SAS Marketing Automation 4.3

Windows 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 Windows 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 to 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	43MA02
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	43MA02
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: Installation

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 Campaign Studio
- SAS Marketing Automation Plug Ins for SAS Management Console
- SAS Marketing Automation Launcher
- SAS Marketing Automation Integration Utilities
- SAS Macros for Marketing Automation

Since most of the updates will be on your mid-tier machine, you should begin on that server. Apply to your client machines as appropriate for your components.

Once the hot fix bundle (43ma04wn.exe) has been downloaded from the SAS Technical Support Hot Fix web site (http://ftp.sas.com/techsup/download/hotfix/ma43.html), it should be copied to a windows location using a user logon that has file access (read/write permissions) to the environment where the

SAS Marketing Automation component is currently installed. For example, create a hot fix install folder called '43ma04' on the C: drive of the windows mid-tier box and copy the bundle to that location.

To run the hot fix bundle locate the file called '**43ma04wn.exe**' and double click that file or run from the start menu.

The hot fix bundle is self-extracting and will copy the necessary installer files to the hot fix folder C:\43ma04. The screen below shows the structure for the hot fix bundle after the files are extracted by the first extract process. The exe files are deleted by the installer as the process runs.
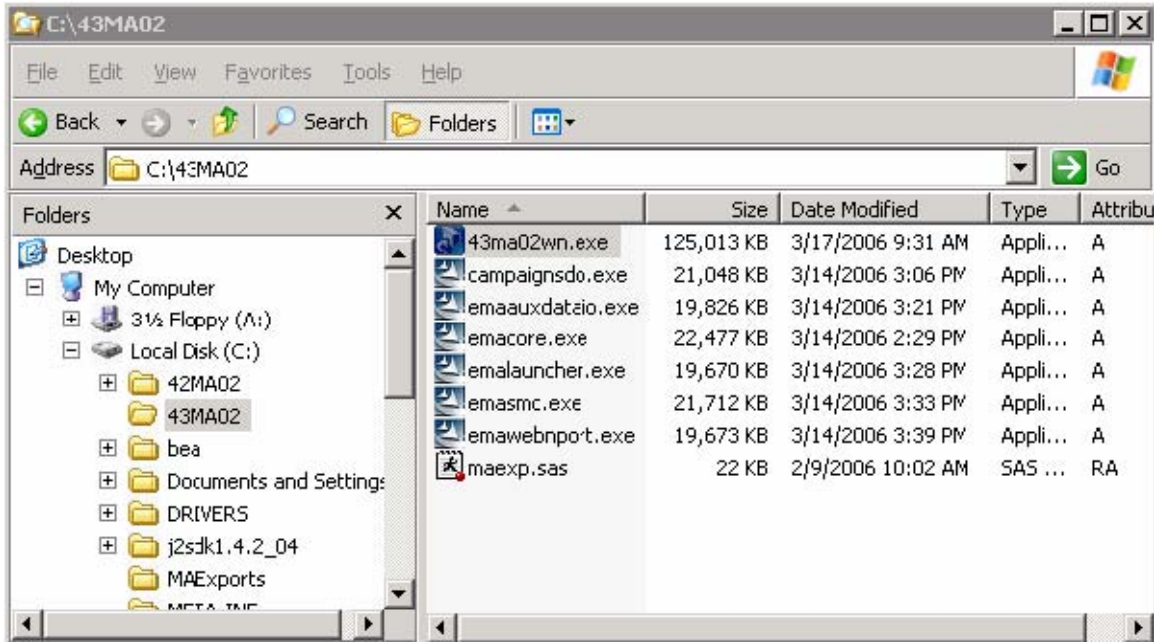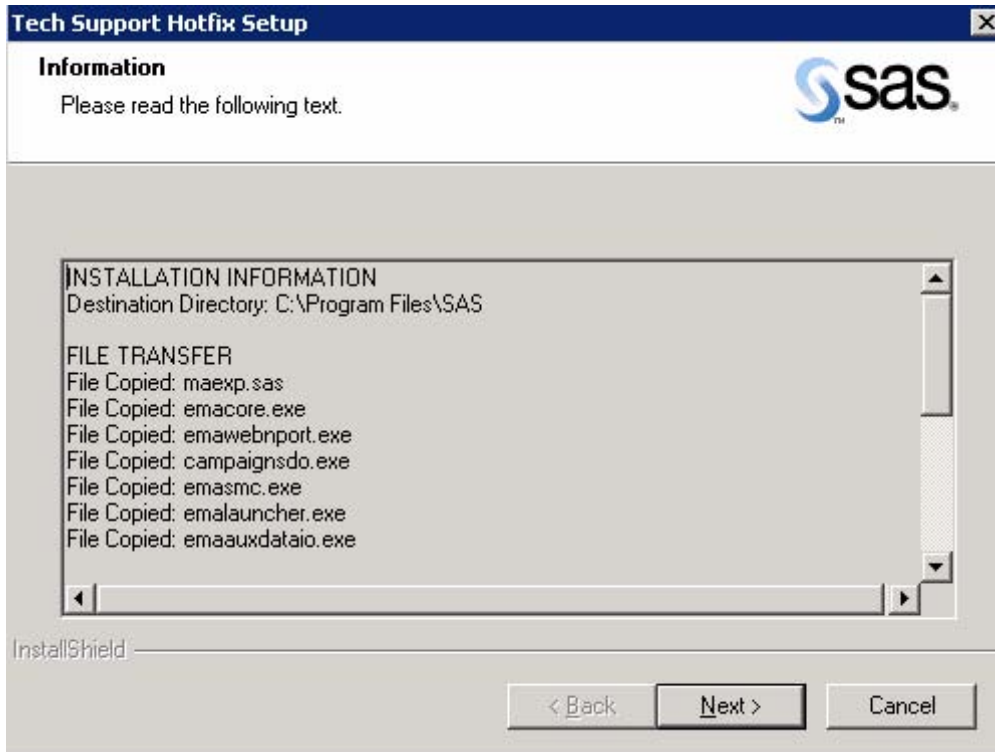

The InstallShield Wizard will start the install process. There will be a series of six different file extract windows that pop up. Each extract is interactive requiring you to navigate through the windows. No data entry is required, but you must click through the windows for each of the six extracts.

The six components to be installed are:

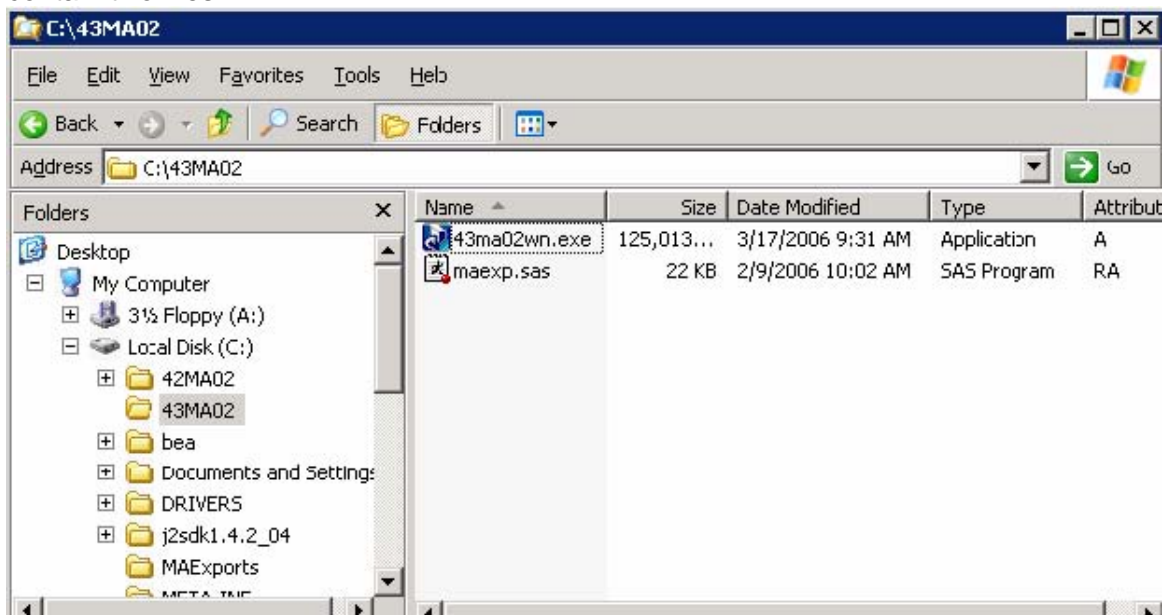|	
SAS Marketing Automation Application Server	emacore.exe
SAS Marketing Automation Web Components	emawebnport.exe
SAS Marketing Automation Campaign Studio	campaignsdo.exe
SAS Marketing Automation 4.3 SAS MC plugin	emasmc.exe
SAS Marketing Automation Launcher	emalauncher.exe
SAS Marketing Automation Integration Utilities	emaauxdataio.exe

The installer will attempt to install all components regardless of what may be installed on your server.

This process will take several minutes. You'll see the InstallShield Wizard icon minimized in your task bar during this time. The final window displayed will be a window which shows the files transferred:

Tech Support Hotfix Setup

Information
Please read the following text.

INSTALLATION INFORMATION
Destination Directory: C:\Program Files\SAS

FILE TRANSFER
File Copied: maexp.sas
File Copied: emacore.exe
File Copied: emawebnport.exe
File Copied: campaignsdo.exe
File Copied: emasmc.exe
File Copied: emalauncher.exe
File Copied: emaauxdataio.exe

InstallShield

< Back   Next >   Cancel

Note that the information in the window indicates the destination directory is
c:\Program Files\SAS for the files transferred. The files are not actually transferred to that
directory.   Only a log file called 43ma04wn.log is written to that SAS directory which contains
the messages in this window. The executable files are downloaded into c:\43ma04 and removed
as each installer runs.

Once the installer has completed its extraction, the hot fix install directory (c:\43ma04) will only
contain two files:

Run 43ma04wn.exe on each machine where MA components are installed

NOTE: 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

2. Post-configuration and Deployment of the SAS Marketing Automation Application Server
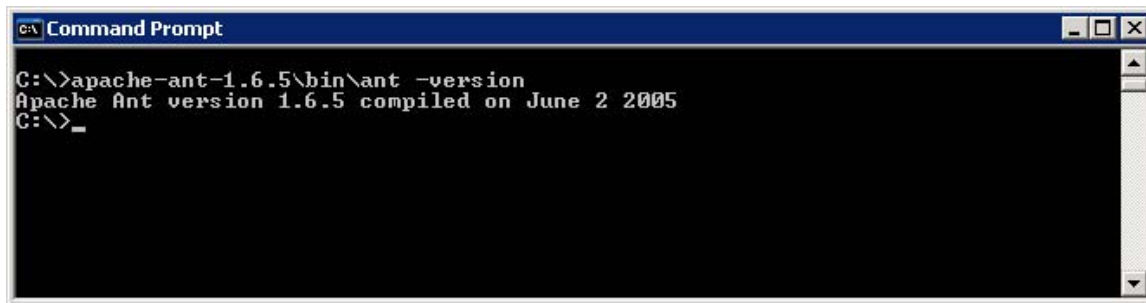
2.1 Download Ant to Run the Post Configuration Script

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/. You install Ant by unzipping the apache-ant-1.6.5-bin.zip file to a location on your machine and making sure that JAVA_HOME is set correctly with the location of your java installation. . This is typically c:\j2sdk1.4.2_05 (for example).

To verify the installation, you run

   ant -version

If Ant is working correctly you will see this message

        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: C:\Program Files\SAS\SASMarketingAutomationCore\4.1. Note this directory will contain a log called emacore_hf.log after the execution of this script.
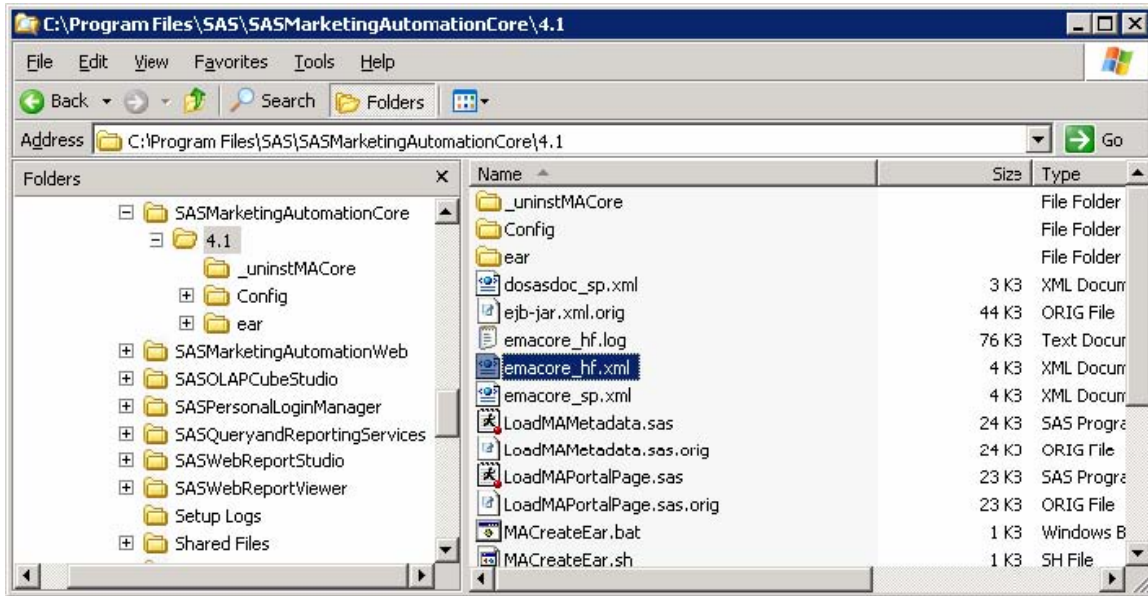
Open a command window and navigate to the bin subdirectory where ant is installed:
cd c:\apache-ant-1.6.5\bin

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. C:\SAS\MA43Plan) 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 a 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. C:\temp will not work unless it's
completely empty. A good example would be c:\temphotfix. You do not need to create that directory first.

<INSTALL_DIR> is the location of the product install (eg. C:\Program
files\SAS\SASMarketingAutomationCore\4.1)

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

Example:
```
ant -f "c:\Program Files\SAS\SASMarketingAutomationCore\4.1\emacore_hf.xml"
-Dconfig.dir="c:\SAS\MA43Plan" -Dtemp.dir="c:\temphf"
-Dinstall.loc="C:\Program Files\SAS\SASMarketingAutomationCore\4.1"
```

     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.

Once you verify the jar has been updated, restart your StartRemoteServices.bat 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.
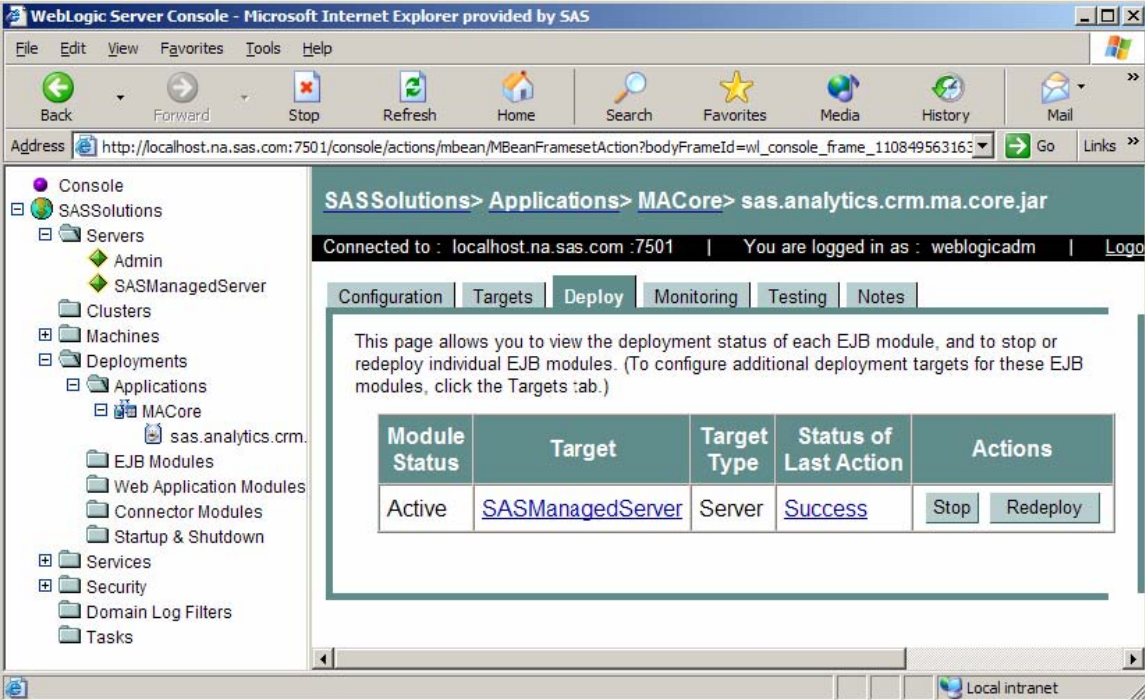
If you are deploying to **IBM WebSphere**, please now follow the instructions under section 2.4.2: Deployment Instructions for IBM WebSphere.

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 page 11.

2.4.2: Deployment Instructions for IBM WebSphere.

Deploying the Marketing Automation Application Server will involve uninstalling the current Marketing Automation Application, moving the .ear file to the deployment location and redeploying the hot fix.

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: `C:\IBM\WebSphere\AppServer`

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

WebSphere Administrative Console - Microsoft Internet Explorer

File   Edit   View   Favorites   Tools   Help

Back ▾   ▾ Search Favorites

Address http://crmsrv14:9090/admin/secure/logon.do   Go   Links »

WebSphere Application Server   Administrative Console
Version 5   IBM ®

Home | Save | Preferences | Logout | Help |

User ID:

crmsrv14

☐ Servers

☐ Applications
     Enterprise Applications
     Install New Application

☐ Resources

☐ Security

☐ Environment

☐ System Administration

☐ Troubleshooting

Enterprise Applications

A list of installed applications. A single application can be deployed onto multiple servers. ℹ

Total: 10

☐ Filter

☐ Preferences

[Start] [Stop] [Install] [Uninstall] [Update] [Export] [Export DDL]

☐	Name ⬍	Status ⬍ ↻
☐	DefaultApplication	➔
☑	Marketing Automation 4.3	➔
☐	Portal_war	➔
☐	SASDoc_war	➔
☐	SASPreferences_war	➔
☐	SASTheme_default_war	➔

WebSphere Status ℹ   < Previous   Next >   January 6, 2006 11:52:53 AM EST ↻

WebSphere Configuration Problems

Total Configuration Problems :0   🛑 : 0 total   ⚠ : 0 total   ℹ : 0 total

Done   Local intranet

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 Applictation 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 configured folder created when Campaign Web Studio was set-up through the SAS Software Navigator.

Deploy Application to Web Server

Deploy 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 (**c:\SAS\<plan name>\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 4.2.1.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 c:\43ma04 into the appropriate directory where your SAS server machine is located. This file will replace an existing file on your installation.

Windows path: !sasroot\ma\sasmacro
Unix path: !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. The location of this updated file will vary depending on whether or not you upgraded from 4.2 to 4.3, or had a clean (new) 4.3 version installed on your system.

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

For Marketing Automation installations upgraded from 4.2 to 4.3:
Source directory is:
`C:\Program Files\SAS\SASMarketingAutomationWeb\4.1\`

For Marketing Automation installations with new 4.3 install:
Source directory is:
`C:\Program Files\SAS\SASMarketingAutomationWeb\4.1\war\WEB-INF\lib\`

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\s`
`as.analytics.crm.ma.webapp.war\WEB-INF\lib`

> Where **`<was_home>`** is the 'home' folder location for WebSphere (e.g.
> `C:\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