

SAS Marketing Automation 4.4

Unix Install Instructions for Hot Fix 44ma11

Introduction

This document describes the steps necessary to install and deploy the SAS Marketing Automation 4.4 Hot fix Release 44ma11 for a Unix environment. **Please take a moment to read through this entire document before attempting to install the hot fix.** There are three 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)

Fix Details

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

When upgrading from SAS Marketing Automation 4.3 to 4.4 do not apply this hot fix until you have completed and verified the metadata migration.

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

Please review SAS Note SN-018542, provided on the download table for 44ma11, as the hot-fix install can overwrite the Isfadmin password and stop you executing campaigns directly from Campaign Studio

You may also access SAS Notes from the Technical Support Main page:
<http://support.sas.com/techsup/search/sasnotes.html>

Save the hot fix bundle (archive file) from the SAS Technical Support Hot Fix web site (<http://ftp.sas.com/techsup/download/hotfix/ma44.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:

- 44ma11r6.tar for AIX

- 44ma11s6.tar for Solaris
- 44ma11hx.tar for HP Itanium

1.2 Unarchive the downloaded tar file

Unarchive the tar file using the following command:

```
tar -xvf 44ma11xxx.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 44ma11_xxx directory. For example, the AIX tar file 44ma11r6.tar will extract into 44ma11_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 44ma11_r64/emauxdataio_r64.tar, 35491840 bytes, 69320 media blocks
x 44ma11_r64/emacore_r64.tar, 41850880 bytes, 81740 media blocks
x 44ma11_r64/emalauncher_r64.tar, 35297280 bytes, 68940 media blocks
x 44ma11_r64/emasmc_r64.tar, 37713920 bytes, 73660 media blocks
x 44ma11_r64/emawebnport_r64.tar, 38512640 bytes, 75220 media blocks
```

You can see from the tar files the following Marketing Automation Components will be updated by this hot fix:

- Marketing Automation Integration Utilities (emauxdataio)
- Marketing Automation Application Server (emacore)
- Marketing Automation Launcher (emalauncher)
- Marketing Automation Plugins to SAS Management Console (emasmc)
- Marketing Automation Web Application (emawebnport)

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 emauxdataio_r64.tar
```

This creates 3 new files in r64 subdirectory:

```
-rwxr-xr-x 1 sas staff 27812035 Oct 31 10:01 Setup_AIX_Power
-rw-r--r-- 1 sas staff 13 Oct 31 10:01 media.inf
-rw-r--r-- 1 sas staff 76667712 Aug 28 22:02 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.

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 (07/11/08)  
SASMarketingAutomation/MAIntegration/4.1/sas.analytics.crm.auxdataio.jar (10/24/07)
```

```
SASMarketingAutomationCore/4.1/emacore_hf.xml (04/12/07)  
SASMarketingAutomationCore/4.1/ear/sas.analytics.crm.ma.core.jar (04/23/2009)  
SASMarketingAutomationCore/4.1/ear/sas.iquery.metadata.jar (07/11/08)
```

```
SASManagementConsole/9.1/plugins/sas.analytics.crm.ma.core-client.jar (07/11/08)  
SASManagementConsole/9.1/plugins/sas.analytics.crm.ma.app.jar (07/11/08)
```

```
SASMarketingAutomation/Launcher/4.1/sas.analytics.crm.ma.core-client.jar (07/11/08)
```

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 1.7 from <http://ant.apache.org/>. See the Apache Ant Documentation for any install details.

Run ant -version from your command prompt and verify that you are accessing ant 1.7

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 44ma11 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-1.7.0/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: 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 be dated 06/13/2008. 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 05/28/2008.

Once you verify the jar has been updated, restart your SAS Remote Services server.

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.

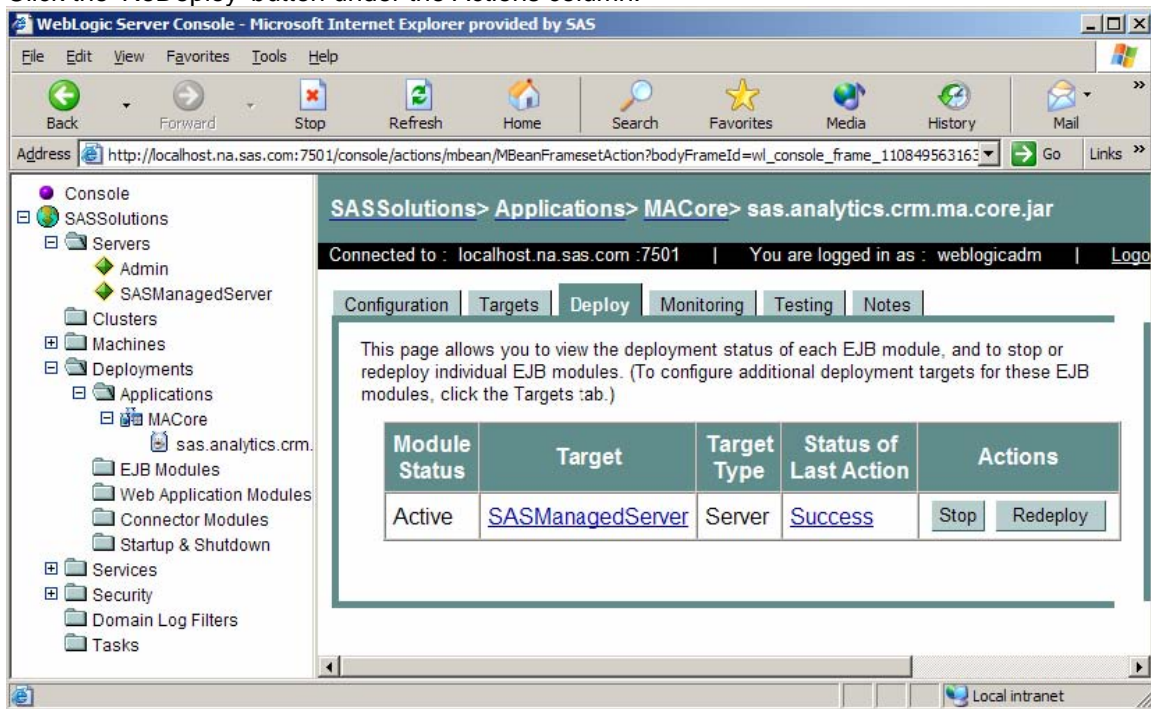
If you are deploying to **IBM WebSphere**, please now follow the instructions under section 2.4.2: Deployment Instructions for IBM WebSphere.

2.4.1: Deployment Instructions for BEA WebLogic.

After logging into the Weblogic console, Navigate to Deployments==> Applications==> MAppServer ==> 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.



The screenshot shows the WebLogic Server Console in Microsoft Internet Explorer. The browser address bar shows the URL: http://localhost.na.sas.com:7501/console/actions/mbean/MBeanFramesetAction?bodyFrameId=wj_console_frame_110849563163. The console interface displays the following information:

- Navigation: SASolutions > Applications > MACore > sas.analytics.crm.ma.core.jar
- Connection: Connected to : localhost.na.sas.com :7501 | You are logged in as : weblogicadm | Logo
- Tabs: Configuration, Targets, **Deploy**, Monitoring, Testing, Notes
- Text: This page allows you to view the deployment status of each EJB module, and to stop or redeploy individual EJB modules. (To configure additional deployment targets for these EJB modules, click the Targets :ab.)
- Table:

Module Status	Target	Target Type	Status of Last Action	Actions
Active	SASManagedServer	Server	Success	Stop Redeploy

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 4.4.ear/deployments/Marketing Automation 4.4/META-INF`

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

Stop the **Marketing Automation 4.4** application from your Websphere console:

Uninstall the **Marketing Automation 4.4** application from your Websphere console

Save the configuration

Stopped, uninstalled and saved changes to **Marketing Automation 4.4**

Restart the Websphere Application Server to continue.

Restarted the WebSphere Application Server.

Next, the newly configured **Marketing Automation 4.4 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
- Accept the defaults
- Next
- Select last step (Summary)
- Finish
- Save

b) *Applications->Enterprise Applications*

- Select Marketing Automation 4.4 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 4.4.ear/deployments/Marketing Automation 4.4/META-INF.**

d) *Applications->Enterprise Applications*

- Select Marketing Automation 4.4 check box
- Select Start button

Copied saved was.policy file back to META-INF directory and restarted Marketing Automation 4.4.

3. 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 to section 4. Campaign Management customers (which are not Marketing Automation packages) do not have this component and therefore, must skip this step.

3.1: Run the Post-configuration Ant script

The 44ma11 hot fix has installed a post-configuration script, emawebnport_hf.xml that will repackage sas.analytics.ma.webapp.war with the updated code. You will find emawebnport_hf.xml in the sas installation directory: /SAS/SASMarketingAutomationWeb/4.1. Note this directory will contain a log called emawebnport_hf.log after the execution of this script.

Use a similar ant script and methodology discussed in section 2.2 above to deploy the changes:

Example:

```
ant -f "/SAS/SASMarketingAutomationWeb/4.1/emawebnport_hf.xml"
-Dconfig.dir="/SAS/MA43Plan" -Dtemp.dir="/SAS/tempfh"
-Dinstall.loc="/SAS/SASMarketingAutomationWeb/4.1"
```

Successfully executed emawebnport_hf.xml script

Verify sas.analytics.crm.ma.webapp.war

The ant script will copy an updated sas.analytics.crm.ma.webapp.war into the configuration directory at Lev1/web/webapps. The script will have created a copy of the original war file suffixed with today's date.

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

3.2: Deployment of the SAS Campaign Web Studio war

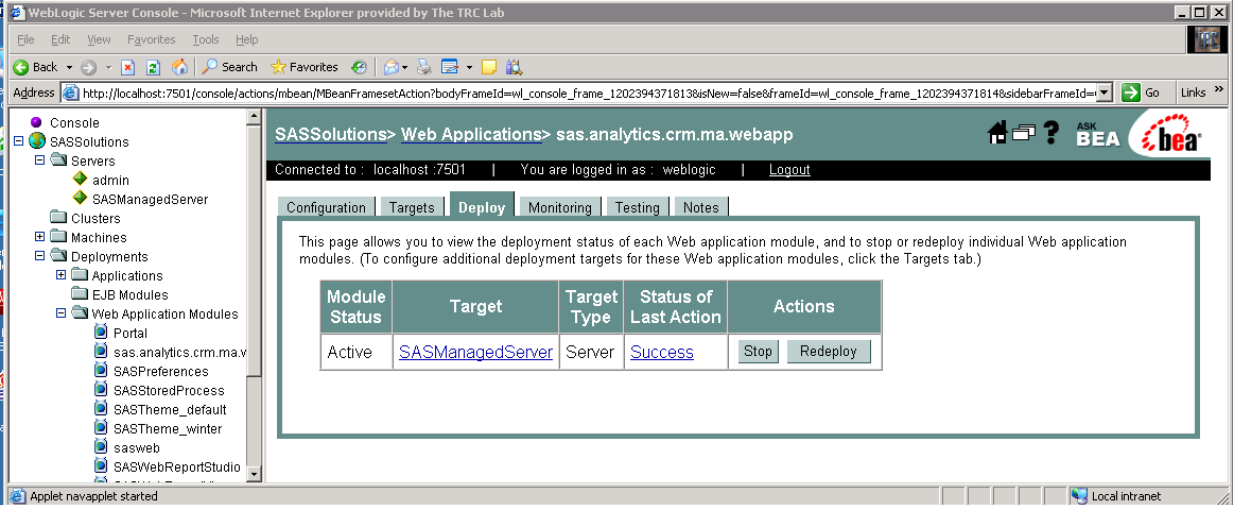
If you are deploying to **BEA WebLogic**, please now follow the instructions under section 3.2.1: Deployment Instructions for BEA WebLogic.

If you are deploying to **IBM WebSphere**, please now follow the instructions under section 3.2.2: Deployment Instructions for IBM WebSphere.

3.2.1: Deployment Instructions for BEA WebLogic.

After logging into the Weblogic console, Navigate to Deployments==> Web Application Modules ==> sas.analytics.crm.ma.webapp in the left panel. (Note that your Target name may vary. The example below used the name SASManagedServer.) Click the Configuration tab to verify your deployment path is the Lev1/web/webapps/directory where the updated war file now resides.

Click the 'ReDeploy' button under the Actions column.



The screenshot shows the BEA WebLogic Server Console interface. The left-hand navigation pane is expanded to 'Web Application Modules', where 'sas.analytics.crm.ma.v' is selected. The main content area displays the 'Configuration' tab for the selected module. A table lists the deployment status:

Module Status	Target	Target Type	Status of Last Action	Actions
Active	SASManagedServer	Server	Success	Stop Redeploy

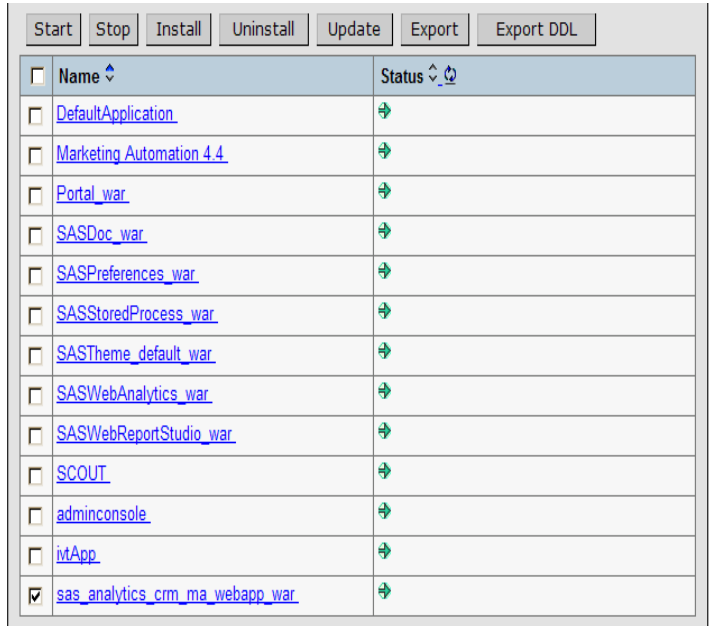
This completes the application server deployment of the hot fix to Weblogic. Please now skip to section 4.

3.2.2: Deployment Instructions for IBM WebSphere.

Re-deploy SAS Marketing Automation Web components using the Websphere Admin console.

- a) Navigate to *Applications->Enterprise Applications*

b) Select the *Stop* button to stop `sas_analytics_crm_ma_webapp.war`



c) Select the *update* button to update `sas_analytics_crm_ma_webapp.war`

d) On the next screen, fill in the path to the `sas_analytics_crm.ma_webapp_war` file

e) Type *ma* as the Context Root

Preparing for the application update

Specify the EAR/WAR/JAR module to upload and install.

Path:	Browse the local machine or a remote server: <input type="radio"/> Local path: <input type="text"/> <input type="button" value="Browse..."/> <input checked="" type="radio"/> Server path: <input type="text" value="\\applications\sas_analytics"/>	<input type="checkbox"/> Choose the local path if the ear resides on the same machine as the browser. Choose the server path if the ear resides on any of the nodes in your cell context.
Context Root:	Used only for standalone Web modules (*.war) <input type="text" value="ma"/>	<input type="checkbox"/> You must specify a context root if the module being installed is a WAR module.
<input type="button" value="Next"/> <input type="button" value="Cancel"/>		

f) Choose Next

g) Choose Next

h) Choose *Continue* on the Application Security Warnings panel

Application Security Warnings

Analysis of this application resulted in the following security warnings.

```
The contents of the was.policy file -  
grant codeBase "file:${application}" {  
  permission java.security.AllPermission;  
};
```

Continue Cancel

- f) Select *Step 4 Summary*
- g) Finish
- h) Save

4: Your installation of the 44ma11 hot fix is now complete

The hot fix installation program downloads all hot fix components for all tiers to each machine. The next step in the installation process depends on your operating system.

In a Windows environment, the setup.exe determines which components are on the machine and adds the hot-fix to those components. If a component is not available, setup.exe will inform you of this and allow you to continue to the next component.

On a Unix machine, the person doing the install needs to know which elements exist on the machine and then run the appropriate hot fix installer for each of them.

Only the most recent hot fix for SAS Marketing Automation is needed to get all of the fixes available for the current version. Although it is not necessary to have installed any earlier hot fix before installing 44ma11, it will not create any problems or prevent the appropriate fixes from being applied.