SAS Marketing Automation 4.3

Unix Install Instructions for Hot Fix 43MA04

Introduction

This document describes the steps necessary to install and deploy the SAS Marketing Automation 4.3 Hot fix Release 43MA04 for a Unix environment. ***Please take a moment to read through this entire document before attempting to install the hot fix.*** There are four steps to this hot-fix that must all be completed:

1) Installation of the updates to the SAS Marketing Automation Components
2) Post-configuration and deployment of the SAS Marketing Automation Application Server
3) Deployment of the SAS Marketing Automation Web Components update (optional)
4) SAS macro update

Fix Details

This hot fix package is cumulative. All issues addressed are shown below. Note the "introduced" column shows if the issue is a new fix, or one that was addressed in a previous hot fix package.

Issue(s) Addressed :		Introduced:
SN-016401	SQL generated twice when communication has a dynamic cell upstream	43MA01
SN-016375	Invalid format error when character format specified for list type user defined fields	43MA01
SN-016400	Error when split node with dynamic output cells connects to communication node	43MA01
SN-016557	Map node in Campaign Studio gives wrong counts	43MA01
SN-016456	Certain combinations of AND and OR nodes can cause exceptions	43MA01
SN-016345	Campaign export fails when only user defined fields exist in definition	43MA01
SN-016138	Importing diagram with split on data item fails with NullPointerException	43MA01
SN-016452	Cannot import calculated data items with Marketing Automation integration utilities	43MA01
SN-016301	Cell folder not visible for Marketing Automation export definitions in SAS Management Console	43MA01
SN-016737	Login failure with LDAP security	43MA02
SN-016633	Internal error when updating contact history from campaign menu	43MA02
SN-016561	Dates with missing values represented as 01JAN1960 in histogram	43MA02

SN-017029	Refine output window persists extraneous metadata to repository	43MA02
SN-017028	Marketing Automation node definition changes leave orphaned metadata	43MA02
SN-017041	Async failures using OR nodes under certain RULE combinations	43MA02
SN-017048	Custom status values not saved correctly in Marketing Automation	43MA02
SN-016100	Exception when saving diagram with null value selection	43MA02
SN-016371	Metadata date values skewed in histogram distribution	43MA0
SN-016817	Exporting zero rows from communication will not replace existing export file	43MA02
SN-017044	Performance impact using Oracle date filters in Campaign Studio diagram	43MA02
SN-017026	Communication fails if no export definition defined	43MA02
SN-018457	Error message 'Scheduling of 'CAMPxxx_COMMxxx' failed' received within SAS Management Console Schedule Manager plug-in	43MA03
SN-018499	Escape characters visible in the scheduler flow description for SAS Marketing Automation jobs	43MA03
SN-018500	Incorrect export results when using measure fields	43MA03

1. Obtaining the Hot Fix Bundle

There are check boxes included at each step to assist you with verification of the completion of each step as you work through these instructions.

1.1 Download Hot Fix Bundle

You should perform these installation steps for *each machine* where the following Marketing Automation components have been installed.

- SAS Marketing Automation Application Server
- SAS Marketing Automation Web Components
- SAS Marketing Automation Plug Ins for SAS Management Console
- SAS Marketing Automation Launcher
- SAS Marketing Automation Integration Utilities
- SAS Macros for Marketing Automation
- SAS Campaign Studio (use windows installer)

Save the hot fix bundle (archive file) from the SAS Technical Support Hot Fix web site (http://ftp.sas.com/techsup/download/hotfix/ma43.html), to a directory for installation using the SAS user account that originally installed SAS Marketing Automation. This is typically the SAS account. The name of the downloaded archive file will vary depending on the unix platform. The downloaded file will be one of the following:

- 43MA04r6.tar for AIX
- 43MA04s6.tar for Solaris
- 43MA04hx.tar for HP Itanium

1.2 Unarchive the downloaded tar file

Unarchive the tar file using the following command:

    tar -xvf 43MA04xxx.tar

where xxx is the appropriate suffix for your unix platform. Since most of the updates will be on your mid-tier machine, you should begin on that server. Apply to other machines as appropriate for your components.

This will extract the following files into a new 43MA04_xxx directory. For example, the AIX tar file 43MA04r6.tar will extract into 43MA04_r64. Sample output from the above tar command is shown below. The sizes of the files will vary based on the unix platform. The sample below shows messages from AIX tar file extract.

    x 43MA04_r64/emaauxdataio_r64.tar, 35051520 bytes, 68460 media blocks.
    x 43MA04_r64/emacore_r64.tar, 37765120 bytes, 73760 media blocks.
    x 43MA04_r64/emalauncher_r64.tar, 34887680 bytes, 68140 media blocks.
    x 43MA04_r64/emasmc_r64.tar, 36976640 bytes, 72220 media blocks.
    x 43MA04_r64/emawebnport_r64.tar, 34897920 bytes, 68160 media blocks.

    (There will also be a maexp.sas file included in this tar.)

You can see from the tar files the following Marketing Automation Components will be updated by this hot fix:
- Marketing Automation Integration Utilities (eamauxdataio)
- Marketing Automation Application Server (emacore)
- Marketing Automation Launcher (emalauncher)
- Marketing Automation Plugins to SAS Management Console (emasmc)
- Marketing Automation Web Application (emawebnport)
- maexp SAS macro

For each component on installed on your server, you'll need to unarchive the tar file and run the setup script. The files within the component archives are named similarly, so you'll need to unarchive and execute the setup scripts one by one.

Sample AIX process shown below:

Step 1: Unarchive the component tar file

    tar -xvf emaauxdataio_r64.tar

This creates 3 new files in r64 subdirectory:

    -rwxr-xr-x 1 sas   staff   27812045 Mar 14 15:20 Setup_AIX_Power

    -rw-r--r-- 1 sas   staff   13 Mar 14 15:20 media.inf

    -rw-r--r-- 1 sas   staff   7229893 Mar 14 15:20 setup.jar

Step 2: Run Setup script to lay down component files.

    cd r64
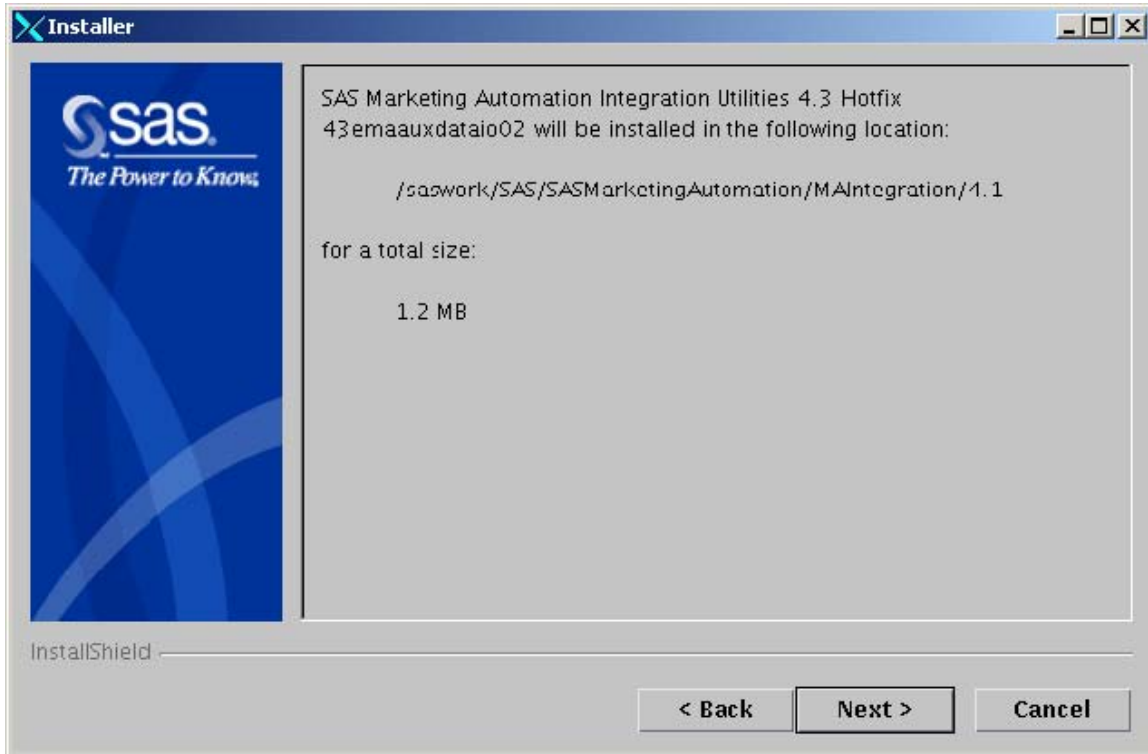
    chmod +x Setup*

    Setup_AIX_Power

Note that you must turn on the execute bit for the setup script the first time you perform the unarchive.

This setup command runs an InstallShield wizard to lay down the SAS components. A series of three screens will appear by the Installer that you must click through.
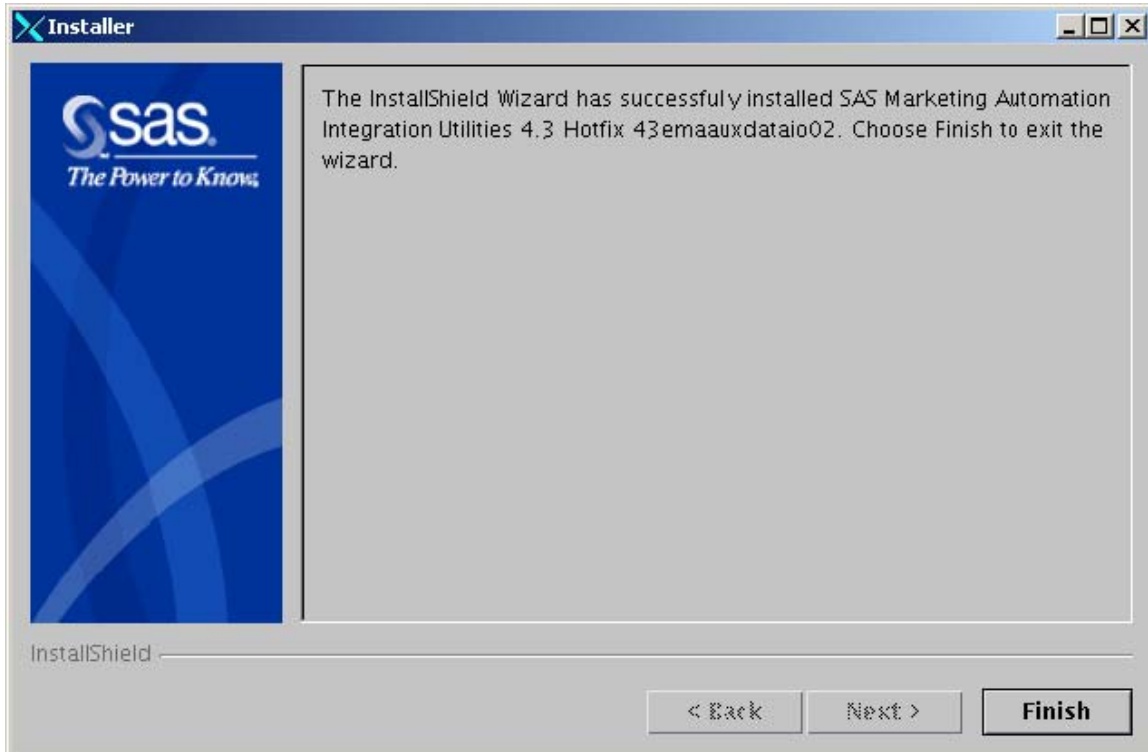

Screen 1: Welcome

Click Next

Screen 2: Verify install location

Click Next

Screen3: Choose Finish

Choose **Finish** to complete the Setup process.

Step 3: Repeat steps 1 and 2 (above) for each component until all 5 setup files have been run.

Step 4: Once InstallShield Components have been run, you can verify the updated files as follows:

SASMarketingAutomation/MAIntegration/4.1/sas.analytics.crm.ma.core-client.jar (11/08/06)
SASMarketingAutomation/MAIntegration/4.1/sas.analytics.crm.auxdataio.jar (2/21/06)

SASMarketingAutomationCore/4.1/emacore_hf.xml (9/8/06)
SASMarketingAutomationCore/4.1/sas.analytics.crm.ma.core-remote.jar (2/21/06)
SASMarketingAutomationCore/4.1/ear/sas.analytics.crm.ma.core.jar (11/8/06)
SASMarketingAutomationCore/4.1/ear/sas.iquery.metadata.jar (10/31/06)
SASMarketingAutomationCore/4.1/emawebnport_hf.xml.xml (1/5/06)

SASManagementConsole/9.1/plugins/sas.analytics.crm.ma.core-client.jar (2/21/06)
SASManagementConsole/9.1/plugins/sas.analytics.crm.ma.smc.jar (2/21/06)
SASManagementConsole/9.1/plugins/sas.analytics.crm.ma.app.jar (2/21/06)

SASMarketingAutomation/Launcher/4.1/sas.analytics.crm.ma.core-client.jar (2/21/06)
SASMarketingAutomation/Launcher/4.1/sas.analytics.crm.ma.launcher.jar (11/8/06)

SASMarketingAutomationWeb/4.1/war/WEB-INF/lib/sas.analytics.crm.ma.core-client.jar (2/21/06)

Step 5:

NOTE: As detailed above, component installation will deliver a new sas.iquery.metadata.jar file.
This new file needs to be manually copied
from
    <Install Directory>/SASMarketingAutomationCore/4.1/ear/
to
    <configuration dir>/Lev1/Web/Deployments/RemoteServices/WEB-INF/lib

1.2 Hot Fix Installation Complete

     Ran setup scripts for each Marketing Automation component on each machine
     where MA components are installed

2. Post-configuration and Deployment of the SAS Marketing Automation Application Server

2.1 Download Ant to Run the Post Configuration Script

Apache Ant is needed to run the post-configuration script for the SAS Marketing Automation Application
Server that is included in this hot fix. Download and install Ant 1.6 from http://ant.apache.org/.   See the
Apache Ant Documentation for any install details.

Be sure JAVA_HOME is set correctly with the location of your java installation. Failure to do so will result
in errors when running the ant command.

        Downloaded ANT and verified the version

2.2: Run the Post-configuration Ant script

The 43MA04 hot fix has installed a post-configuration script, emacore_hf.xml, that will repackage sas.analytics.crm.ma.core.ear with the updated code and the deployment descriptor (ejb-jar.xml) that has already been configured for your environment. You will find emacore_hf.xml in the sas installation directory: SASMarketingAutomationCore/4.1/emacore_hf.xml.

Navigate to the bin subdirectory where ant is installed:
   Example: cd /usr/local/ant/apache-ant-1.6.5/bin

Set JAVA_HOME for session if needed for you specific installation:
   Example: export JAVA_HOME=/usr/java14

Run this command to execute the emacore_hf.xml script (all on one line)

ant -f emacore_hf.xml
   -Dconfig.dir=<CONFIGDIR>
   -Dtemp.dir=<TEMPDIR>
   -Dinstall.loc=<INSTALL_ DIR>

where

<CONFIGDIR> is the path to the Configuration Directory (eg. /saswork/MAplan) where the new sas.analytics.crm.ma.core.ear files are 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/SASMarketingAutomationCore/4.1)

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

Example:
ant -f "/saswork/SAS/SASMarketingAutomationCore/4.1/emacore_hf.xml"
-Dconfig.dir="/saswork/MAplan" -Dtemp.dir="/saswork/hotfix_tmp"
-Dinstall.loc="/saswork/SAS/SASMarketingAutomationCore/4.1"

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

   explode:

   BUILD SUCCESSFUL

   Total time: 11 seconds

Note: A complete log from the ant script can be found in the SAS installation directory SASMarketingAutomationCore/4.1/emacore_hf.log.

   Successfully executed emacore_hf.xml script

2.3: Verify core-remote jar and restart RemoteServices

The ant script will copy an updated sas.analytics.crm.ma.core-remote.jar into the configuration directory at Lev1/web/Deployments/RemoteServices/WEB-INF/lib. The new file will have the current date, and a size of 428 KB. If the file was not updated by the ant script, you can copy the jar from the SAS installation directory: SASMarketingAutomationCore/4.1. The file in that directory should be dated 2/21/06.

Verify jar updated

Once you verify the jar has been updated, restart your StartRemoteServices.sh script to restart the SAS Application Services.

Restart RemoteServices

2.4: Deployment of the MA core Jar file

If you are deploying to **BEA WebLogic**, please now follow the instructions under section 2.4.1: Deployment Instructions for BEA WebLogic.

If you are deploying to **IBM WebSphere**, please now follow the instructions under section 2.4.2: Deployment Instructions for IBM WebSphere.
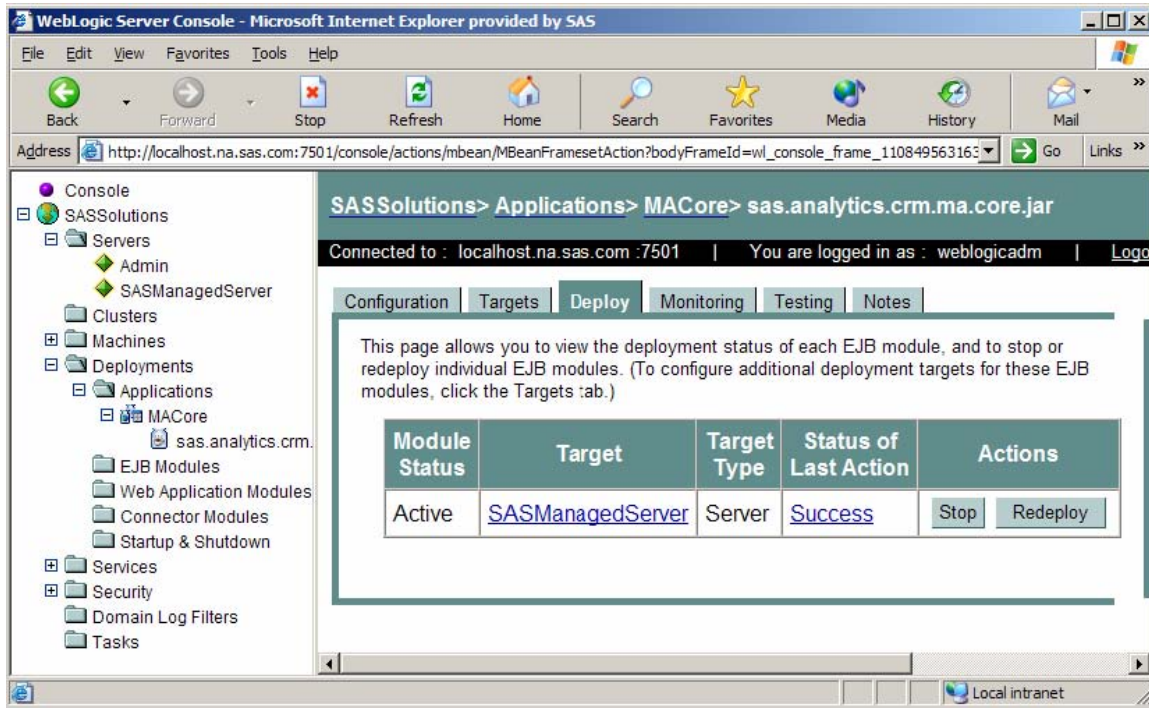
2.4.1: Deployment Instructions for BEA WebLogic.

After logging into the Weblogic console, Navigate to Deployments==> Applications==> MAAppServer ==> sas.analytics.crm.ma.core.jar in the left panel. (Note that your application name may vary. The example below used the name MACore.) Click the Configuration tab to verify your deployment path is the Lev1\web\webapps\exploded directory where the updated jar now resides.   (If you used some other path, you'll need to extract and copy the updated jar.)

Click the 'Deploy' tab at the top of the right window.

Click the 'ReDeploy' button under the Actions column.

This will cause the jar file to be redeployed within the Weblogic server.

Notes:

> *It is the **JAR** file that is being deployed not the **EAR** file. Once you run the hotfix setup program and extract the jar file, you're done with the ear.*
> *To verify the path to the deployed jar file, click on the Configuration tab.*

Redeployed the SAS Marketing Automation Application Server in Weblogic

This completes the application server deployment of the hot fix to Weblogic. Please now skip to section 3: Deployment of the SAS Marketing Automation Web Components.**2.4.2: Deployment Instructions for IBM WebSphere.**
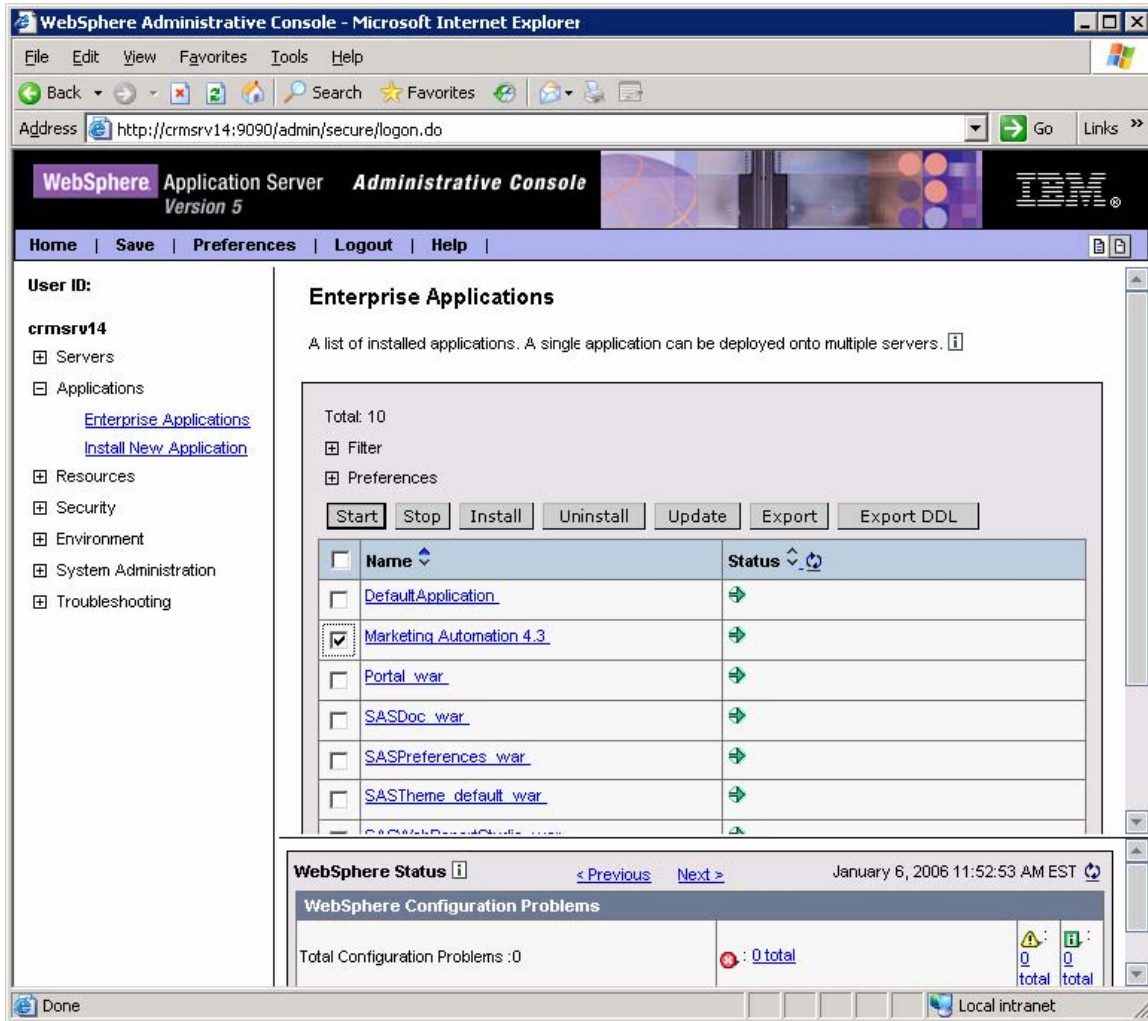
Deploying the Marketing Automation Application Server will involve uninstalling the current Marketing Automation Application, and reinstalling the ear file.

Before uninstalling the current Marketing Automation Application, make a back up copy of the current WAS.policy file. You can find the file in this directory.

```
<was_home>/config/cells/<machine name>/applications/Marketing Automation
4.3.ear/deployments/Marketing Automation 4.3/META-INF
```

Where **<was_home>** is the 'home' folder location for WebSphere:
For example: **/saswork/IBM/WebSphere/AppServer**

Stop the **Marketing Automation 4.3** application from your Websphere console:

Uninstall the **Marketing Automation 4.3** application from your Websphere console

Save the configuration

> Stopped, uninstalled and saved changes to **Marketing Automation 4.3**

Restart the Websphere Application Server to continue.

> Restarted the WebSphere Application Server.

Next, the newly configured **Marketing Automation 4.3 application** needs to be reinstalled.
.
The deployed location of the configured ear file is typically on the mid-tier machine that hosts the Marketing Automation Software. This machine should contain a folder or path named:

<config-dir>`/Lev1/web/webapps`

Where **<config-dir>** is a folder name that represents the configuration directory used to originally configure the mid-tier environment through the SAS Software Navigator.

Note: There is a known problem when installing new applications using server paths (instead of local) for the source location ear or war file under Websphere 5.1.1.2. Refer to SAS Note SN-016983 for details.

Install Application to Web Server

Install SAS Marketing Automation Application Server using the Websphere admin console

      a) *Applications->Install New Application*
- Select "Local path" radio button
- Select Browse button and navigate to the MA ear file **(<config-dir>/Lev1/ web/webapps/sas.analytics.crm.ma.core.ear**)
- Next
- Select last step (Summary)
- Finish
- Save

      b) *Applications->Enterprise Applications*
- Select <u>Marketing Automation 4.3</u> link
- Classloader Mode: PARENT_LAST
- Apply/Save

      c) Locate your saved copy of the WAS.policy file, and copy it back to its original location at **<was_home>/config/cells/<machine name>/applications/Marketing Automation 4.3.ear/deployments/Marketing Automation 4.3/META-INF.**

      d) *Applications->Enterprise Applications*
- Select <u>Marketing Automation 4.3</u> check box
- Select Start button

   Copied saved was.policy file back to META-INF directory and restarted Marketing Automation 4.3.

3: SAS Macro Update for SAS Tier

There is one program which must be updated in your SAS installation directory of the SAS application tier: **maexp.sas**

You must manually copy this file from the download directory into the appropriate directory where your SAS server machine is located. This file will replace an existing file on your installation.

The Unix path where this file is: !sasroot/sasautos

     Copied maexp.sas from download directory into SAS installation directory

4. Deployment of the SAS Marketing Automation Web Components Update

This section is optional for Marketing Automation customers. If Campaign Web Studio is not installed, you can skip this section. Campaign Management customers (which are not Marketing Automation packages) do not have this component and therefore, must skip this step.

The 43MA04 hot fix has updated **sas.analytics.crm.ma.core-client.jar** on your system. Locate the updated **sas.analytics.crm.ma.core-client.jar** file in the install directory:

SAS/SASMarketingAutomationWeb/4.1/war/WEB-INF/lib/

Updated jar to copy is:
sas.analytics.crm.ma.core-client.jar

Weblogic Configurations Copy To:
<config_dir>/Lev1/web/webapps/exploded/sas.analytics.crm.ma.webapp.war/
WEB-INF/lib

> Where **<config_dir>** is a folder name that represents the configured folder created when Campaign Web Studio was set-up through the SAS Software Navigator.

WebSphere Configurations Copy To:
<was_home>/installedApps/<machine_name>/sas_analytics_crm_ma_webapp_war.ear/sa
s.analytics.crm.ma.webapp.war/WEB-INF/lib

> Where **<was_home>** is the 'home' folder location for WebSphere (e.g.
> **/usr/IBM/WebSphere/AppServer)**

Copied .jar file to deployment directory.

The Marketing Automation Web Components web module needs to be restarted in its respective application server (Weblogic or Websphere) for the changes to take effect.

Stopped and restarted (redeployed) the MA web module.

Installation, configuration and deployment of 43MA04 Hot Fix is now complete.

If you have any questions or concerns regarding the installation of this hot fix, please do not hesitate to contact SAS Technical Support:

Phone: (919) 677-8008
Email: support@sas.com
Web: http://support.sas.com/techsup/contact/submit_emits2.html