

# SAS Marketing Optimization

## Solaris 64 bit Installation Instructions for Hot Fix 51mo14

### Introduction

This document describes the steps necessary to install and deploy the SAS Marketing Optimization 5.1 Hot fix Release 51mo14 for the Solaris 64 bit environment. Please take a moment to read through this entire document before beginning the install for this hot fix. There are four steps to this hot fix that must be completed:

1. **Create the appropriate backups**
2. **Extract the two components from the hot fix package**
3. **Install the individual components that apply to your system**
4. **Install the client portion of the Windows hot fix**

The hot fix 51mo13 addresses the issue(s) in Release 5.1 of SAS Marketing Optimization software on Windows as documented in the "Issue(s) Addressed" section of the hot fix download page:

<http://ftp.sas.com/techsup/download/hotfix/mo51.html#51mo14>

### IMPORTANT NOTES:

1. You must have SAS Marketing Optimization 5.1 installed on your system before applying this hot fix.
2. You must have Administrator Privileges on your CLIENT or SERVER machine.
3. All currently active SAS sessions, daemons, spawners and servers must be terminated before applying this hot fix. Once the hot fix has been installed, the appropriate servers should be restarted.
4. The instructions below assume that SAS 9.1.3 (9.1 TS1M3) is installed in /usr/lib/sas913. If you have installed SAS 9.1.3 in a different location, you will need to modify the paths below.
5. This download is intended for customers running a Solaris 64 bit server and mid-tier. To install the Windows client updates, you must download the Windows version of this hot fix and install the appropriate client pieces on your Windows system.

### Installation Details

#### 1. Create the appropriate backups

Technical Support strongly suggests that you back up the files being replaced by this hot fix. You should always try to include the current date in the name of the backup file created to distinguish between versions of backup files. By doing this you will maintain a history of the file, which will be helpful when multiple iterations of a hot fix have been applied to the same file.

\*\*\* IMPORTANT NOTE: For the jar files, these backups must be created in a directory other than the directory that the original file resides in.

For example, copy the file

```
c:\foo\sas.foo.jar  
to
```

c:\foo\_backup\sas.foo.jar.07012006  
where 07012006 is the date when the hot fix is applied.

The <date> extension MUST be appended AFTER the .jar extension as it appears above.

The files that should be backed up for the SAS **server** component (51mktopt14s6.tar) are:

```
<!SASROOT>/ucmacros/mktopt/mo_copy_project.sas
<!SASROOT>/ucmacros/mktopt/mo_copy_scenario.sas
<!SASROOT>/ucmacros/mktopt/mo_create_scenario.sas
<!SASROOT>/ucmacros/mktopt/mo_create_input_data.sas
<!SASROOT>/ucmacros/mktopt/mo_create_scenario.sas
<!SASROOT>/ucmacros/mktopt/mo_create_tables.sas
<!SASROOT>/ucmacros/mktopt/mo_delete_scenario_element.sas
<!SASROOT>/ucmacros/mktopt/mo_edit_optimization_pid.sas
<!SASROOT>/ucmacros/mktopt/mo_import_solution.sas
<!SASROOT>/ucmacros/mktopt/mo_ma_agent_and_time.sas
<!SASROOT>/ucmacros/mktopt/mo_prepopulate_metadata_tables.sas
<!SASROOT>/ucmacros/mktopt/mo_promote_solution.sas
<!SASROOT>/ucmacros/mktopt/mo_refresh_update_scen_tables.sas
<!SASROOT>/ucmacros/mktopt/mo_rpt_compare_constraint_table.sas
<!SASROOT>/ucmacros/mktopt/mo_rpt_compare_offer_graph.sas
<!SASROOT>/ucmacros/mktopt/mo_rpt_compare_offer_table.sas
<!SASROOT>/ucmacros/mktopt/mo_rpt_constraint_summary_table.sas
<!SASROOT>/ucmacros/mktopt/mo_set_job_flow_scen.sas
<!SASROOT>/ucmacros/mktopt/mo_validate_imported_solution.sas
<!SASROOT>/ucmacros/mktopt/mo_validate_input_data.sas
<!SASROOT>/cmacros/mktopt/sasmacr.sas7bcac
```

The files that should be backed up for the **mid-tier** component of this hot fix (51mktoptmid14s6.tar) are:

```
SASMarketingOptimizationServer/5.1/applicationContext.xml
SASMarketingOptimizationServer/5.1/war/WEB-INF/applicationContext.xml
SASMarketingOptimizationServer/5.1/war/WEB-INF/lib/sas.analytics.mo.server.jar
SASMarketingOptimizationServer/5.1/bean/sas.analytics.crm.ma.core-client.jar
SASMarketingOptimizationServer/5.1/ibm/sas.analytics.crm.ma.core-client.jar
SASMarketingOptimizationServer/5.1/war/WEB-INF/lib/sas.analytics.crm.ma.core-client-ibm.jar
SASMarketingOptimizationServer/5.1/war/WEB-INF/lib/sas.analytics.crm.ma.core-client.jar
```

## 2. Extract the two components from the hot fix package

The hot fix package downloaded is a compressed tar file named 51mo14s6.tar. Download this file to the user's root directory. Uncompress the tar file with this command:

```
$> cd ~
$> tar -xf 51mo14s6.tar
```

This will extract two components to the user's 51mo14 subdirectory:

```
51mktopt14s6.tar - contains updates to the MO server
51mktoptmid14s6.tar - contains updates to the MO mid-tier
```

Please note:

This download is intended for customers running a Solaris 64 bit server and mid-tier. To install the Windows client updates, you must download the Windows version of this hot fix and install the appropriate client pieces on your Windows system.

### 3. Install the individual components that apply to your system.

#### 3.1 Installing 51mktopt14s6.tar

##### 3.1.1 Extract the contents from the archive file.

Execute this command to extract the contents of the mktopt14 package:

```
$> cd ~/51mo14
$> tar -xf 51mktopt14s6.tar
```

This will extract the following files into the user's 51mo14/mktopt directory:

```
mktopts6.tar.Z
mo_migration_hf.sas
```

##### 3.1.2 Install the package

```
$> cd /usr/lib/sas913
$> uncompress -c ~/51mo14/mktopt/mktopts6.tar | tar -xf -
$> install/admin/hotfix/hist_upd
```

The following files will be installed:

```
<!SASROOT>/ucmacros/mktopt/mo_copy_project.sas
<!SASROOT>/ucmacros/mktopt/mo_copy_scenario.sas
<!SASROOT>/ucmacros/mktopt/mo_create_input_data.sas
<!SASROOT>/ucmacros/mktopt/mo_create_scenario.sas
<!SASROOT>/ucmacros/mktopt/mo_create_tables.sas
<!SASROOT>/ucmacros/mktopt/mo_delete_scenario_element.sas
<!SASROOT>/ucmacros/mktopt/mo_edit_optimization_pid.sas
<!SASROOT>/ucmacros/mktopt/mo_import_solution.sas
<!SASROOT>/ucmacros/mktopt/mo_ma_agent_and_time.sas
<!SASROOT>/ucmacros/mktopt/mo_prepopulate_metadata_tables.sas
<!SASROOT>/ucmacros/mktopt/mo_promote_solution.sas
<!SASROOT>/ucmacros/mktopt/mo_refresh_update_scen_tables.sas
<!SASROOT>/ucmacros/mktopt/mo_rpt_compare_constraint_table.sas
<!SASROOT>/ucmacros/mktopt/mo_rpt_compare_offer_graph.sas
<!SASROOT>/ucmacros/mktopt/mo_rpt_compare_offer_table.sas
<!SASROOT>/ucmacros/mktopt/mo_rpt_constraint_summary_table.sas
<!SASROOT>/ucmacros/mktopt/mo_set_job_flow_scen.sas
<!SASROOT>/ucmacros/mktopt/mo_validate_imported_solution.sas
<!SASROOT>/ucmacros/mktopt/mo_validate_input_data.sas
<!SASROOT>/cmacros/mktopt/sasmacr.sas7bcac
<!SASROOT>/hotfix/sasexe/mo.51mo14
```

##### 3.1.3 Run mo\_migration\_hf.sas

- Restart the appropriate SAS servers and spawners.
- BACK UP the existing SCENARIOS table in the datastore. The datastore is located in the Lev1/SASMain/Data/MarketingOptimization/datastore directory. For example, if your Marketing Optimization 5.1 installation was done in /install/SAS/MO51Config, then the datastore is located

in /install/SAS/MO51Config/Lev1/SASMain/Data/MarketingOptimization/datastore. If the datastore does not contain a SCENARIOS table, you do not need to run this migration program and you can skip to step 3.2.

- c. Start an interactive SAS session with the MO 5.1 autoexec and submit the program mo\_migration\_hf.sas from the Program Editor. The MO 5.1 autoexec is located in the Lev1/SASMain directory. For example, if your Marketing Optimization 5.1 installation was done in /install/SAS/MO51Config, then the MO 5.1 autoexec is located in /install/SAS/MO51Config/Lev1/SASMain/MarketingOptimization\_autoexec.sas. The mo\_migration\_hf.sas file was installed by the hot fix in 51mo14/mktopt.
- d. Verify the program runs successfully with no errors or warnings in the log.

## **3.2 Installing 51mktoptmid14s6.tar**

### **3.2.1 Extract the contents from the archive file.**

Execute this command to extract the contents of the mktoptmid14 package:

```
$> cd ~/51mo14
$> tar -xf 51mktoptmid14s6.tar
```

This will extract the following files into the user's 51mo14/s64 directory:

```
media.inf
setup.jar
Setup_Solaris_Sparc
```

### **3.2.2 Execute the installer**

Change the permission of Setup\_Solaris\_Sparc:

```
$> cd s64
$> chmod +x Setup_Solaris_Sparc
```

Execute the file Setup\_Solaris\_Sparc.

Launching the installer will install the following files:

```
SASMarketingOptimizationServer/5.1/applicationContext.xml
SASMarketingOptimizationServer/1/war/WEB-INF/applicationContext.xml
SASMarketingOptimizationServer/5.1/war/WEB-INF/lib/sas.analytics.mo.server.jar
SASMarketingOptimizationServer/5.1/bean/sas.analytics.crm.ma.core-client.jar
SASMarketingOptimizationServer/5.1/ibm/sas.analytics.crm.ma.core-client.jar
SASMarketingOptimizationServer/5.1/war/WEB-INF/lib/sas.analytics.crm.ma.core-client-ibm.jar
SASMarketingOptimizationServer/5.1/war/WEB-INF/lib/sas.analytics.crm.ma.core-client.jar
SASMarketingOptimizationServer/5.1/Config/mktoptmid_hf.xml
SASMarketingOptimizationServer/5.1/Config/MOTtransform.xsl
```

### **3.2.3 Run the Post-configuration Ant script**

The 51mo14 hot fix has installed a post-configuration script, mktoptmid\_hf.xml, which will repackage sas.analytics.mo.server.war with updated code. You will find mktoptmid\_hf.xml in the SAS installation directory SASMarketingOptimizationServer/5.1/Config.

a) Navigate to the bin subdirectory where ant is installed:

Example: `cd /usr/local/ant/apache-ant-1.7.0/bin`

Set JAVA\_HOME for session if needed for your specific installation. In order for the post-configuration script to repackage the war file with updated code, JAVA\_HOME must point to a JDK.

Example: `export JAVA_HOME=/usr/java14`

b) Run the Post-configuration Ant script

```
ant -f mktoptmid_hf.xml
-Dconfig.dir=<CONFIGDIR>
-Dtemp.dir=<TEMPDIR>
-Dinstall.loc=<INSTALL_DIR>
-DMO_EmailServerName=<EMAIL_SERVER>
```

where:

<CONFIGDIR> is the path to the Configuration Directory (eg. /saswork/MOplan) where the new sas.analytics.crm.mo.server.war file will be copied when the hot fix is applied by executing the ant scripts.

<TEMPDIR> is a path to an empty temporary directory for temp files. Make sure this location is empty so that the script can execute without errors when it performs the clean up.

<INSTALL\_DIR> is the location of the product install (eg. /saswork/SAS/SASMarketingOptimizationServer/5.1)

<EMAIL\_SERVER> is the name of your email server (eg. My.email.server.com)

Helpful hint: create a .bat file with the command above in case you need to make corrections.

Example:

```
ant -f "/saswork/SAS/SASMarketingOptimizationServer/5.1/Config/mktoptmid_hf.xml"
-Dconfig.dir="/saswork/MOplan" -Dtemp.dir="/saswork/hotfix_tmp"
-Dinstall.loc="/saswork/SAS/SASMarketingOptimizationServer/5.1"
-DMO_EmailServerName="my.email.server.com"
```

Final messages from the execution of the script should be similar to:

BUILD SUCCESSFUL

Total time: 11 seconds

Note: A complete log from the ant script can be found in the SAS installation directory SASMarketingOptimizationServer/5.1/mktoptmid\_hf.log.

### 3.2.4 Deploy the mid-tier

#### Deployment Instructions for BEA WebLogic:

After logging into the Weblogic console, navigate to Deployments -> Web Application Modules -> sas.analytics.crm.mo.server in the left panel. (Note that your application name may vary.) Select the Configuration tab to verify your deployment path is the <configuration install root>/Lev1/web/webapps/exploded directory where the updated war now resides.

Select the 'ReDeploy' tab under the "Actions" column

## **Deployment Instructions for IBM WebSphere**

Re-deploy SAS Customer Intelligence war components using the Websphere Admin console.

- Navigate to Applications->Enterprise Applications
- Select the Stop button to stop sas\_analytics\_mo\_server\_war
- Select the update button to update sas\_analytics\_mo\_server\_war
- On the next screen, fill in the path to the sas\_analytics\_mo.server\_war file. This is by default in the <configuration install root>/Lev1/web/webapps directory
- Type sas.analytics.mo.server as the Context Root
- Choose Next
- Choose Next
- Choose Continue on the Application Security Warnings panel
- Step1: choose Next
- Step2: choose Next
- Step3: check the box for Web Module sas.analytics.mo.server.war, then choose Next
- Summary: choose Finish
- Save

### **4. Install the client portion of the Windows hot fix**

To install the Windows client updates, you must download the Windows version of this hot fix and install the client piece on your Windows system(s).

**This completes the installation of the hot fix 51mo14 on Solaris 64 bit.**