

# Technical Note: Opware SAS 6.1.2 Patch Installation Instructions

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The patch described in this document can be applied to version **6.1.1** of Opware SAS. It cannot be applied to other versions. After the patch is applied, the version of the Opware SAS core becomes **6.1.2**.

## Contents

This document contains the following sections:

- Applying the Patch - You must follow the instructions in this section to apply the 6.1.2 patch to the core.
- Migration to 6.1.2 for RPMs Created by ISMTool - If your core has RPMs created by ISMTool shipped with Opware SAS 6.1.1 or earlier, you must follow the instructions in this section.
- Deploying the New Opware Agents - To take advantage of some of the bug fixes in this patch, you must deploy new Agents on Windows 2003 or HP-UX 11.x managed servers.
- Syntax and Menus of patch\_install.sh - This section contains reference material.

## Applying the Patch

To apply the Opware SAS 6.1.2 patch, perform the instructions in the following sections:

- Running the patch\_opware.sh Script
- Patching BZ147396
- Patching BZ146844

- Uploading the New ISMTool and Opsware Agents

### Running the `patch_opsware.sh` Script

In the steps that follow, you run the `patch_opsware.sh` script on each core server. While you are running the script, the core is stopped and you cannot manage the servers that belong to the core. In a multimaster mesh, you run the script on all core servers in the mesh.

To run the `patch_opsware.sh` script, perform the following steps:

- 1** Obtain the Opsware SAS 6.1.2 installation media. (Typically, the installation media is available on a Product Software DVD and as a downloadable ISO image.)
- 2** On each core server (or a network share), create a directory structure that duplicates the structure of the installation media, for example:

```
mkdir /opsware_system
```

The path of the directory cannot contain spaces.

- 3** Copy the contents of the media to a local disk or network share under the directory you created in the preceding step.

- 4** On each core server, log on as `root` and shut down the core:  

```
/etc/init.d/opsware-sas stop
```

- 5** On each core server, log on as `root` and run the `patch_opsware.sh` script:  

```
cd /  
/opsware_system/opsware_installer/patch_opsware.sh
```

You must specify the full path to the script. The directory path shown in this step indicates that you copied the Opsware SAS media to the directory you created in step 2 on page 2. You do not need to specify a response file for `patch_opsware.sh`.

Do not skip any of the core servers, even if you know that this patch contains no changes for a particular core component.

- 6** When `patch_opsware.sh` displays the following menu, enter `i` at the prompt:

```
Welcome to the Opsware Installer.  
It appears that you do not have any Opsware SAS patches  
installed on this system.  
Press 'i' to proceed with patch installation, 's' to show  
patch contents or 'q' to quit.
```

```
Selection: i
```

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If the patch has already been installed, a different menu appears. For an explanation of the various menus, see “Syntax and Menus of `patch_install.sh`” on page 8.

- 7 After you have run `patch_opsware.sh` on all core servers, start the core. On each core server, log on as `root` and enter the following command:

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

On a multiple-server core, you start the core components in the order listed in the section “Details: Start Order for Opsware SAS Components” of the *Opsware® SAS Administration Guide*.

- 8 In a multimaster mesh, run `patch_opsware.sh` on all core servers in the other cores. You can run `patch_opsware.sh` on the different cores in parallel.
- 9 Follow the instructions in the next section.

### Patching BZ147396

This bug fix enables the multimaster mesh to manage Windows 2003 servers that need SP2 or Windows 2003 SP2 servers that need additional Windows patches.

In the steps that follow, you run the `apply_patch.sh` script on a single core server. In a multimaster mesh, you only need to run the `apply_patch.sh` script once for the entire mesh.

To run the `apply_patch.sh` script, perform the following steps:

- 1 Make sure that you have followed the instructions in “Running the `patch_opsware.sh` Script” on page 2. You must run `patch_opsware.sh` on all core servers in a multimaster mesh before you run `apply_patch.sh`.

- 2 Log on as `root` to the Data Access Engine server.

- 3 Locate the `BZ147396-1.0.0.zip` file on the installation media, for example:  

```
ls /opsware_system/packages/BZ147396-1.0.0.zip
```

The directory path shown in this step indicates that you copied the Opsware SAS media to the directory you created in step 2 on page 2.

- 4 Unzip `BZ147396-1.0.0.zip` into a temporary directory, for example:

```
unzip -d /var/tmp \  
/opsware_system/packages/BZ147396-1.0.0.zip
```

- 5 Run the `apply_patch.sh` script:

```
/var/tmp/BZ147396/apply_patch.sh
```

- 6 Remove the temporary files:

```
rm -rf /var/tmp/BZ147396
```

- 7** Re-import the MBSA patch database with one of the following tools:
  - Opsware SAS Client: See the section “Importing the Microsoft Patch Database” in the online help or the *Opsware® SAS User’s Guide: Application Automation*.
  - `populate-opsware-update-library` command-line script: See the section “Automatically Importing Windows Patches” in the online help or the *Opsware® SAS User’s Guide: Application Automation*.
- 8** Follow the instructions in the next section.

### Patching BZ146844

This bug fix enables the ordering of RPMs created by ISMTool of Opsware SAS 6.1 or earlier.

In the steps that follow, you run the `apply_patch.sh` script on a single core server. In a multimaster mesh, you only need to run the `apply_patch.sh` script once for the entire mesh.

To run the `apply_patch.sh` script, perform the following steps:

- 1** Make sure that you have followed the instructions in “Running the `patch_opsware.sh` Script” on page 2. You must run `patch_opsware.sh` on all core servers in a multimaster mesh before you run `apply_patch.sh`.
- 2** Log on as root to the Data Access Engine server.
- 3** Locate the `BZ146844-1.0.0.zip` file on the installation media, for example:

```
ls /opsware_system/packages/BZ146844-1.0.0.zip
```

The directory path shown in this step indicates that you copied the Opsware SAS media to the directory you created in step 2 on page 2.
- 4** Unzip `BZ146844-1.0.0.zip` into a temporary directory, for example:

```
unzip -d /var/tmp \
/opsware_system/packages/BZ146844-1.0.0.zip
```
- 5** Verify that the `unzip` command displays output such as the following:

```
Archive:  BZ146844.zip
creating: /var/tmp/BZ146844/
inflating: /var/tmp/BZ146844/apply_patch.sh
inflating: /var/tmp/BZ146844/wayscript_uploader.pyc
inflating: /var/tmp/BZ146844/wayscript_uploader
inflating: /var/tmp/BZ146844/BZ146844.patch
```

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- 6** Run the `apply_patch.sh` script:  

```
/var/tmp/BZ146844/apply_patch.sh
```
  - 7** When `apply_patch.sh` prompts for a user name, respond with the Opsware SAS user `admin`. The `apply_patch.sh` script displays the following output:

```
way admin username: admin
way admin password:
Authenticating user...
Uploading doer.py as opsware.swprov.doer
way.library.createCurrentVersion
Uploading action_blob.py as opsware.swprov.action_blob
way.library.createCurrentVersion
Uploading ismupdate.py as opsware.ismupdate
way.library.createCurrentVersion
```
  - 8** Remove the temporary files:  

```
rm -rf /var/tmp/BZ146844
```
  - 9** Follow the instructions in the next section.

## Uploading the New ISMTool and Opsware Agents

The bug fixes in Opsware SAS 6.1.2 require new versions of ISMTool and the Opsware Agents, which you upload into the core with the `patch_content.sh` script. In a multimaster mesh, you only need to run the `patch_content.sh` script once for the entire mesh.

To upload the new ISMTool and Agents, perform the following steps:

- 1** Before proceeding, make sure that you have followed the steps in “Patching BZ146844” on page 4.
- 2** Obtain the Opsware SAS 6.1.2 installation media that corresponds to the Opsware SAS Agent and Utilities DVD. This media is different than the media for the Product Software DVD used in “Running the `patch_opsware.sh` Script” on page 2.
- 3** On the Software Repository server, mount the Opsware SAS Agent and Utilities DVD or NFS-mount the directory that contains a copy of the DVD contents.
- 4** Log onto the Software Repository server as `root` and change to the root directory (`/`).
- 5** Invoke the `patch_content.sh` script, specifying the response file you created when installing the core, for example:

```
/opsware_system/opsware_installer/patch_content.sh
-r /usr/tmp/oiresponse.standalone
```

You must specify the full path to the script. The directory path in the preceding command indicates that you copied the Opware SAS Agent and Utilities DVD to a local disk or network share using the required directory structure.

- 6** Verify that the `patch_content.sh` script displays the following menu:

```
Welcome to the Opware Installer.
```

```
Please select the components to update.
```

```
1 () Software Repository - Content (install once per mesh)
```

```
Enter a component number to toggle ('a' for all, 'n' for none).
```

```
When ready, press 'c' to continue, or 'q' to quit.
```

- 7** Enter 1 to select Software Repository - Content.

- 8** Enter `c` to continue.

- 9** After the script completes, perform the instructions in the next section.

## Migration to 6.1.2 for RPMs Created by ISMTool

This section updates the RPMs in your core that were created by ISMTool shipped with Opware SAS 6.1.1 or earlier. Unless you are certain that you have no such RPMs, follow the instructions in this section. If these RPMs are not migrated, they cannot be installed on managed servers by Opware SAS. For details on the ISMTool bugs, see “What’s Fixed in Opware SAS 6.1.2” in the *Opware SAS 6.1.2 Release Notes*.

### Pre-requisites for RPM Migration

Before migrating the RPMs, you must perform the following tasks:

- Run the Software Migration Tool (`swmgmt-migrate.sh`) as described in the *Opware SAS 6.1.1 Content Migration Guide*.
- Follow the instructions in “Applying the Patch” on page 1 of this document.

### Migrating RPMs Created by ISMTool

The following instructions explain how to migrate the RPMs by running the `ismpolicyrpm-migrate.sh` script. In a mutlimaster mesh, you only need to run the script once for the entire mesh.

To migrate the RPMs, perform the following steps:

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**1** On the core server running the Opsware Command Center (occ) component, log on as root.

**2** Change to the directory containing the `ismpolicyrpm-migrate.sh` script.  
`cd /opt/opsware/twist/migration`

**3** View a list of the RPMs that will be updated by the migration script by entering the following command:

```
./ismpolicyrpm-migrate.sh --preview
```

This command lists the Opsware IDs of the RPMs.

**4** (Optional) To view the properties of an RPM, you can search for it by Opsware ID in the SAS Client:

1. In the Navigation pane, select Library ► By Type ► Packages ► *platform*
2. For the View, select Properties.
3. In the field next to the magnifying glass, enter the Opsware ID.

**5** To migrate the RPMs, enter the following command:

```
./ismpolicyrpm-migrate.sh --update
```

This command 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

## Deploying the New Opsware Agents

This release of Opsware SAS includes bug fixes that affect the Agents. You must deploy the new Agents on managed servers if you need to perform the following operations:

- Manage Windows 2003 servers that need SP2, install SP2 on Windows 2003 servers, or manage Windows 2003 SP2 servers that need additional Windows patches (bug fix 147396).
- From the Opsware SAS Client, open a Remote Terminal session on HP-UX 11.x servers running Agent version 32f (bug fix 147396).

The new Agents must be uploaded into the core before they can be deployed on managed servers. You should have uploaded the new Agents into the core by following the instructions in “Uploading the New ISMTool and Opsware Agents” on page 5 .

To deploy the new Agents onto the managed servers, you can either use the Agent Installer CLI (opsware-agent-<version>.exe) or the Agent Upgrade Tool (opsh\_agent). For instructions on how to use these tools, see “Appendix B: Opsware Agent Utilities” of the *Opsware® SAS User’s Guide: Server Automation*.

Because of bug 142104, you cannot use the Agent Upgrade custom extension to deploy the new Agents on the managed servers.

## Syntax and Menus of patch\_install.sh

This section contains reference information. For step-by-step instructions, see “Running the patch\_opsware.sh Script” on page 2.

The `patch_install.sh` script installs and uninstalls an Opsware SAS patch. The script resides in the `opsware_installer` subdirectory of the product media. Unlike the `install_opsware.sh` script, the `patch_opsware.sh` script does not use a response file.

The `patch_opsware.sh` script has the following syntax:

```
patch_opsware.sh [--verbose]
```

Before a patch is applied, backups are made of the files that are changed by the patch. The backups are stored in the following directory:

```
/var/opt/opsware/OPSWpatch/patch_version
```

The `patch_opsware.sh` script automatically detects whether or not a patch is installed on the server and then displays a corresponding menu. If the server has not been patched at all, `patch_opsware.sh` displays the following menu:

```
It appears that you do not have any Opsware SAS patches
installed on this system.
Press 'i' to proceed with patch installation, 's' to show
patch contents or 'q' to quit.
```

If the patch was installed successfully, the next time `patch_opsware.sh` is invoked from the same product media, it displays the following menu:

```
It appears that you have previously completed installation of
this patch on this system.
```



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Press 'r' to remove this patch, press 's' to show patch contents, or 'q' to quit.

If the previous patch installation was incomplete, the menu will reflect this as well:

It appears that you have an incomplete installation of this patch on this system.

Press 'i' to continue patch installation, 'u' to upgrade the patch to itself.

Press 'r' to remove this patch, 's' to show patch contents, or 'q' to quit.

If you have a previous version of the patch installed (successfully or not), the menu will look like this:

It appears that you have installed or attempted to install a previous version

of the patch on this system.

Press 'u' to upgrade the patch to the current version, 'r' to remove currently installed patch.

Press 's' to show new patch contents, or 'q' to quit.