAS 6.1.1 Content Migration Guide*
- *Opsware Automation Platform Developer's Guide*
- *SAS 3rd Party and Open Source Notices*

The Opsware SAS documentation is available online at

<https://download.opsware.com/kb/category.jspa?categoryID=20>

Ask your Opsware administrator for the user name and password to access the web site.

Documentation for Opsware SAS 6.1.2

This release comes with the following documentation:

- *Opsware SAS 6.1.2 Release Notes*
- *Technical Note: Opsware SAS 6.1.2 Patch Installation Instructions*
- *Opsware SAS 6.1 Planning and Installation Guide*
- *Opsware SAS 6.1 Policy Setter's Guide*
- *Opsware SAS 6.1 Administration Guide*
- *Opsware SAS 6.1 User's Guide: Server Automation*
- *Opsware SAS 6.1 User's Guide: Application Automation*
- *Opsware SAS 6.1 Oracle Setup for the Model Repository*

- *Opware SAS 6.1 Content Utilities Guide*
- *Opware SAS 6.1.1 Content Migration Guide*
- *Opware Automation Platform Developer's Guide*
- *SAS 3rd Party and Open Source Notices*

The Opware SAS documentation is available online at the same URL listed in the previous section.

Chapter 3: Opware Agent Compatibility

IN THIS CHAPTER

This chapter contains the following topics:

- Opware Agent Compatibility for 6.1.1 and 6.1.2

Opware Agent Compatibility for 6.1.1 and 6.1.2

The majority of the Opware SAS Web Client features for Opware SAS 6.1.1 and 6.1.2 are compatible with Opware Agents 4.5 and later.

The Agent compatibility testing of Opware SAS 6.1.1 and 6.1.2 features with Opware Agent versions prior to 6.1.1 6.1.2 yielded the following results for the features in the Opware SAS Client.

SAS Client Features

The following features in the SAS Client are compatible with Opware Agents 5.1 and later:

- Application Configuration Management
- Server Browser
- Global Shell
- Audit and Remediation
- Visual Application Manager

To access the Services functionality in the Server Browser feature, you must upgrade to Opware Agent 5.2 or later.

The following features in the SAS Client are compatible with Opware Agents 4.5 and later:

- Patch Management for Windows
- Patch Management for Unix

- Software Management

Chapter 4: What's Fixed in Opsware SAS 6.1 and 6.1.1

IN THIS CHAPTER

This chapter contains bugs that have a severity level of Critical or Major and are fixed in Opsware SAS 6.1 and 6.1.1. These descriptions are arranged by the following features:

- Application Configuration
- Audit and Remediation
- Global Shell
- Opsware Agent
- Opsware Installer
- Opsware SAS Client
- OS Provisioning
- Patch Management for Windows
- Software Management
- Visual Packager

Application Configuration

Bug ID: 134791

Description: Sometimes an error dialog displayed when you selected Configured Application in the Device Explorer window.

Platform: Independent

Subsystem: Application Configuration/Device Explorer

Symptom: If you opened a Device Explorer for a server that belongs to a facility whose Name and Short Name do not match, and selected Configured Application in the View pane, an error dialog would display.

Resolution: Fixed

Bug ID: 138504

Description: Performing an application configuration data-manipulation run script concurrently by two users would only successfully execute for one of the users.

Platform: Independent

Subsystem: Application Configuration

Symptom: If you created an application configuration that contains a data manipulation script, attached the application configuration to a server, and two users both tried to perform a 'run script' at the time, only one of the user's script execution would succeed.

Resolution: Fixed.

Bug ID: 139644

Description: If you upgraded from Opsware SAS 5.2 to SAS 6.0.1, Application Configuration recurring push jobs become un-editable.

Platform: Independent

Subsystem: Application Configuration

Symptom: If you upgraded from Opsware SAS 5.2 to SAS 6.0.1, any recurring application configuration push jobs that were created in SAS 5.2 would not be editable in the SAS 6.0.1 version.

Resolution: Fixed.

Bug IDs: 137904

Description :Application Configuration audit rules operator "does not contain" should not be used twice in an audit rule.

Platform: Independent

Subsystem: Audit and Remediation

Symptom: In the Application Configuration rule of the Audit and Remediation feature, "does not contain" would not work as expected if used twice in a single rule.

Resolution: Fixed

Audit and Remediation

Bug ID: 138164

Description: SAS 5.0 Audit Results migrated to SAS 6.0 will show value of -1 for all differences in audit results object list in the SAS Client

Platform: Independent

Subsystem: Audit Results

Symptom: If you upgrade Opware SAS from 5.0 to 6.0, any audit you created and ran in SAS 5.0 will display audit result differences in the main audit results list with a value of -1, no matter how many actual differences were found in the original audit. For example, if you create and ran an audit using SAS 5.0 and the results produced 5 differences between the audit rule and the target server, when you upgrade SAS to 6.0, the differences will display incorrectly as -1 in the audit results object list Differences column in the SAS Client.

To see this, select audit results from the navigation pane, select an operating system (Windows or UNIX) and in the contents pane, the differences column will show -1 for any SAS 5.0 migrated audit results.

Resolution: Open the individual audit results and the correct number of differences will display in the audit results window. This will not occur if you are not upgrading Opware SAS.

Bug ID: 135855

Description: Copy To for non existent Windows services on target didn't provide feedback that Remediation/Copy To did not work

Platform: Windows

Subsystem: Audit and Remediation - Audit and Snapshot

Symptom: If you created an audit or snapshot specification that contained a rule for a Windows Service that does not exist on the target, or has a dependency on another service, and in the Audit Results or Snapshot you tried to remediate (audit) or use "copy to" (snapshot), the remediate or copy to would not work, but you would not see an error messages stating failure to remediate/copy to.

Resolution: Fixed.

Global Shell

Bug ID: 137220

Description: Opware PAM module requires use of -r option for passwd program.

Subsystem: OGFS Backend

Platform: Linux

Resolution: Fixed.

Bug ID: 137821

Description: Cannot write to Solaris attribute files in OGFS from a Global Shell session.

Subsystem: SAS Client - Global Shell

Platform: Solaris

Resolution: Fixed.

Opware Agent

Bug ID: 137024

Description: When you install the Opware Agent Deployment Helper software policy on a Windows 2003 x64 server and configure the server as the Agent Deployment Helper server, deploying an Opware Agent on a Windows server caused the Opware Agent installation to fail.

Platform: Windows 2003 64 bit

Subsystem: Opware Agent - ODAD

Resolution: Fixed.

Opware Installer

Bug ID: 138633

Description: Opware SAS core un-installation fails when the binaries for the Opware Installer are removed from the directory /var/tmp/oitmp

Platform: Unix

Subsystem: Opware Installer > SAS Core Un-installation

Workaround: Fixed.

Opware SAS Client

Bug ID: 139028

Description: In the SAS client, when you searched for patch policies, the values for the Type of patch policy in the search results were displayed as Dynamic or Static. The value Dynamic should have correspond to Vendor Recommended and the value Static should correspond to User Defined.

Subsystem: SAS Client - Search

Platform: Independent

Resolution: Fixed.

Bug ID: 137634

Description: SAS Client stopped responding, when you try to open a folder using the Actions menu displayed in the search results.

Subsystem: SAS Client - Search

Platform: Independent

Resolution: Fixed.

Bug ID: 135932

Description: Search on an Audit also displayed the source name of the Audit.

Subsystem: SAS Client - Search

Platform: Independent

Symptom: In the SAS Client when you searched for the item Audit using any of the following attribute values,

Source / Target Server

Source/Target Server Asset Tag

Source/Target Server Serial Number

Source/ Target Snapshot Name

the results contained all the audits which matched the attribute value. In the results the source name of the audit was also displayed in the Source column. The source of the audit could have been a server or a snapshot or none.

Resolution: Fixed.

OS Provisioning

Bug ID: 139498

Description: OS Provisioning with Windows 2003 sometimes failed when mounting Win 2k3 media with a "duplicate workgroup or computer name" error

Platform: Windows 2003

Subsystem: Windows OS Provisioning

Symptom: In some cases, provisioning a server with Windows 2003 would sometimes fail when mounting Win 2k3 media and display a "duplicate workgroup or computer name" error.

Resolution: Fixed.

Bug ID: 139652

Description: OS provisioning on Windows 2003 x64 would fail intermittently on files during untar phase

Platform: Windows 2003 x64

Subsystem: Windows OS Provisioning

Symptom: During the OS Provisioning of Windows 2003 x64 Standard Edition, the extraction of the i386.tar file during the DOS phase of the setup could fail on some files in certain hardware configurations. It was not always consistent on the files it will fail on. Consequently the Windows install might have been affected, depending on the files missed during the extraction.

Resolution: Fixed

Bug ID: 130584

Description: Uploading a build customization script (BCS) with the same name as an existing BCS that had been deleted would cause an any OS sequence that uses that replaced BCS to fail during the OS provisioning process

Platform: Independent

Subsystem: OS Provisioning/Build Customization Scripts (BCS)

Symptom: If you created a BCS, then deleted it, and then later uploaded a BCS that uses the same name as the deleted BCS, any OS Sequence that used the replaced BCS would fail.

Resolution: Fixed

Bug ID: 139839

Description: Provisioning Windows XP Service Pack 2 (SP2) using an OS sequence was not working, where the OS sequence consisted of XP RTM plus XP SP2 with unit post script.

Platform: Windows XP SP2

Subsystem: OS Provisioning Remediation

Symptom: If you attempted to provision a Windows XP SP2 server using an OS sequence that contained XP RTM plus XP SP2 with unit post script, the server would not reboot and the session would time out after 4 hours.

Resolution: Fixed

Bug ID: 143916

Description: Reprovisioning a SUSE Linux Enterprise Server 10 (64 bit x86) server failed at running the dhclient command

Platform: SUSE Linux Enterprise Server 10 (64 bit x86)

Subsystem: OS Provisioning

Symptom: In some cases, when trying to reprovision a server with SUSE Linux Enterprise Server 10 (64 bit x86), the OS reprovisioning process became stuck while running the dhclient command and eventually timed out.

Resolution: Fixed

Patch Management for Windows

Bug ID: 132907

Description: The uninstall patch process failed with an exit code -3, which means that the Agent was unable to find the uninstaller for the selected patch.

Platform: Windows

Subsystem: SAS Client - Patch Management for Windows

Resolution: Fixed.

Bug ID: 138810

Description: Error in remediating Windows XP Service Pack 2 using Patch install or provisioning Windows XP SP2 due to firewall issues

Platform: Windows XP Service Pack 2 (SP2)

Subsystem: Patch Management/OS Provisioning

Resolution: Fixed.

Bug ID: 138736

Description: Some patches cannot be uninstalled with the SAS Client; however, they can be manually uninstalled.

Platform: Windows

Subsystem: SAS Client - Patch Management for Windows

Resolution: Fixed.

Software Management

Bug ID: 134489

Description: In the Package window, the Files/Scripts tabs on the Packages: Contents view contained no data for RPM and Zip packages.

Subsystem: SAS Client - Software Management

Platform: Independent

Resolution: Fixed.

Bug ID: 135068

Description: You were unable to assign a software policy at the root level to a user group.

Platform: Independent

Subsystem: AAA (Security), Software Management

Resolution: Fixed.

Bug ID: 137610

Description: In the SAS Client you were unable to delete packages even if the packages are not in use.

Subsystem: SAS Client - Software Management

Platform: Independent

Resolution: Fixed.

Bug ID: 137852

Description: In the SAS Client, if you selected multiple software policy templates then in the Actions menu, the option "Install software Policy Template" was not enabled.

Subsystem: SAS Client - Software Management

Platform: Independent

Resolution: Fixed.

Bug ID: 138146

Description: In the SAS Client you were unable to delete a folder containing a package which is not in use.

Subsystem: SAS Client - Software Management

Platform: Independent

Resolution: Fixed.

Bug ID: 138696

Description: In the SAS Client, when you remediate a server against a software policy containing packages belonging to multiple platforms of the same platform family and then run a software compliance scan, then the server was always displayed as non-compliant.

Subsystem: SAS Client- Software Management

Platform: Independent

Resolution: Fixed.

Bug ID: 138864

Description: In the SAS Web Client, folder search did not display folders to which you are assigned only List permissions.

Subsystem: SAS Web Client - Permissions

Platform: Independent

Resolution: Fixed.

Bug ID: 138945

Description: The compliance status of a server was not updated when you update a software policy.

Subsystem: SAS Client - Software Management

Platform: Independent

Resolution: Fixed.

Bug ID: 139298

Description: Application, Service Levels, and Templates were not locked after migration

Platform: Independent

Subsystem: Software Management: Content Migration

Resolution: Fixed.

Bug ID: 137387

Description: Performing the Software Management data migration caused multimaster conflicts

Platform: Unix

Subsystem: Software Management: Content Migration

Resolution: Fixed.

Bug ID: 139469

Description: In the SAS Client when you select a private device group, and right-click on the device group, the Run ISM Controls menu option was disabled.

Subsystem: SAS Client - Software Management

Platform: Independent

Resolution: Fixed.

Bug ID: 139655

Description: You were unable to download a Solaris response file using the SAS Client.

Subsystem: SAS Client- Software Management

Platform: Solaris

Resolution: Fixed.

Bug ID: 139713

Description: Importing a RPM package with EUC-KR encoding displayed the product name of the package with question marks (?).

Subsystem: SAS Client- Software Management

Platform: Solaris

Resolution: Fixed.

Bug ID: 139767

Description: When you copy a software policy to the same folder or a different folder, the custom attributes defined in the source software policy were not copied to the new software policy.

Subsystem: SAS Client- Software Management

Platform: Independent

Resolution: Fixed.

Visual Packager

Bug ID: 139620

Description: In the Create Package window, you can select the Contents tab to add packages to the software repository. After selecting the Contents tab, if you selected the Details tab and then again selected the Contents tab, the buttons Skip and Choose File were disabled in the Create Package window when the first listed package was selected.

Subsystem: SAS Client- Visual Packager

Platform: Independent

Resolution: Fixed.

Chapter 5: What's Fixed in Opsware SAS 6.1.2

IN THIS CHAPTER

This chapter contains bugs that have a severity level of Critical or Major and are fixed in Opsware SAS 6.1.2. These descriptions are arranged by the following features:

- ISM Tool and RPM Package Properties
- Windows Patch Management
- Other Bug Fixes

ISM Tool and RPM Package Properties



In addition to the following bug descriptions see the section, "Migration to 6.1.2 for RPMs Created by ISMTool," in the document, *Technical Note: Opsware SAS 6.1.2 Patch Installation Instructions*.

Bug ID: 146844

Description: Ordering of RPMs by ISMTool (of SAS 6.1.1 or earlier) does not work.

Platform: Independent

Subsystem: Software Management Backend - Remediate, RPMs

Symptom:

As part of the Software Management changes made in 6.1, the ordering of RPMs within a software policy is no longer under manual control by the user. Rather, any RPMs within a policy are installed in order as dictated by their dependencies. For RPMs which have no dependency relationship, their installation order is arbitrary.

With respect to ISMTool, this introduces a regression for any customer who depends upon manually controlling the installation order of RPMs. ISMTool produces as output multiple RPMs. It then attaches these RPMs to a policy and expects them to be installed in order as dictated by the policy. For example, the ISM control package must be installed before the ISM application package(s).

In addition, ISMTool provides `--orderPkg` and `--orderPos` command-line options, which allow the user to modify the order of packages within the ISM policy. This is typically used in combination with so-called “pass-thru” packages. A pass-thru package is one placed within the ISM directory that ISMTool then attaches to the corresponding ISM policy. The `--orderPkg` and `--orderPos` options allow the user to specify the ordering of such packages within that policy. However, if the pass-thru packages are RPMs, this ordering will be ignored.

Resolution: Fixed.

Remediate has been modified such that RPMs tagged with `--nodeps` do not go through the dependency solving process. Note that this option must be applied twice, once for install and once for uninstall. Additionally, ISMTool RPMs should be tagged as “Upgradable: No”.

So, the install process on a managed server is now:

- RPMs that are not tagged with `--nodeps` in their install options go through the dependency solving process, possibly re-ordered and pulling in additional RPMs.
- The dependency-solved set of RPMs gets installed first in dependency order.
- All remaining packages in the policy (whether RPMs tagged with `--nodeps` or ZIPs) get installed in policy order.

Similarly, the uninstall process (when a policy is detached) is now:

- RPMs that are not tagged with `--nodeps` in their uninstall options go through the dependency solving process, possibly re-ordered and pulling in additional RPMs.
- The dependency-solved set of RPMs gets uninstalled first in dependency order.
- All remaining packages in the policy (whether RPMs tagged with `--nodeps` or ZIPs) get uninstalled in the reverse order of how they were originally installed.

For example, suppose that a software policy has the following five packages in this order:

- 1** Red.rpm
- 2** Orange.rpm (requires Violet.rpm)

- 3 Blue.zip
- 4 Yellow.rpm (has --nodeps install/uninstall options and "Upgradable: No")
- 5 Green.rpm (has --nodeps install/uninstall options and "Upgradable: No")

(Note that in the SAS Client, it is not possible to view the policy ordering of RPMs.)

During installation on the managed server, remediate will perform dependency solving on Red.rpm and Orange.rpm. This will pull in Violet.rpm. The installation will then proceed as follows:

- 1 /bin/rpm -U Red.rpm Orange.rpm Violet.rpm.
- 2 Unzip Blue.zip
- 3 /bin/rpm -i Yellow.rpm
- 4 /bin/rpm -i Green.rpm

If the policy were to be detached and remediated, the uninstall would look like this:

- 1 /bin/rpm -e Red.rpm Orange.rpm
- 2 /bin/rpm -e Green.rpm
- 3 /bin/rpm -e Yellow.rpm
- 4 Remove/uninstall files in Blue.zip.

Notice that Violet.rpm is not uninstalled. This behavior is correct because Violet.rpm was not part of the original policy.

Bug ID: 147329

Description: Existing ISMTool RPMs need "--nodeps" and "Upgrade: No"

Platform: Independent

Subsystem: ISMTool (IDK)

Symptom: RPMs created by ISMTool shipped with Opsware SAS 6.1.1 or earlier cannot be installed on managed servers.

Resolution: Fixed

When uploading RPMs, ISMTool will now set each RPM's installflags and uninstallflags to "--nodeps" and its upgradeable flag to false. In certain situations (such as with some pass-thru RPMs), you may wish to override this behavior. To do so, set installflags to the empty string, for example:

```
ismtool --editPkg <pkgname> --addPkgProp installflags \  
--propValue `` <ismdir>
```

If you do this, you are responsible for manually setting these package properties as appropriate.

Bug ID: 147330

Description: ISMTool RPM migration script required

Platform: Independent

Subsystem: ISMTool (IDK)

Symptom: RPMs created and uploaded by ISMTool shipped with Opware SAS 6.1.1 or earlier must be migrated.

Resolution: Fixed

This release includes a utility script named `ismpolicyrpm-migrate.sh`. If your core has RPMs created by ISMTool shipped with Opware SAS 6.1.1 or earlier, you must run `ismpolicyrpm-migrate.sh` on your core. The `ismpolicyrpm-migrate.sh` script searches for all software policies created by ISMTool, locates RPMs associated with those policies, and then sets the following install and uninstall parameters on each RPM:

- Upgrade: No
- Install Flags: `--nodeps`
- Uninstall Fags: `--nodeps`

For instructions on running `ismpolicyrpm-migrate.sh`, see the section “Migration to 6.1.2 for RPMs Created by ISMTool,” in the document, *Technical Note: Opware SAS 6.1.2 Patch Installation Instructions*.

Windows Patch Management

Bug ID: 147289

Description: MBSA is not reporting Windows 2003 SP2 as installed.

Platform: Windows

Subsystem: Windows Patch Management Backend

Symptom: When using SAS to install Windows 2003 SP2, the job status window gives a mixed message regarding whether SP2 was successfully installed. This turns out to be an issue with mbsacli not reporting SP2 as installed..

Resolution: Fixed

Bug ID: 147396

Description: Patch list for Windows 2003 SP2 servers not reported correctly.

Platform: Windows

Subsystem: Windows Patch Management Backend

Symptom: This is a different but related issue as reported by BZ147289. The patch list for servers with Windows 2003 SP2 is not reported correctly because the dependency list is not extracted correctly when the MBSA patch database is parsed.

Resolution: Fixed. To apply this fix to Opsware SAS, you must follow the instructions in the "Patching BZ147396 " section of the *Technical Note: Opsware SAS 6.1.2 Patch Installation Instructions*.

Other Bug Fixes

Bug ID: 145933

Description: VAM and SAS Client sometimes hangs when scanning multiple servers through a Solaris 9 or Solaris 10 Opsware Global File System (OGFS) (hub).

Platform: Solaris 9 and Solaris 10

Subsystem: Visual Application Manager (VAM) - Opsware Global File System (OGFS)

Symptom: If a user runs a single VAM scan on multiple servers - typically more than 30 physical or virtual servers - and the Opsware Global File System (OGFS) is running on Solaris 9 or Solaris 10, in some cases the OGFS server process may hang for up to ten minutes and the scan will fail. This may affect any other SAS Clients using the same OGFS server. This is due to a threading issue for an OGFS that runs Solaris 9 and Solaris 10.

Resolution: Fixed

Chapter 6: Known Problems, Restrictions, and Workarounds in Opsware SAS 6.1.1

IN THIS CHAPTER

This chapter describes workarounds for known problems in Opsware SAS 6.1.1. These descriptions are arranged by the following features:

- Application Configuration
- Audit and Remediation
- DCML Exchange Tool (DET)
- Global Shell
- Intelligent Software Module (ISM) Development Kit
- Operating System Provisioning
- Opsware Agent
- Opsware API
- Opsware Installer
- Opsware SAS Client
- Opsware SAS Web Services API 2.2
- Patch Management for Windows
- Patch Management for Unix
- Reports
- Software Management
- Visual Application Manager
- Visual Packager

Application Configuration

Bug ID: 137456

Description: Preserve format does not preserve comments when the comment exists on a line that has been deleted.

Platform: Independent

Subsystem: Application Configuration

Symptom: With preserve format enabled, any change to the value set that causes a line to be deleted from a configuration file will result in any comments on the deleted line to be removed also.

Workaround: None

Bug ID: 138610

Description: Device Group Explorer not displaying inherited values correctly for servers which belong to multiple groups with identically named application configurations.

Platform: Independent

Subsystem: Application Configuration - Device Groups

Symptom: If two different device groups contain an application configuration that uses the same name, and each group has different values set for the configuration, and the same server belongs to both groups, then the Device Group Explorer will not show the proper inherited values when that server is displayed. It will only show the inherited values of the current device group in the browser and not both groups.

However, when you view the application configuration in the server's Device Explorer, you will see the value inheritance correctly.

Workaround: In general, if you want the application configuration instance of a server to be separate from the device group that the server belongs to, use a different name for each application configuration instance.

Bug ID: 139042

Description: Audit and Remediation - Application Configuration Rule View rule changes are not updated right away following rule modifications.

Platform: Independent

Subsystem: Audit and Remediation - Application Configuration Rule

Symptom: If you add or make changes to remediation application configuration rule (audit, snapshot, audit policy) in the Rule View tab, such as changing a value in Operator, Reference, and the Value drop-down lists, you will not see the changes reflected in the rule text, even though the changes will be made.

Workaround: To see the changes in the Rule View tab:

- 1** Save the changes.
- 2** Select the File View tab.
- 3** Select the Rule View tab

Audit and Remediation

Bug ID: 137898

Description: Some Audit and Remediation CIS Rules/Checks will not run in an Audit if the proper file is uploaded to the core.

Platform: Independent

Subsystem: Audit and Remediation

Symptom: Some Audit and Remediation CIS Rules/Checks in an Audit require that the files `auditpol.exe`, `ntrights.exe`, and `showpriv.exe` exist on the core that the Audit is running from. If this file does not exist on the core, then when a user runs an Audit with specific CIS Rules/Checks that require this file, then the user will see a time out in the Audit job.

Workaround:

1. Get the Windows utilities (`showpriv.exe`, `ntrights.exe`, `auditpol.exe`) from the Microsoft Windows 2000 Resource Kit.
2. Install the OCLI on a UNIX server managed by Opsware, or on an Opsware core server.
3. Copy the Windows utilities to `/var/tmp` on the UNIX server.
4. Make sure `/opt/opsware/agent/bin` is at the beginning of the PATH
e.g. `export PATH=/opt/opsware/agent/bin:$PATH`
5. Run the following three OCLI commands:

```
upload -C"Customer Independent" -t"Windows Utility" -O"Windows 2003" --old /var/tmp/showpriv.exe
```

```
upload -C"Customer Independent" -t"Windows Utility" -  
O"Windows 2003" --old /var/tmp/ntrights.exe
```

```
upload -C"Customer Independent" -t"Windows Utility" -  
O"Windows 2003" --old /var/tmp/auditpol.exe
```

6. Perform the following steps to validate the file upload:
 - a) Using the SAS Client, go to Opware Administration.
 - b) Go to 'Patch Settings'
 - c) Look at the list of 'Patch Utilities' to determine that each of the three utilities are listed and on the core. If any one of the files is not listed, then they must be uploaded/imported into the core.

Bug ID: 137901

Description: Application Configuration Audit Rules syntax limitation for “does not contain” rule

Platform: Independent

Subsystem: Audit and Remediation - Application Configuration Rules

Symptom: The Application Configuration Rules for Audit and Remediation (audits, snapshots, and audit policies) has a limitation in that you should not create a rule that uses the syntax "does not contain" twice in the same rule.

Workaround: Avoid using “does not contain” more than once in an application configuration Audit and Remediation rules.

Code Deployment and Rollback

Bug ID: 145470

Description: Code Deployment and Rollback (CDR) Not Supported on an VMware ESX Hypervisor.

Platform: VMWare ESX 3

Subsystem: Code Deployment and Rollback

Symptom: If you attempt to use the Code Deployment and Rollback features on a VMWare ESX 3 hypervisor, it will not work. This feature is not supported on VMware ESX hypervisor servers.

Workaround: Configure the ESX firewall to allow connections between the source and target computers at TCP port 1002.

DCML Exchange Tool (DET)

Bug ID: 130600

Description: Import error occurs during custom fields import when target core has same custom field name.

Platform: Independent

Subsystem: DET Import

Summary: When importing a custom field, the error “OpswareError:spin.DBUniqueConstraintError” may be returned if the target core already has a custom field with the same display name.

Workaround: Ensure there are no conflicting display names, or rename the display name prior to importing.

Bug ID: 138949

Description: Some imports fail if Microsoft patches are missing.

Platform: Windows

Subsystem: DET

Summary: By design, DET doesn't allow the import of Microsoft patches; they must be inserted into Opsware by the MS patch database import process. Thus, if an export contains a Microsoft patch and the destination mesh is not up-to-date with regard to MS patches, the import will not import the missing patches. It will print a warning at the end like this:

```
The following Windows patches were not uploaded:  
Q911564 (WindowsMedia-KB911564-x86-ENU.exe)
```

The behavior described in the preceding paragraph is not a bug. However, associated objects in the failed import will not be imported as a side effect. For example, if you import a folder or a device group with multiple attachments (such as software policies or OS sequences) and the import also contains a Windows patch that does not exist in the destination mesh, then the import fails and the attached objects are not imported.

Workaround: Import MS patches with the SAS Client feature that relies on the MS patch database. Then, you can import the other objects (such as software policies) with DET.

Bug ID: 135494

Description: Import correctly detaches and deletes objects, but preview incorrectly states that the objects will be renamed.

Platform: Independent

Subsystem: DET

Summary: Here's an example scenario where this problem occurs:

- 1** Create a template with two apps in it. Export this from mesh A and import into mesh B.
- 2** Detach one app from the template and incrementally export with `-del`. This export will contain the detachment and the delete of the app.
- 3** Preview the import with `-del`, then perform the import with `-del`.

In this scenario, the preview incorrectly shows that the app will be renamed because it is in use by a template. The actual import will correctly delete the app. This problem also occurs when other objects are detached and deleted, for example, app/package, app policy/app policy, and so forth.

Note that this problem does not occur if *both* objects are being deleted, only if one object is being deleted and detached from the other.

Workaround: None

Bug ID: 138466

Description: Export and import of a relocatable ZIP (with multiple instances in the source core) work correctly, but the summary statement of DET is incorrect

Platform: Independent

Subsystem: DET

Summary: If the user exports using a filter with `packageType = Relocatable_ZIP` that specifies multiple ZIP instances, the operation works correctly, exporting the ZIP instances as appropriate. A subsequent import also works correctly. However, the summary statement generated by DET during the export and import implies that just one ZIP instance was exported and imported even if multiple ZIP instances were involved.

Workaround: Check the RDF file to verify that multiple files were exported.

Global Shell

Bug ID: 129237

Description: Error when you open a terminal window for a Windows or Unix server.

Subsystem: SAS Client - Remote Terminal, Global Shell

Platform: Independent

Symptom: In the OCC Client you can use the Remote Terminal feature to open a terminal window for a Unix or Windows server and the Global Shell feature to open a terminal window for Opware Global File System (OGFS). If the Remote Terminal session or the Global shell session for server times out or is disconnected, the following error displays:

An internal error has occurred. See the console log for details.

Workaround: Restart the OCC Client and then open a new terminal window for a Windows or Unix server.

Bug ID: 129501

Description: Changing the encoding with the `swenc` command might cause problems for background processes.

Subsystem: SAS Client - Global Shell

Platform: Linux

Symptom: In a Global Shell session, change the encoding with the `swenc` command. Background processes that are running in the Global Shell session might fail.

Workaround: Wait until background processes have completed before changing the encoding with `swenc`.

Bug ID: 130514

Description: User must belong to Administrators group to browse metabase.

Subsystem: SAS Client - Global Shell

Platform: Windows

Symptom: In a Global Shell session, a non-admin user has permission to view the / opsw/@/<server>/metabase subdirectory of OGFS. However, the user cannot browse metabase, and the session displays the message "Protocol error."

In the agent.err file, the following lines appear:

```
<timestamp> [10997] ERR Error from Agent for unique <int>:  
. . .  
File ".\base\ops\shell\ogfs_wshandler.py", line 402, in run  
File ".\base\ops\shell\metabase.py", line 72, in metabase_  
getattr
```

Workaround: Login as a member of the Administrators group (admin).

Bug ID: 132935

Description: Global Shell audit directory has read-any access.

Subsystem: SAS Client - Global Shell

Platform: Independent

Symptom: Prior to SAS 6.1.1, the Global Shell audit directory could be read by any Unix user with a login to the core server. It could also be read from within a Global Shell session if the user had file system permissions to the core server.

In 6.1.1, this bug was partially fixed. The Opware Installer changes the access on the directory by recursively running a chmod command. However, this fix causes a performance problem, as documented by bug 146106.

Workaround: See bug 146106.

Bug ID: 146106

Description: Upgrade slow for Global Shell audit file system that is NFS mounted.

Platform: Independent

Subsystem: Global Shell Backend

Symptom: The performance problem occurs when the audit file system for the Global Shell (hub) is mounted over NFS and there are a large number of audit files. In testing, we've seen it take three hours when upgrading three hub instances in parallel.

Workaround: Unmount the audit file system before the SAS upgrade, for example:

```
% umount /var/opt/opsware/ogfs/mnt/audit
```

This is only necessary if the audit filesystem is NFS mounted, which you can determine with the following command:

```
% df -k /var/opt/opsware/ogfs/mnt/audit
```

Because the file system is remounted by the Opware Installer, there's no need to remount it by hand.

Bug ID: 139095

Description: Default Global Shell prompt (PS1) overwrites single-line output.

Platform: Independent

Subsystem: Global Shell

Summary: The default PS1 we ship with the product includes a carriage return (\r), which seems to overwrite output that does not contain a newline. This problem occurs often with the OCLI methods, since attribute files and method results do not typically contain newlines. It also affects the viewing of custom attribute values.

Workaround: User can edit their .bash_profile and change the PS1 setting to the following:

```
PS1="[ \uOGSH \W] (\!) $"
```

Bug ID: 133316

Description: On Solaris OGFS, rosh (ttlg) commands for Windows filesystems are case sensitive.

Platform: Solaris (OGFS), Windows (managed server)

Subsystem: Global Shell

Summary: This problem occurs only if the OGFS (hub) is running on Solaris, not if it's running on Linux. This problem occurs when a user in a Global Shell session cd's into a Windows filesystem directory and issues a rosh (ttlg) command that uses a different case than what appears in the OGFS. Although the names in a Windows filesystem are not case sensitive, the hub is hosted on a Unix server, which has Unix filesystem semantics with respect to case.

Here's an example that reproduces this problem:

```
$ pwd
/opsw/Server/@/m229/files/Administrator/
$ cd c
$ ttlg -l Administrator dir c:\\
ttlg: Error getting current directory (1161): No such file or
directory
$ cd ../C
$ ttlg -l Administrator dir c:\\
Volume in drive C has no label.
Volume Serial Number is 6836-A79C
```

Workaround: Users must observe filesystem case even when they cd into the filesystems of Windows servers. This is made easier if they use the tab completion features of their shells.

Bug ID: 137948

Description: After an application node is detached from a server, in the OGFS the file system under /opsw/Application/ is still accessible.

Platform: Independent

Subsystem: OGFS

Summary: In this situation, the user creates an application node under Application Servers in the SAS Web Client and then attaches the node to a managed server. In the Global Shell, the user cd's to the server's file system under the node, as in the following example:

```
cd /opsw/Application/Application Servers/<app-server>/@
cd Server/<server>/files/root
```

Next, in the SAS Web Client, the user detaches the application node from the server. Here's the bug: In the Global Shell, the user can still access the server's file system under the detached node.

Workaround: Exit the current Global Shell session and start a new one.

Bug ID: 141568

Description: Within Global Shell session, scp to a remote server does not work.

Platform: Independent

Subsystem: Global Shell

Symptom: The scp command fails with the following error message: No such file or directory lost connection.

Workaround: To copy a file from the OGFS to a non-managed server, run scp on the non-managed server. To copy a file from the OGFS to a managed server, use the cp command within the Global Shell and copy the file to /opsw/Server/@/<server>/files/<login>/<target-path>.

Bug ID: 144088

Description: SunOS OGFS: Hub start fails with ogfs_mount error in /var/adm/messages.

Platform: Sun OS

Subsystem: Global Shell

Symptom: The problem can be caused by setting the shell's cwd to the ogfs mountpoint (thereby making the mountpoint's vnode.v_count > 1). The full error is: ogfs: [ID 845410 kern.notice] ogfs_mount: error on overlay or vcount != 1 | vflag is already VROOT.

Workaround: Move the shell's cwd out of that directory, stop the Hub and start it again. It's not necessary to unload the kernel ogfs/ogdrv kernel modules or reboot the server.

Bug ID: 144661

Description: The rosh -n and -l options should not be required when invoked from /opsw/Server/@/<server>/metabase/<user> .

Platform: Windows Managed Server

Subsystem: Global Shell

Symptom: The rosh command generates the following error message: Username must be specified with -l or via path. The error occurs when rosh is invoked without -n or -l from within the <user> subdirectory of metabase, registry, or complus. The error does not occur in under the files subdirectory.

Workaround: Specify the user name (Windows login) with the -l option.

Bug ID: 140696

Description: In rosh, an interactive Windows program hangs.

Platform: Windows

Subsystem: Global Shell

Symptom: Launch a Global Shell session, rosh on a Windows managed server, run an interactive program such as ismtool. The interactive program will hang.

Workaround: None, unless you have access to the source code of the Windows interactive program. To fix the code, for example in Python, call the `sys.stdout.flush()`.

Intelligent Software Module (ISM) Development Kit

Bug ID: 135455

Description: Some ISMs force files to be installed in “C:\Program Files” on 64-bit Windows systems.

Platform: 64-bit Windows

Subsystem: ISM

Summary: This problem affects ISMs (containing MSIs) created with ismtool or the Visual Packager. When such a package is created on a 64-bit Windows server, “C:\Program Files” is hardcoded into the paths of some of the files within the package, even if the files do not reside in “C:\Program Files.” Later, when the ISM is installed on a managed server, the files are placed in “C:\Program Files.”

Workaround: None

Operating System Provisioning

Bug ID: 133894

Description: Wordbot error during import media.

Subsystem: OS Provisioning - import_media

Platform: Independent

Symptom: There appears to be a bug in the mechanism that connects to the Data Access Engine, and retrieves and then caches customer information associated with the IP address of the request to the Software Repository. Occasionally, this results in "wordbot.accessDenied" error.

Workaround: None. This error is caused by a transient problem within the Software Repository. The import_media script will retry each package upload a total of 3 times, which is normally sufficient to work around this issue. If you see this message logged frequently and the affected package is not correctly uploaded even with the retries, contact Opware support.

Bug ID: 135253

Description: Cannot reprovision a recently provisioned server sooner than ten minutes after provisioning the server.

Platform: Linux, Solaris

Subsystem: OS Provisioning - Reprovisioning a Server

Symptom: If you provision a server, and sooner than ten minutes attempt to reprovision the same server, you will get a failure.

Workaround: Wait ten minutes before attempting to reprovision or reboot the server.

Bug ID: 138234

Description: Hardware registration information being deleted from server in server pool in SAS Web Client (unprovisioned server list in SAS Client)

Platform: Windows XP

Subsystem: OS Provisioning

Symptom: In some cases, Windows XP servers that have been added to the server pool in the SAS Web Client (or, unprovisioned servers in the SAS Client) will initially report hardware registration information, but after a certain period of time, the server will stop reporting hardware information and all previously reported information will be deleted.

Workaround: Re-boot the server into the server pool again.

Bug ID: 139689

Description: Creating a second OS Installation Profile from second instance of SAS Client launched from the SAS Web Client as a different user will cause SAS Client to crash.

Platform: Independent

Subsystem: OS Provisioning - OS Installation Profiles

Symptom: If you create an OS Installation Profile from inside the SAS Web Client, then launch the SAS Client from the SAS Web Client and log in as different user, and attempt to create another OS Installation Profile as the second user, the SAS Client will crash.

Workaround: None. This behavior is not supported.

Bug ID: 142005

For information about this bug, see the explanation in the following chapter.

Bug ID: 144615

Description: Unable to save the change of OS Sequence Remediation's Script Timeout using Save Changes dialog

Platform: Independent

Subsystem: OS Provisioning - OS Sequence with Remediation

Symptom: If you create an OS Installation Profile, and in the Remediate Policies task object, enable remediation, and in an Ad-Hoc Script set a Script Timeout value, the timeout value will be saved when you close the OS Sequence and click Yes to save changes, or if you use the File menu -> Save function.

However, if after you save this initial configuration you open the OS Sequence again and make a change to the script timeout value, and then attempt to close the OS Sequence, you will be prompted to save the changes in a dialog. If you click Yes, the changes will not be saved.

Workaround: During OS Sequence modification phase, in order to save your changes to the Script Timeout field in an Remediate Policies object, click the mouse to empty boxes (such as Command box) to make the OS Sequence object window dirty. The changes would then be saved through either methods (through File menu ► Save, or close the OS Sequence Window and choose Yes to save).

Bug ID: 143459

Description: If you provision a server that has customer "Not Assigned", and it got assigned a customer during provisioning, then you changed the server's customer back to "Not Assigned", it caused an error.

Platform: Any

Subsystem: OS Provisioning/Customer Assignment

Symptom: If you provisioned a sever that had a customer assignment set to "Not Assigned", and then provision the server with an OS Profile or OS Sequence that has a customer the server will be assigned to the customer set in the OS Profile or OS Sequence. However, if you attempt to change the server's customer assignment back to "Not Assigned", you get an error. Not Assigned is an invalid customer assignment post-provisioning

Workaround: None

Opware Agent

Bug ID: 129395

Description: The Opware Discovery and Agent Deployment (ODAD) feature in the SAS Client does not work in realms when the realm display name is different from the realm short name.

Subsystem: SAS Client, Opware Discovery and Agent Deployment (ODAD) feature

Platform: Independent

Symptom: The ODAD feature does not function because it cannot look up the Opware Gateway information about the realm.

Workaround: None. Do not change the display name of a realm in the Opware Command Center (web) UI so that it is different from the short name.

Bug ID: 129735

Description: Scanning a managed server opens the unmanaged server window.

Subsystem: SAS Client, Opware Discovery and Agent Deployment (ODAD) feature

Platform: Independent

Symptom: When you scan a server that is already managed by Opware SAS, the ODAD feature cannot determine which managed server ID it corresponds to and, by default, opens the unmanaged server window.

Workaround: None

Bug ID: 134679

Description: The Opsware Discovery and Agent Deployment feature is unable to deploy agents to Windows servers if the Local Security Policy of the system is set in a particular way.

Subsystem: ODAD

Platform: Windows

Symptom: Some releases of Windows XP set the Local Security Policy in a particular way by default. If the Local Security Option "Network Access: Sharing and security model for local accounts" is set to the value "Guest only - local users authenticate as Guest" then all attempts to deploy Opsware Agents using ODAD will fail with an incorrect user name or password error.

Workaround: Perform the following steps to change the option:

- 1** Log into the unmanaged server using remote desktop.
- 2** Navigate to Control Panel -> Administrative Tools -> Local Security Policy.
- 3** Select Local Policies -> Security Options.
- 4** Scroll down to the option "Network access: Sharing and Security Model for local accounts".
- 5** Double click it.
- 6** Change to "Classic - local users authenticate as themselves".
- 7** Click Apply and then OK.

Bug ID: 137024

Description: Unable to install loopback adapters on a Windows 2003 64-bit AD Helper Server

Platform: Windows 2003 64 bit

Subsystem: Agent Deployment

Symptom: When you install the Opsware Agent Deployment Helper software policy on a Windows 2003 x64 server and configure the server as the Agent Deployment Helper server, deploying an Opsware Agent on a Windows server causes the Opsware Agent installation to fail with the error: "Unable to install loopback adapters."

Workaround: None. Using a Windows 2003 64-bit server as the server to run the Windows Agent Deployment Help is not supported.

Bug ID: 137558

Description: Using ODAD to install an Opware Agent on a Windows server requires configuring a firewall port exception.

Platform: Windows XP with SP1 and Windows 2003 R2 with SP1

Subsystem: Opware Discovery and Agent Deployment (ODAD)

Symptoms: ODAD uses NetBIOS to connect to Windows servers. If the Windows firewall on a server is enabled, ODAD cannot connect to the server unless the "Don't allow exceptions" option is disabled and a port exception for TCP 139 is enabled.

Workaround:

To disable the "Don't allow exceptions" option, perform the following steps:

1. From the Network Connections window, open the Properties page for the network connection. Access the Windows Firewall settings on the Advanced tab of the Properties window.
2. On the General tab, deselect the "Don't allow exceptions" option.

To enable an exception for port TCP 139, perform the following steps:

1. On the Windows Firewall window, select the Exceptions tab. Select the "File and Printer Sharing" service and click Edit. The Edit a Service window appears.
2. If not already selected, select the check box for port TCP 139. The default scope setting for this port is "Subnet."
3. When the Opware Agent Deployment Helper server and target Windows server are on different subnets, click the "Change scope" button and change the scope of the port to "Any computer" or enter a user specified custom list.
4. Click OK to save your configuration changes.

Opware API

Bug ID: 143592

Description: The getPlatformVOs method throws NotFoundException.

Platform: Independent

Subsystem: Opware API

Symptom: If the parameter passed to the `getPlatformVOs` method includes non-existent platform refs, the method throws `NotFoundException`, but it should just filter out the non-existent platforms from the returned list.

Workaround: Catch `NotFoundException` and then retry with valid platform refs.

Bug ID: 143527

Description: Authenticated user should not receive an `AuthorizationException` while calling a finder method.

Platform: Independent

Subsystem: Opsware SAS API

Symptom: Occurs when an authenticated user calls a finder that selects objects the user is not authorized to view, that is, the user does not have Read permission on the objects.

Workaround: Catch the `AuthorizationException`, which is the superclass of `AuthenticationException`.

Opsware Installer

Bug ID: 137740

Description: The Opsware Global File System Server (OGFS) component did not start after installing an Opsware core.

Subsystem: Opsware Global File System Server (OGFS)

Platform: Independent

Symptom: In the Opsware SAS client, launching the Global Shell causes an authentication error and the shell will not function.

Workaround:

1. On the server running the OGFS component, run the following command to determine whether the OGFS started:

```
[ -d /var/opt/opsware/ogfs/mnt/ogfs/.authenticate ] &&  
echo DOWN || echo UP
```

If the OGFS did not start, the command displays the following output: DOWN.

2. Start the OGFS component by performing the following steps:
 - a) Log on as root to the server running the OGFS component.

b) Enter the following command to start the OGFS component:

```
/etc/init.d/opsware-sas start hub
```

Bug ID: 138694

Description: Upgrade failed due to an Oracle database problem.

Subsystem: Opware Model Repository

Platform: Independent

Symptom: Oracle has a SYS.AUDIT_ACTIONS table. Oracle's default synonym AUDIT_ACTION is for SYS.AUDIT_ACTIONS. When the Model Repository creates the TRUTH.AUDIT_ACTIONS table, the synonym is changed to TRUTH.AUDIT_ACTIONS. When you upgrade Oracle software, Oracle will recreate the synonym as SYS.AUDIT_ACTIONS.

Workaround: If the AUDIT_ACTIONS synonym is overwritten by an Oracle upgrade, enter the following commands:

```
Su - oracle
Sqlplus "/ as sysdba"
Grant create session to truth;
Connect truth/<password>
Create or replace public synonym audit_actions for audit_
actions;
```

Bug ID: 141553

Description: The Satellite Gateway installer fails if the Agent is installed and running.

Subsystem: Opware Installer

Platform: Independent

Symptom: If you run the Satellite Installer and choose Gateway to install on a managed server, you will get an error message (similar to the following example) at the end of install script:

```
WARNING: an error was detected while running an external
command or script. The output follows:
Verifying dependencies
Verify "localhost" not listening on port 1002: FAILURE (Port
already
allocated).
[Nov-06-2006 08:19:46] Component installation script encountered
an error (exit
status 1)
```

```
[Nov-06-2006 08:19:46] Exiting Opware Installer.
```

With this failed installation, the new realm does not appear in the drop-down list in the ADT interface ("Unmanaged Servers").

For more details, see the file that resembles the following path:

```
/var/log/opware/install_opware/install_opware.2006-11-06.08:14:24_verbose.log
```

When the script is done, the file resembles the following path:

```
/var/log/opware/install_opware/install_opware.2006-11-06.08:14:24.log
```

Workaround: Deactivate the Agent before you install the Gateway.

Bug ID: 140512

Description: Gateway startup does not detect when ConnectionLimit is set to a value that is too high for the operating system.

Subsystem: Opware Gateway

Platform: Independent

Symptom: If the ConnectionLimit setting is larger than the maximum number of open file descriptors (ulimit -n), then the gateway may run out of file descriptors, causing it to fail. The default ulimit on Solaris is 256, the default ulimit on the Gateway is 1024.

Workaround: None.

Bug ID: 145549

Description: Opware Installer does not check for all prerequisite packages when installing Oracle on Solaris 10.

Subsystem: Opware Installer

Platform: Independent

Symptom: When installing Oracle on Solaris 10 the Opware Installer does not explicitly check for the following prerequisite packages: SUNWpool, SUNWpoolr and SUNWmfrun.

Workaround: Install the SUNWpool and SUNWpoolr packages to avoid the following error:

```
Can't load
'/usr/perl5/5.8.4/lib/sun4-solaris-64int/auto/Sun/Solaris/
Project/Project.so'
```

```
for module Sun::Solaris::Project: ld.so.1: perl: fatal:
libpool.so.1: open
failed: No such file or directory at
/usr/perl5/5.8.4/lib/sun4-solaris-64int/DynaLoader.pm line
230.
  at /usr/sbin/projadd line 19
Compilation failed in require at /usr/sbin/projadd line 19.
BEGIN failed--compilation aborted at /usr/sbin/projadd line
19.
[error] Problem adding projadd to /etc/project.
execution of OPSWoracle_rdbms-10.2.0.2.0-7 script failed,
exit status 1
```

Install the SUNWmfrun package to avoid the following error:

```
Exception in thread "main" java.lang.UnsatisfiedLinkError:
... libmawt.so: ld.so.1: java: fatal: libXm.so.4: open
failed: No such
file or directory
```

Opware SAS Client

Bug ID: 133253

Description: Actions available for the search results are not accurate if multiple windows are open in the SAS Client.

Subsystem: SAS Client - Search

Platform: Independent

Symptom: After performing a search in the SAS Client, If you open multiple windows and select objects in more than one window, then the actions available for the search results from the Action menu for the selected objects may be incorrect in the other windows.

Workaround: To display the exact options in the Action menu for the search results, reselect the objects in the active window and then select Actions from the File menu.

Or

Right-click on the selected object and use the context menu to select the appropriate action.

Bug ID: 138720

Description: SAS Client search does not display accurate results when you include special characters such as comma (,) in the value field.

Subsystem: SAS Client - Search

Platform: Independent

Symptom: In the SAS Client search, if you perform an Advance Search using the following values in the value field, the displayed search results are not accurate.

Value = special characters such as comma (,).

Workaround: Searching for comma value using the "begins with", "ends with", or "contains" comparison operator and a piece of the data that doesn't include the comma.

Bug ID: 139533

Description: Package window intermittently fails to open correctly in the SAS Client search feature.

Subsystem: SAS Client - Search

Platform: Independent

Symptom: When you double click on a package to open the Package window from the search results in the SAS Client, the Package window may display incomplete information. This behavior is observed intermittently. This behavior is observed intermittently.

Workaround: To open a Package window from the search results, select the Open menu item from the Action menu.

Bug ID: 138334

Description: Job Type drop-down list for both Job Logs and Recurring Schedules may not display correct available jobs if a user's permissions change while the SAS Client is open.

Platform: Independent

Subsystem: SAS Client - Jobs and Sessions

Symptom: Depending on when a user's granted permissions change, for example, while the user is logged in to the SAS Client, the Job Logs and Recurring Schedules Job Types drop-down list may not display the available job types accurately for that user. For

example, if a user has permission to view all job type when the user starts the SAS Client, but during the session has a change in permissions that allow the user to not view certain job types, the Job Type drop-down list will still display all jobs as being available to view by the user.

Workaround: Close and restart to the SAS Client, or open a new window in the SAS Client and check the Job Types drop-down list again.

Bug ID: 144239

Description: When you close the remediate preview window while the process is still running, the Agent will get locked on the server and cannot run any remediate jobs.

Subsystem: SAS Client - Remediate

Platform: Independent

Symptom: When you launch remediate job from the server, run the preview, and then close the preview window while it is running, the Agent gets locked on the managed server and all other jobs fail. The following error message appears:

"The request to retrieve information from the Opsware Agent failed because it could not obtain a lock for the server. Most likely someone else is performing an operation on the same device. Try again in a few minutes. If the problem persists, please contact your Opsware Administrator.

Workaround: Wait for the remediate process to finish and then run the preview.

Bug ID: 144363

Description: Duplicating a device group from a device group without any rules, results in duplicate device group showing to contain servers.

Subsystem: SAS Client - Device Groups

Platform: Independent

Symptom: In the SAS Client you can duplicate a dynamic group which contains no rules and the resulting duplicate device group shows up in the device group list. In the navigation pane, when you select the duplicate device group, the members of the device group are shown in the Content pane.

Workaround: Create a rule for each dynamic device group or convert the dynamic device group to a static device group.

Bug ID: 144896

Description: Creating a dynamic device group using advanced search does not list the members of the group immediately.

Subsystem: SAS Client - Device Groups

Platform: Independent

Symptom: In the SAS client when you create a device group from advanced search, the members of that group are not listed immediately in the Content pane. You can view the members of the group immediately if you open the Device Explorer.

Workaround: Select Update Cache from the tools menu to list the members of that group immediately in the Content pane.

Bug ID: 145626

Description: Exceptions received when you update cache for patches.

Platform: Independent

Subsystem: SAS Client

Symptom: In the SAS Client when you select multiple patches and select Update Cache from the Tools menu, you receive an exception.

Workaround: None.

Opsware SAS Web Client

Bug ID: 136366

Description: TimedOutException occurs when deleting a dynamic server group containing many servers.

Subsystem: SAS Web Client

Platform: Independent

Symptom: In the SAS Web Client, when you delete a dynamic server group containing many servers, the following exception occurs:

```
Error Summary
Name:      Standard 500 Error
Description: 500 Internal Server Error
More Details...
```

Hide Details

```
Message Text: Transaction Rolledback.; nested exception is:
weblogic.transaction.internal.TimedOutException: Transaction
timed out after
243 seconds
```

In spite of the exception, the dynamic server groups are deleted successfully.

Workaround: None

Opware SAS Web Services API 2.2

Bug ID: 144254

Description: ServerWebService.getEventList method throws unexpected java.util.ConcurrentModificationException.

Platform: Independent

Subsystem: Opware SAS Web Services API 2.2

Symptom: Stack trace on WebLogic side of twist includes the following:

```
Caused by: java.util.ConcurrentModificationException at
java.util.LinkedList$ListItr.checkForComodification(LinkedList.
java:552) at
java.util.LinkedList$ListItr.next(LinkedList.java:488) at
java.util.SubList$1.next(AbstractList.java:798) at . . . .
```

Workaround: Retry the method call.

Patch Management for Windows

Bug ID: 132400

Description: You have a server running Service Pack 3. When you try to remediate a patch policy that contains patch1 (for SP3), patch2 (for SP4), and Service Pack 4, only patch1 and Service Pack 4 will be installed. Since patch2 is intended for SP4, it will not get installed because when you start the remediate process, the server is still at SP3. After the first remediate is complete and you run the remediate process again, patch2 will then get installed.

Platform: Windows

Subsystem: Opware SAS Client - Patch Management for Windows

Symptom: You have a patch policy attached to a server running Service Pack 3. The patch policy contains patch1 (for SP3), patch2 (for SP4), and Service Pack 4. When you run the remediate process, only patch1 and Service Pack 4 are installed. After the remediate process is complete and you run the remediate process again, patch2 will then get installed.

Workaround: If a Service Pack or a patch that is dependent on a certain Service Pack needs to be installed, install it manually. Do not use the remediate process to install a patch or a Service Pack that is dependent on a certain Service Pack.

Bug ID: 132415

Description: Email notifications were not sent when the install, uninstall, or remediate process failed due to pre-install or pre-uninstall scripts that failed to run.

Platform: Windows

Subsystem: SAS Client - Patch Management for Windows

Symptom: You tried to install a patch where the pre-install or pre-uninstall script failed. No email notifications were sent.

Workaround: None

Bug ID: 132467

Description: You cannot use the SAS Client to uninstall a patch that was installed with the OCC application node.

Platform: Windows

Subsystem: SAS Client - Patch Management for Windows

Symptom: You created an application node and added a patch to it. In the OCC, you installed the application node on a managed server. In the OCC, you removed the application node from the server. In the SAS Client, you tried to uninstall it with the Uninstall Patch task window and received an error explaining that "This patch cannot be uninstalled because it is referenced by another part of the model."

Workaround: Use the SAS Client for all Windows patching.

Bug ID: 132599

Description: In the Properties view that lists patches for a certain Windows operating system, a patch is displayed as grayed out when Patch Management cannot determine whether the version of the patch that is installed is the same as the version of the patch that is in the Library. This occurs when the GUID identifier is not provided or is the same for both versions of the patch.

Platform: Windows

Subsystem: SAS Client - Patch Management for Windows

Symptom: A patch install appears successful; however, after verification, Opware determined that the patch was not actually installed. When you view patches listed for a certain operating system in the Properties view, you see two patches displayed: one is grayed out and shown as installed-not-by-opware and one is not installed.

Workaround: None

Bug ID: 132866

Description: When you add an Update Rollup to a patch policy, not all versions of it are added. Only the Update Rollup you selected will be added.

Platform: Windows

Subsystem: SAS Client - Patch Management for Windows

Symptom: You tried to add all versions on an Update Rollup to a patch policy. Only the version of the Update Rollup you selected was added.

Workaround: Manually add all versions of the Update Rollup to a patch policy.

Bug ID: 137322

Description: If you created patch policy remediate jobs in Opware 5.5 and are using Opware 6, you will not be able to see those jobs in Opware 6.

Platform: Windows

Subsystem: SAS Client - Patch Management for Windows

Symptom: You look in My Jobs in the Opware Command Center and in Jobs and Sessions in the SAS Client for patch policy remediate jobs you created when you were using Opware 5.5 and do not see them.

Workaround: None

Bug ID: 143178

Description: Patch installation hangs on Windows XP without SP2.

Platform: Windows XP

Subsystem: Opware SAS Client - Patch Management for Windows

Symptom: The Agent cannot reboot the Windows managed server after the patch is installed. This occurs on Windows XP servers with SP1 or no SP at all. It does not occur on Windows XP servers with SP2. Windows XP has a "welcome screen" feature which causes the hang when the server is rebooted. This affects patch and package installs/uninstalls that require reboots.

Workaround: Install SP2 or disable the "welcome screen" feature.

Patch Management for Unix

Bug ID: 138929

Description: Unclear error message when base fileset and update fileset does not uninstall successfully during Patch remediation.

Platform: AIX 5.3

Subsystem: SAS Client - Patch Management for Unix

Symptom: If you attempt to use the Patch Remediate feature to uninstall the base fileset and update fileset on the AIX 5.3 operating system in one remediation job, the install base fileset and its update should both be uninstalled. In the particular case, when uninstallation of base fileset fails, the error message is not clear enough to indicate the reason, and the update fileset is not mentioned in the error messages.

Workaround: None

Bug ID: 139165

Description: APARs can be satisfied by both Update Filesets and Base Filesets.

Platform: AIX

Subsystem: SAS Client - Patch Management for Unix

Symptom: If the LPP containing the Base Fileset that satisfies an APAR is uploaded with the Import Package dialog, Opware does not recognize that the Base Fileset satisfies the APAR. When you view the APAR properties, you will see “Unknown AIX Fileset” for the Base Fileset that was just uploaded.

Workaround: Upload the LPP containing the Base Fileset using the ocli with the -o option. Verify that the -C customer option specifies Customer Independent.

Bug ID: 139208

Description: Using Patch Remediation to install ML01 on AIX 5.3 server produces some errors.

Platform: AIX 5.3.

Subsystem: SAS Client - Patch Management for Unix

Symptom: In some cases, using the Patch Remediation feature to install ML01 on AIX 5.3, the job will complete but with errors.

Workaround: None

Reports

Bug ID: 133350

Description: Multi-byte characters do not display correctly in the chart legend.

Platform: Independent

Subsystem: SAS Client - Reports

Symptom: Characters that do not represent multi-byte characters display in the legend.

Workaround: Click the “Show all <nn> servers” link to view the correct multi-byte characters.

Bug ID: 133351

Description: No report results display when you click the multi-byte character link.

Platform: Independent

Subsystem: SAS Client - Reports

Symptom: When you click the multi-byte character link, no report results are displayed. The report should return the same number of objects as indicated in the link.

Workaround: Click the “Show all <nn> servers” link to view the correct multi-byte characters.

Bug ID: 133652

Description: Multi-byte characters do not display correctly in the report description.

Platform: Independent

Subsystem: SAS Client - Reports

Symptom: Characters that do not represent multi-byte characters display in the report description.

Workaround: See the information displayed in the Customer column.

Bug ID: 134581

Description: The following special characters are not valid report parameters: #, \$, %, &, +, and ;.

Platform: Independent

Subsystem: SAS Client - Reports

Symptom: There are no report results when you run a report that uses special characters in the report parameters.

Workaround: Select [Any Value] using the Equals operator or choose the Begins With, Ends With, or Contains operator and then enter a string for a wildcard search that contains everything up to the point of where the special character would be.

Bug ID: 136029

Description: The Action menu is disabled in Reports.

Platform: Independent

Subsystem: SAS Client - Reports

Symptom: When the Reports feature is selected in the navigation tree, the Action menu is disabled.

Workaround: Use the context-sensitive (right-click) menu.

Bug ID: 136305

Description: Customer/Facility Permissions and Device Group Permission Overrides report taking long time to run and not all results viewable. SAS Client may hang.

Platform: Independent

Subsystem: SAS Reports - User and Security Reports

Symptom: The 'Customer/Facility Permissions and Device Group Permission Overrides' report can take a very long time to run, in some cases, over 30 minutes. When it finishes, the SAS Client freezes and the report results are not scrollable. In some cases, depending on the amount of data being reported, the SAS Client will hang.

Workaround: None. If you see this error and have questions, please call Opware support.

Bug ID: 143410

Description: The SAS Client "Servers by Customer" report fails to return complete results on desktops with less than 1 GB MB RAM and when the number of servers is greater than 1000.

Platform: Windows

Subsystem: SAS Client Reports

Symptom: In the SAS Client, if you run the following report, Server Reports ► Servers by Customer, the report takes a long time to complete on machines with less 512 MB RAM and

when you attempt to run the report on more than 4000 servers. Moreover, the report will not export to CSV – only the first few hundred records will be exported.

Workaround: To run this report, it is recommended that the system from which you are running the report has at least 1GB of memory, and you limit the number of servers to 1000.

If the report completes, export the report to .html. Then, open the report in a Web browser, select all and then copy. Then, open Excel, select the whole sheet then perform an Edit ► Paste.

Software Management

Bug ID: 133443

Description: Bulk package upload can cause the “Package Type Not Defined in Truth” error.

Subsystem: SAS Client - Software Management

Platform: Independent

Symptom: Import media uploads packages to the Software Repository. The Software Repository connects to the Data Access Engine to retrieve information specific to the package type being uploaded. Even though all packages uploaded during this step are of the same type, the call to the Data Access Engine will occasionally produce the following error: "Error uploading package. SUNWceax: Package Type Not Defined in Truth".

Workaround: None.

Bug ID: 136715

Description: In the SAS Client, you are unable to refresh the Package window.

Subsystem: SAS Client - Software Management

Platform: Independent

Symptom: In the SAS Client, if you have the Package window open and you make any changes to the servers associated with the packages in the Server window, then the changes made to the server are not reflected in the Package window when you refresh the Package window.

Workaround: Close the Package window and open it again.

Bug ID: 137989

Description: Modifying the folder permissions in the SAS client does not reset the menu options in the Action menu immediately.

Subsystem: SAS Client - Software Management

Platform: Independent

Symptom: In the SAS Client, when you modify the folder permissions, the permissions are saved but the changes are not propagated to the menu options in the Action menu immediately.

Workaround: After you modify the folder permissions, select Update Cache from the Tools menu to propagate the changes to the menu options in the Action menu.

Bug ID: 138934

Description: The software compliance status for a non adoptable Solaris patch in a software policy is always "Not in Compliance".

Subsystem: SAS Client - Software Management

Platform: Independent

Symptom: If a software policy contains an non adoptable patch such as Solaris patch, then after remediating a server with the software policy, the compliance status displayed for the sever is always "Not in Compliance".

Workaround: None.

Bug ID: 139040

Description: Install Software Policy Template fails on managed servers belonging to multiple platform families.

Subsystem: SAS Client - Software Management

Platform: Independent

Symptom: When you install a Software Policy Template on managed servers belonging to multiple platform families, and if the selected software policy template's platform family does not match the platform family of the managed servers, an exception occurs and the Software Policy Template is not attached to the managed servers.

Workaround: None. When you install a software policy template on managed servers, the software policy template and the managed servers must belong to the same platform family.

Bug ID: 139046

Description: Unable to delete HPUX depot patches in the SAS Client.

Subsystem: SAS Client - Software Management

Platform: HPUX

Symptom: After you import a HPUX depot patch to Opware SAS, you are unable to delete the package immediately from the SAS Client. Deleting the package results in the following error:

```
"Uabled to delete item because it is either in use or you do not
have sufficient privileges"
```

This behavior is only observed if the HPUX depot patch is not located in a folder.

Workaround: To delete a HPUX depot patch immediately after importing it to Opsware SAS, perform the following steps:

- 1** Delete the HPUX depot patch using SAS Client.
- 2** From the Tools menu, select Update Cache.
- 3** Select the HPUX depot patch in the SAS Client and delete it again.

Bug ID: 138400

Description: Software is not uninstalled after a migrated software policy is detached and remediated from a server

Platform: Independent

Subsystem: Software Management > Content Migration

Symptom: If you detach a migrated software policy from a server and remediate, the packages are not removed from the server.

Workaround: You can install software by using a migrated software policy in the SAS Client but you cannot uninstall software until you have completed the migration. You must complete migration as soon as possible and do not remediate servers or detach software policies unless you have completed migration.

Bug ID: 141459

Description: The SAS client stops responding when you attach a policy to several servers.

Platform: Independent

Subsystem: SAS Client - Software Management

Symptom: In the SAS client when you attach a policy to several servers the SAS client stops responding.

Workaround: None.

Bug ID: 143642

Description: Remediating an RPM package to a server in one core immediately after importing the package in another core in a multimaster mesh fails with metadata missing error.

Platform: Independent

Subsystem: SAS Client - Software Management

Symptom: In a multimaster mesh, after importing an RPM package in one core, if you try to install the package in another core immediately, then the remediation fails with metadata missing error.

Workaround: If you receive this error immediately after importing an RPM in one core and then attempting to install the RPM on a server in another core, wait several minutes, then retry the operation.

Bug ID: 143751

Description: Uninstall fails for zope packages on SLES 10.

Subsystem: SAS Client - RPM Deployment

Platform: Linux

Symptom: In the SAS Client, when you try to uninstall a zope package on SLES 10 server by remediating the server with a software policy containing zope package, the remediate process fails with the following error:

```
ImportError: /opt/zope/lib/python/ZODB/cPersistence.so: wrong
ELF class:
ELFCLASS32
..failed
error: %preun(zope-2.7.8-15.i586) scriptlet failed, exit status
Software uninstall failed with an exit code of 255
```

Workaround: To uninstall a zope package on a SLES 10 server, add "--noscripts" to the uninstall properties of the zope package in the Package Properties window before remediating the server.

Bug ID: 144220

Description: Performance issues when remediating a policy containing a large number of RPMs.

Subsystem: SAS Client - RPM Deployment

Platform: Linux

Symptom: When remediating a policy which contains a large number of RPMs, the SAS Client does not appear to be performing any action.

Installing RPMs contains consists of three phases.

Phase 1: Resolve dependencies for the RPMs contained in the policy.

Phase 2: Download the RPMs resulting from phase 1.

Phase 3: Install the RPMs.

Phase 1 corresponds to the "Preview" step of remediating a policy.

Even if the "Preview" button is not clicked, this phase must still be performed. While this phase is occurring, the SAS Client does not provide any feedback. If many RPMs (more than one hundred) are involved, this step can take up to 45 minutes to complete. Although nothing appears to be happening in the SAS Client, in reality, Opsware is performing the steps needed to resolve dependencies. Because this phase involves many transactions between the managed server and the SAS core, the operation is not instantaneous.

Workaround: None.

Bug ID: 144301/144379

Description: To authenticate with Opsware, the `rhncertimport` script requires to access the Command Engine or the Data Access Engine certificate or the user name and password stored in the Configuration file.

Subsystem: SAS Client - RPM Deployment

Platform: Independent

Symptom: There are two ways in which `rhncertimport` authenticates with Opsware : Command Engine or the Data Access Engine certificate or via user name and password stored in the Configuration file in the Software Repository.

To run the `rhncertimport` successfully, the script needs to either access to the Command Engine or the Data Access Engine certificate or the configuration file should contain the `uapi_user=Username` and `uapi_pass=Password` options.

If the Command Engine or the Data Access Engine is not installed on the same server as the Software Repository then the certificate may not be installed in the server containing the Software Repository. Hence the `rhncertimport` may fail if the configuration file does not contain the `uapi_user=Username` and `uapi_pass=Password` options.

Workaround: In case certificate is not available, then specify the `uapi_user=Username` and `uapi_pass=Password` options in the Configuration file.

Bug ID: 144719

Description: Adding packages to a software policy may result in null pointer exception.

Subsystem: SAS Client - Software Management

Platform: Independent

Symptom: In the SAS Client, when you create a software policy from the Library > By Folder view and then immediately try to add packages to the software policy, you may receive a null pointer exception. This behavior is observed intermittently.

Workaround: Close the Software Policy window and re-open the Software Policy window to add the packages.

Bug ID: 144841

Description: SAS Client stops responding when you delete a folder containing many packages.

Subsystem: SAS Client - Software Management

Platform: Independent

Symptom: In the SAS Client, deleting a folder containing many packages causes the SAS Client to stop responding. Once the folder is deleted the SAS Client starts to respond again.

Workaround: To access the SAS Client again, wait till the folder is deleted.

Bug ID: 145246

Description: Unable to delete a build customization script in the SAS Client.

Platform: Independent

Subsystem: SAS Client - Software Management

Symptom: In the SAS Client, if you delete a build customization script package, the package is not deleted.

Workaround: Restart the SAS Client to delete the package.

Bug ID: 146000

Description: Uploading packages or patches after uploading a BCS script causes Customer to be same as the BCS Customer.

Platform: Independent

Subsystem: SAS Client - Software Management

Symptom: After uploading a BCS Script and specifying a customer other than Customer Independent, future uploads to non-BCS scripts will be uploaded with the customer selected in the last BCS script upload. As a result, an attempt to remediate packages and patches results in an error during downloading patches or packages using the SAS client.

Workaround: Close the SAS Client after uploading BCS script and before uploading a patch or package.

Bug ID: 146394

Description: RPM dependency solving fails to exclude overlapping RPMs

Subsystem: SAS Client - RPM Deployment

Platform: Red Hat Linux

Symptom: When attempting to install an RPM, the install fails with the following error:

```
package glibc-2.3.4-2.25 is already installed
```

Workaround: This occurs when multiple architectures of the same RPM are available for a platform and are included in the same policy.

e.g, `glibc-2.3.4-2.25.i386` and `glibc-2.3.4-2.25.i686` are both included in the RHBA-2006:096 policy created via RHN Import. In this situation, the dependency solver attempts to install `glibc-2.3.4-2.25.i386` even though `glibc-2.3.4-2.25.i686` is already installed (or vice-versa).

The workaround is to remove one of the two RPMs from the policy.

Visual Application Manager

Bug ID: 139071

Description: For .vam files that reside on the hub, instead of opening the selected (older) topology, the SAS Client opened the most recent saved topology when you clicked Open.

Platform: Independent

Subsystem: SAS Client - Visual Application Manager

Symptom: You selected an older topology from a .vam file on the hub and clicked Open. The most recent topology is displayed, instead of the one that you selected.

Workaround: In the Open window, select both the .vam file and the older topology that you want to open and then double-click that .vam file to open it.

Bug ID: 145823

Description: New Application Tier windows missing Server Filter field (and title bar says "Edit Application") when you create a new tier from the top level application node.

Platform: Independent

Subsystem: Visual Application Manager (VAM)

Symptom: If you select the top level node in the Application tree inside VAM and create a new application tier, the title bar of the new application tier window will incorrectly say Edit Application Tier, and the window will not have a server filter.

Workaround: Create and name the new application tier, then save and close it. To edit the application tier and add a server filter, in the Application Tree, select the tier, and from the Application menu, select Edit or right-click and then select Edit to display the Edit Tier window. Now you can add the server filter to the tier.

Bug ID: 145933

Description: VAM and SAS Client sometimes hangs when scanning multiple servers through a Solaris 9 or Solaris 10 Opware Global File System (OGFS) (hub).

Platform: Solaris 9 and Solaris 10

Subsystem: Visual Application Manager (VAM) - Opware Global File System (OGFS)

Symptom: If a user runs a single VAM scan on multiple servers - typically more than 30 physical or virtual servers - and the Opware Global File System (OGFS) is running on Solaris 9 or Solaris 10, in some cases the OGFS server process may hang for up to ten minutes and the scan will fail. This may affect any other SAS Clients using the same OGFS server. This is due to a threading issue for an OGFS that runs Solaris 9 and Solaris 10.

Workaround: If your OGFS is running on Solaris 9 or Solaris 10, try scanning a lesser number of servers if you experience this behavior.

Visual Packager

Bug ID: 139506

Description: Visual Packager supports only ASCII characters in the software policy name.

Subsystem: SAS Client - Visual Packager

Platform: Independent

Symptom: If you include non-ASCII characters in the software policy Name in the Create Package window, Visual Packager creates a new software policy in the folder hierarchy (with packages attached) and each non-ASCII character displays as a question mark (?).

Workaround: None. Do not include non- ASCII characters in the software policy name.

Bug ID: 143744

Description: Unable to create a package using Visual Packager on AIX.

Platform: AIX

Subsystem: SAS Client - Visual Packager

Symptom: Using Visual Packager when you create a package on AIX and include filesystems or Installed Patches in the Selection field, then the create package process fails with the following error:

```
com.opsware.common.LegacyException: msg= java.io.IOException:  
Executing  
command to package contenton server on server 390001
```

Workaround: None.

Bug ID: 143744

Description: Creating package with supplied fileset for UpdateFileset (patch) fails.

Platform: AIX

Subsystem: Visual Packager Backend

Symptom: When creating an AIX package with Visual Packager, select an install patch that has an update fileset and then try to create the package. Result:

```
com.opsware.common.LegacyException: msg= java.io.IOException:  
Executing command to package contenton server on server <server-  
id> ...
```

Workaround: First import the LPP into SAS and then create a policy via Visual Packager that involves inner/child packages of the LPP.

Chapter 7: Known Problems, Restrictions, and Workarounds in Opsware SAS 6.1.2

IN THIS CHAPTER

This chapter describes workarounds for known problems in Opsware SAS 6.1.2.

Bug ID: 142005

Subsystem: OS Provisioning - OS Definitions/OS Installation Profiles and OS Sequences

Platform: Solaris/Linux

Description: This bug encompasses two main issues:

- **Issue One** – Cannot Upload New Configuration Files for OS Installation Profiles with Attached Packages
- **Issue Two** – **Migrated OS Installation Profiles with Manually Attached Packages Will Not Install During OS Sequence Remediation**

Issue One – Cannot Upload New Configuration Files for OS Installation Profiles with Attached Packages

For Solaris or Linux OS Definitions/OS Installation Profiles that were created previous to the SAS 6.1.1 release and that contain attached packages, you will not be able to upload a new configuration files to those OS Definition/OS Installation Profile.

Since the OS Provisioning feature no longer allows packages to be directly attached to an OS Definitions/OS Installation Profile (they are now added via Software Policies in the OS Sequence), any profiles that have attached packages and that were created in a release previous to SAS 6.1.1 will not allow you to modify or upload a new configuration to the profile.

Workaround: If your core contains OS Definitions/Installation Profiles that contain attached packages, and you need to modify the configuration file, create a new OS Installation Profile using the Prepare OS Wizard. To create a set of packages you want to install on a bare metal server, create a software policy and attach the appropriate

packages to it. Then, create an OS Sequence and attach the software policy to the OS Sequence. Before you run the OS Sequence, make sure that you have specified to Enable Remediation, and the packages will be installed when the OS Sequence finishes the process.

If you have migrated OS Installation Profiles that contain packages, and would like to remove all those attached packages (so you can add them to a Software Policy and then attach the Software Policy to the OS Installation Profile), we have provided a script that will remove all attached packages on the migrated OS Installation Profiles.

Issue Two – Migrated OS Installation Profiles with Manually Attached Packages Will Not Install During OS Sequence Remediation

It is possible that some OS Installation Profiles that were migrated from SAS 5.x to SAS 6.x could contain packages that were manually attached to the profiles. If you run an OS Sequence that references migrated OS Installation Profiles with manually attached packages, the attached packages will not successfully remediate (get installed) on the target server. The OS Sequence will ignore any packaged that are attached to OS Installation Profiles. (However, everything else that is part of the OS Sequence will be installed and remediated.) From SAS 6.0 and forward, OS Sequences will remediate packages that are contained in the Software Policies that are attached to the sequence, but not any packages that are attached to older OS Installation Profiles.

If you have migrated OS Installation Profiles that contain manually attached packages, you can run a package removal script that will remove all manually attached packages from the migrated OS Installation Profiles. Then, you can add the desired packages to a Software Policy, and then attach the Software Policy to the OS Sequence. When you run the OS Sequence, all packages that are part of the Software Policy will be installed during remediation.

Workaround: Migrated OS Installation Profile Package Removal Script

The OS Installation Package Removal Script allows you to detach all packages from a migrated OS Installation Profile. Using this script you can remove packages from a specific OS Installation Profile or several at a time, denoted by either the profile's name or Opware ID.

To run the script, from a shell enter the following command:

```
root@spin# /opt/opsware/bin/python /opt/opsware/spin/util/  
unmodel_os_packages.sw.pyc "RHEL 4 AS Basic" "Solaris 9 U2"  
12340001
```

Where “RHEL 4 AS Basic” and “Solaris 9 U2” are the names of OS Installation Profiles and 12340001 is the Opware ID of an OS Installation Profile.

The script can be run more than once on the same OS Installation Profile without adverse effects.

Chapter 8: Documentation Errata

IN THIS CHAPTER

This chapter contains the following topics:

Updates to the Opware SAS 6.1.1 User's Guide: Server Automation

Updates to the Opware SAS 6.1.1 User's Guide: Server Automation

The followings topic in the Opware SAS 6.1.1 User's Guide is updated with new information:

Installing Opware Agents Using ODAD

If you are unable to deploy the Opware agent to a UNIX server by logging in as root, the system you are deploying to may be configured to disallow direct root logins. In such cases ODAD allows you to log in as a non-root user and then escalates your privileges via either the "su" command or the "sudo" command.

Perform the following steps to deploy agents as a non-root user:

- 1** Enter the unprivileged user name in the Username field to log into the server.
- 2** Enter the unprivileged password in the Password field.
- 3** Select the Become root (UNIX) checkbox. Select "Supply root password" and enter the password or select "Use sudo". If you choose to use sudo, the unprivileged account must be able to run any command as root.

Chapter 9: Contacting Opsware, Inc.

IN THIS CHAPTER

This chapter contains the contact information for Opsware Technical Support and Opsware Training:

- Opsware Technical Support
- Opsware Training

Opsware Technical Support

To contact Opsware Technical Support:

Phone: +1 877 677-9273 (1-877-Opsware)

E-mail: support@opsware.com

For information about Opsware Technical Support:

URL: <https://download.opsware.com>

Opsware Training

To contact Opsware Training:

E-mail: education@opsware.com

Opsware, Inc. offers several training courses for Opsware users and administrators.

For information about Opsware Training:

URL: www.opsware.com/education

