SAS Marketing Automation 4.4

Windows Install Instructions for Hot Fix 44MA10

Introduction

This document describes the steps necessary to install and deploy the SAS Marketing Automation 4.4 Hot fix Release 44ma10 for a Windows 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 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)

Fix Details

The hot fix 44MA10 addresses the issue(s) in 4.4 of SAS Marketing Automation software on Windows as documented in the "Issue(s) Addressed" section of the hot fix download page:

http://ftp.sas.com/techsup/download/hotfix/ma44.html #44ma10

Please review SAS Note SN-018542, provided on the download table for 44MA10, as the hot-fix install can overwrite the lsfadmin 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

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

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 (44ma10wn.exe) has been downloaded from the SAS Technical Support Hot Fix web site (http://ftp.sas.com/techsup/download/hotfix/ma44.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 '44ma10' 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 '**44ma10wn.exe**' and double click that file or run from the start menu.
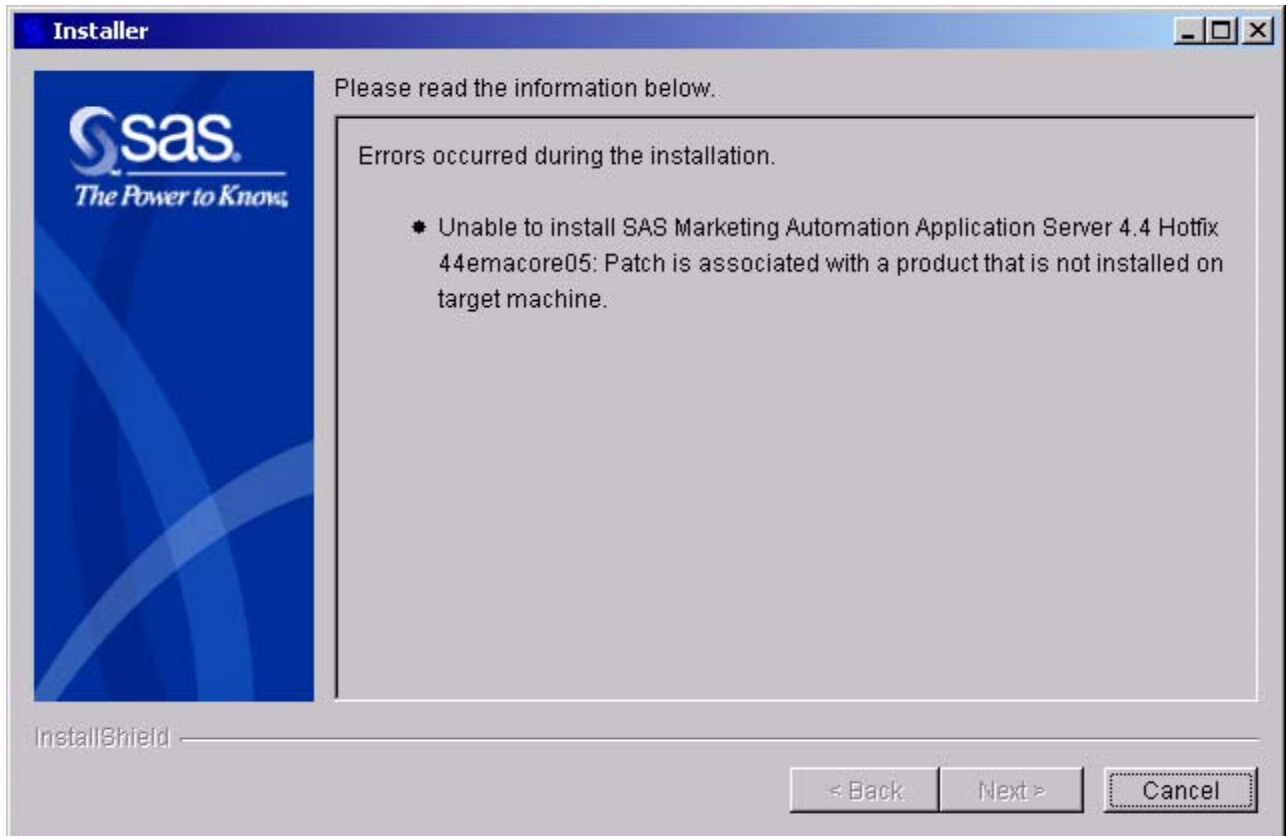
The hot fix bundle is self-extracting and will copy the necessary installer files to the hot fix folder C:\44ma10.   The screen below shows the structure for the hot fix bundle after the files are extracted by the first extract process.   The exe files are deleted by the installer as the process runs.

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.
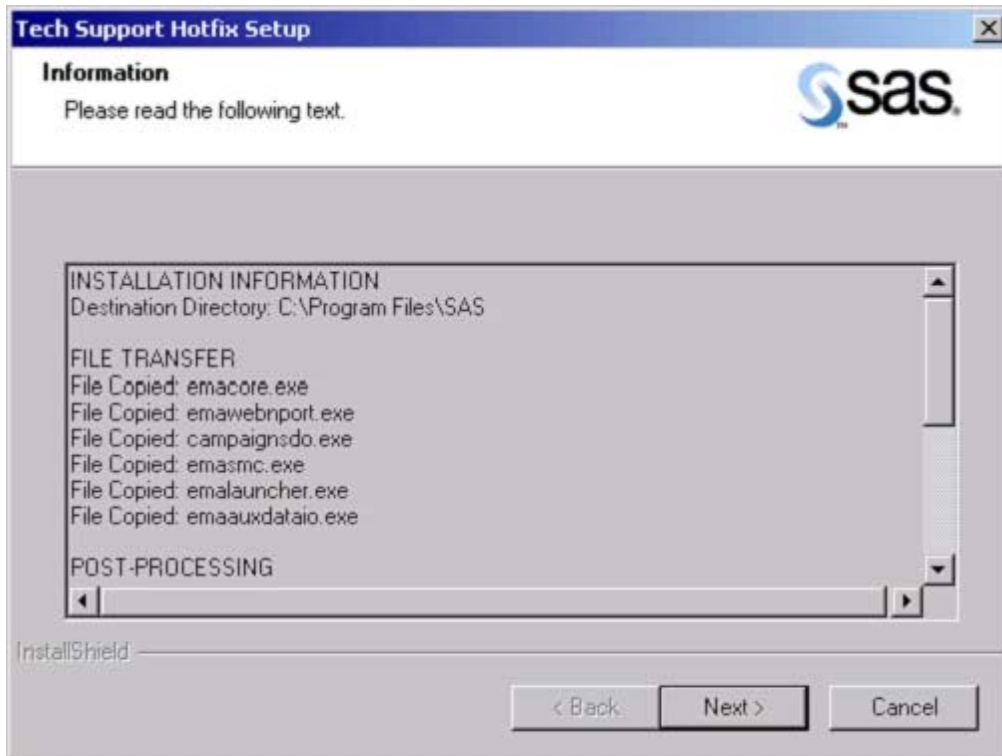
The six components to be installed are:

SAS Marketing Automation Application Server	emacore.exe
SAS Marketing Automation Web Components	emawebnport.exe
SAS Marketing Automation Campaign Studio	campaignsdo.exe
SAS Marketing Automation 4.4 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.
For Marketing Automation components that are not installed on a specific server, you will see a window similar to the following:

This is normal behavior. Choose the "Cancel" button and the hot fix installation will continue with the next component.

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:

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 44ma10wn.log is written to that SAS directory which contains the messages in this
window. The executable files are downloaded into c:\44ma10 and removed as each installer runs.

Once the installer has completed its extraction, the hot fix install directory (c:\44ma10) will contain the six
.exe files listed above.

Run 44ma10wn.exe on each machine where MA components are installed. This will run and then delete
each of the executables.

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/. You install
Ant by unzipping the apache-ant-1.7.0-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
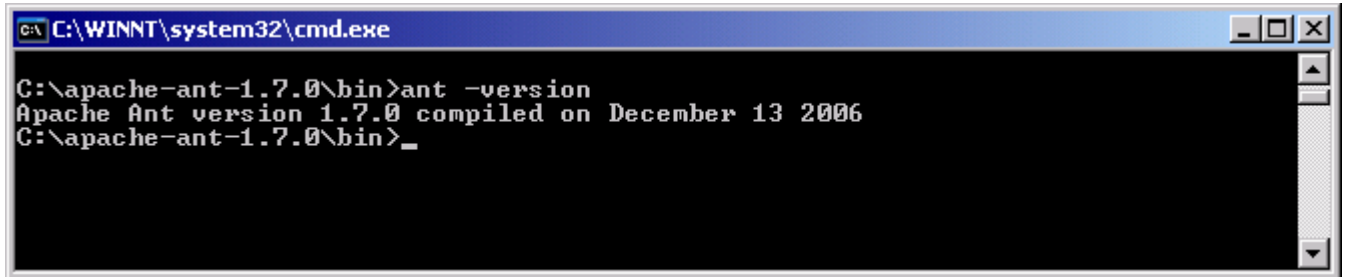(for example).
Although these instructions and screen shots are based on ant 1.7.0, 1.7.1 may be used instead.

To verify the installation, you run

   ant -version

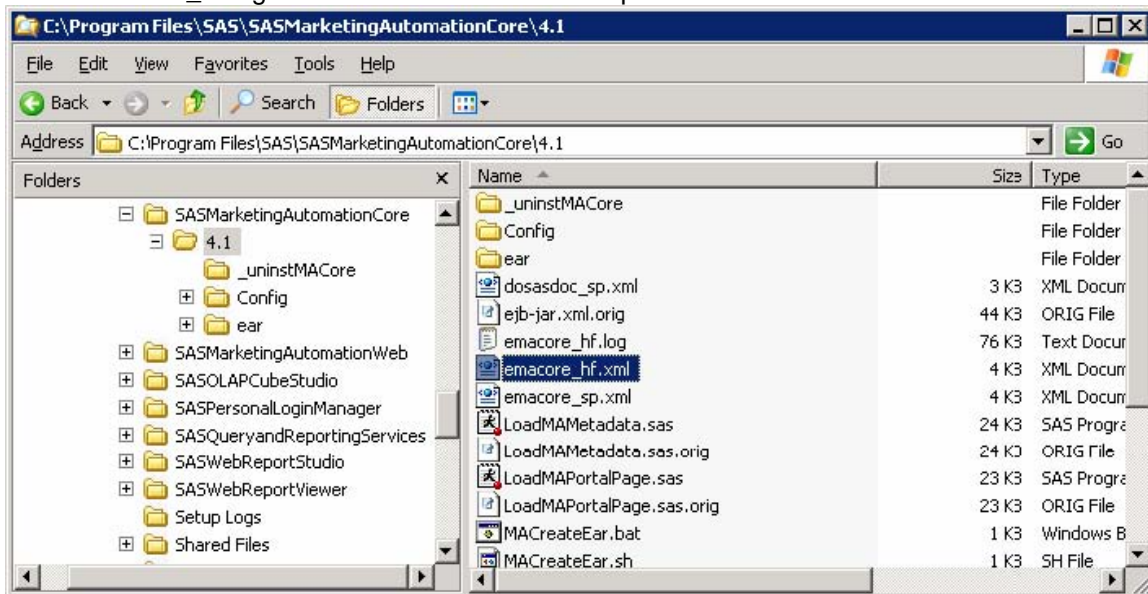Also….
If Ant is working correctly you will see this message

```
C:\WINNT\system32\cmd.exe                                           _|□|×|

C:\apache-ant-1.7.0\bin>ant -version
Apache Ant version 1.7.0 compiled on December 13 2006
C:\apache-ant-1.7.0\bin>_
```

Downloaded ANT and verified the version

2.2: Run the Post-configuration Ant script

The 44ma10 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-1.7.0\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 be dated 05/28/2008, and a size of 537 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 05/28/2008.

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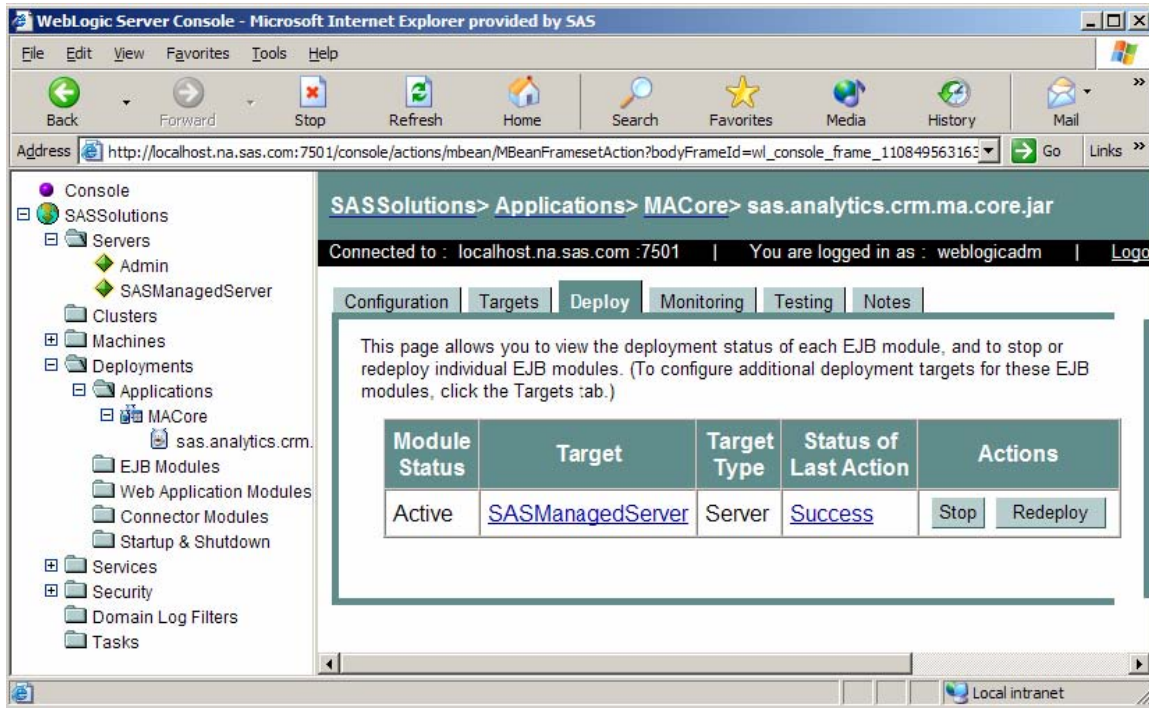
If you are deploying to **IBM WebSphere**, please now follow the instructions under section 2.4.2: Deployment Instructions for IBM WebSphere.

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 Section 3.
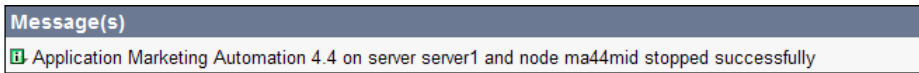
2.4.2: Deployment Instructions for IBM WebSphere.

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 4.4.ear\deployments\Marketing Automation 4.4\META-INF`
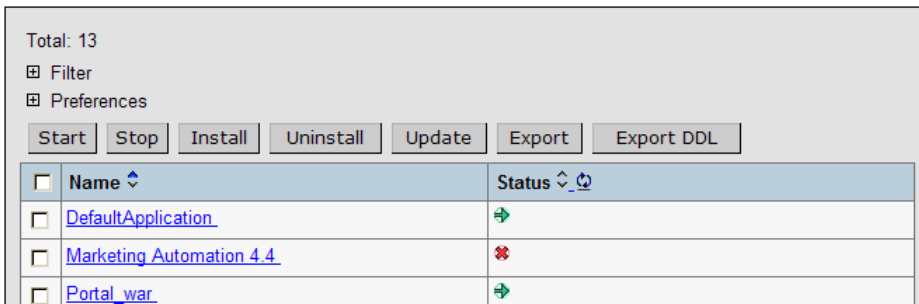
Where **`<was_home>`** is the 'home' folder location for WebSphere:
For example: `C:\IBM\WebSphere\AppServer`

a) From your Websphere console, choose the Stop button to stop the **Marketing Automation 4.4** application.

b) Choose the *Uninstall* button to uninstall the **Marketing Automation 4.4** application from your Websphere console.

c) Save the configuration

d) Restart the Websphere Application Server to continue.

e) 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 configured folder created when SAS Marketing Automation was originally installed.

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 4.4</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 4.4\META-INF.
```

d) *Applications->Enterprise Applications*
- Select <u>Marketing Automation 4.4 </u>check box
- Select Start button

3*. Deployment of SAS Campaign Web Studio*

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 44ma10 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: C:\Program Files\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 "c:\Program
Files\SAS\SASMarketingAutomationWeb\4.1\emawebnport_hf.xml"
-Dconfig.dir="c:\SAS\MA43Plan" -Dtemp.dir="c:\temphf"
-Dinstall.loc="C:\Program Files\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.

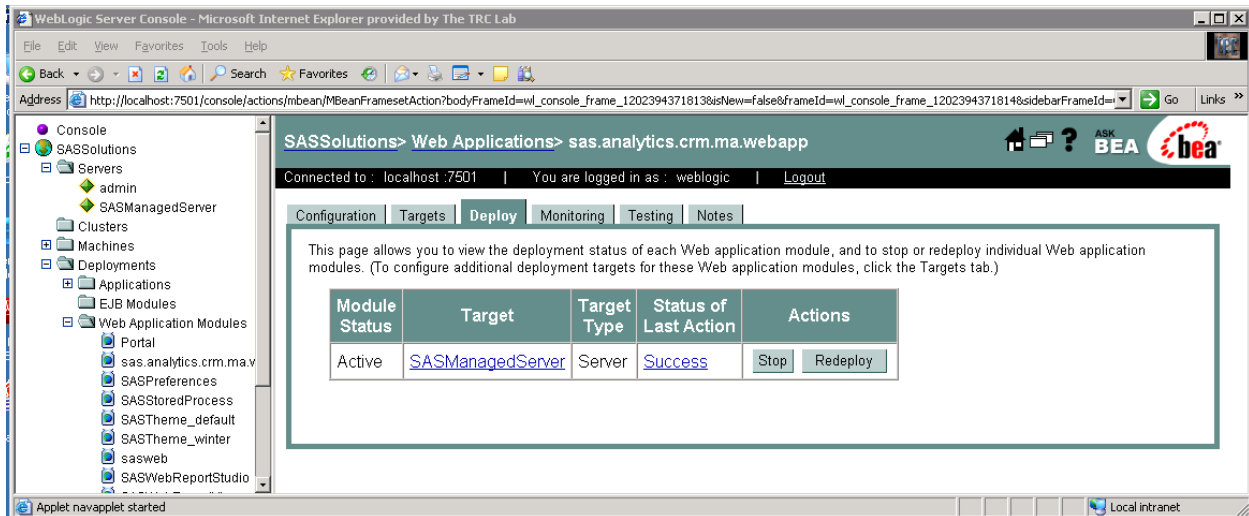## 3.2: Deployment of the SAS Campaign Web Studio war

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.

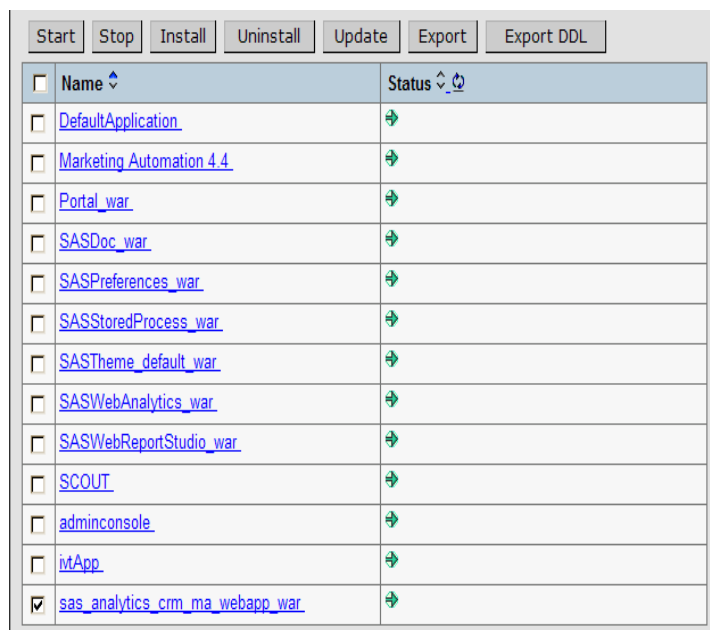Click the 'ReDeploy' button under the Actions column.

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: ○ Local path: [_____] [Browse...] ⊙ Server path: [\\applications\sas_analytics]	ⓘ 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) [ma]	ⓘ You must specify a context root if the module being installed is a WAR module.

[Next] [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 44MA10 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 44MA10, it will not create any problems or prevent the appropriate fixes from being applied.