SAS Marketing Automation 5.1

Windows Install Instructions for Hot Fix 51ma12

Introduction

This document describes the steps necessary to install and deploy the SAS Marketing Automation 5.1 Hot fix Release 51ma12 for a Windows environment. ***Please take a moment to read through this entire document before attempting to install the hot fix.*** There are six 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) Post-configuration and deployment of the SAS Customer Intelligence Reporting Application
4) Post-configuration and deployment of the SAS Marketing Automation Web Components update (optional)
5) Install the changes to macros and stored processes on the SAS Compute Server
6) Customer Intelligence Reporting Common Data Model updates

Fix Details

The hot fix 51ma12 addresses the issue(s) in 5.1 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/ma51.html #51ma12

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

SAS Marketing Automation hot fixes are cumulative. Only the latest hot fix need be applied to install all fixes. The hot-fix needs to be applied to all tiers. Servers (Windows and/or Unix) and clients (Windows). Please be sure to use the hot fix installer appropriate to the server/client operating system.

Although the actual fixes incorporated in the hot fix are cumulative there are changes to the SAS Customer Intelligence Reporting Common Data Model (CDM) which depend on whether or not you have already installed any hot fixes. See **Section 7** and **Appendix A** of this document before making any CDM changes.

Please review SAS Note SN-018542, (http://support.sas.com/kb/18/542.html) as the hot-fix install can overwrite the lsfadmin password and prevent campaigns from being directly scheduled from Campaign Studio.

1. Obtaining the Hot Fix Bundle

The hot fix bundle (51ma12wn.exe) may be downloaded from the SAS Technical Support Hot Fix web site (http://ftp.sas.com/techsup/download/hotfix/ma51.html), and may either be run directly from the web page or saved to a Windows location. For example, create a hot fix install folder called '51ma12' on the C: drive of the Windows computer and save the bundle to that location.

In either case you need to be logged on using a user logon that has file access (read/write permissions) to the environment where the SAS Marketing Automation components are currently installed.

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*, including the Server Tier, on which at least one of the Marketing Automation components is installed.

- SAS Customer Intelligence Core Mid-Tier
- SAS Customer Intelligence Web Components
- SAS Customer Intelligence Studio
- SAS Customer Intelligence Plug Ins for SAS Management Console
- SAS Marketing Automation Launcher
- SAS Marketing Automation Integration Utilities
- SAS Customer Intelligence Reporting Mid-Tier
- SAS Marketing Automation Server Processes (macros and stored processes)

Since most of the updates will be on your mid-tier machine, you should begin on that server. You will then need to apply the hot fix to your to your client machines and SAS Compute server.

To run the hot fix bundle locate the file called '**51ma12wn.exe**' and double click that file, run from the start menu or directly from the hot fix download site.

The hot fix bundle is self-extracting and will copy the necessary installer files to the hot fix folder C:\51ma12.   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 seven 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.
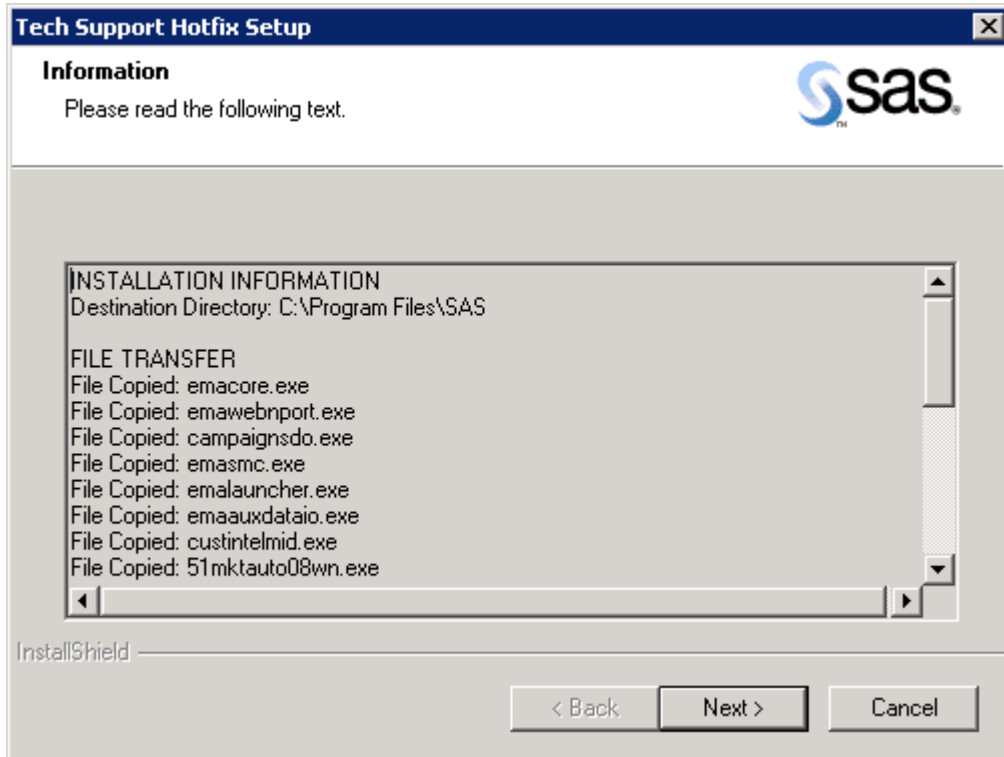
The six components to be installed are:

SAS Customer Intelligence Core Mid-Tier	emacore.exe
SAS Customer Intelligence Web Components	emawebnport.exe
SAS Customer Intelligence Campaign Studio	campaignsdo.exe
SAS Customer Intelligence SAS MC plug ins	emasmc.exe
SAS Marketing Automation Launcher	emalauncher.exe
SAS Marketing Automation Integration Utilities	emaauxdataio.exe
SAS Customer Intelligence Reporting	custintelmid.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:
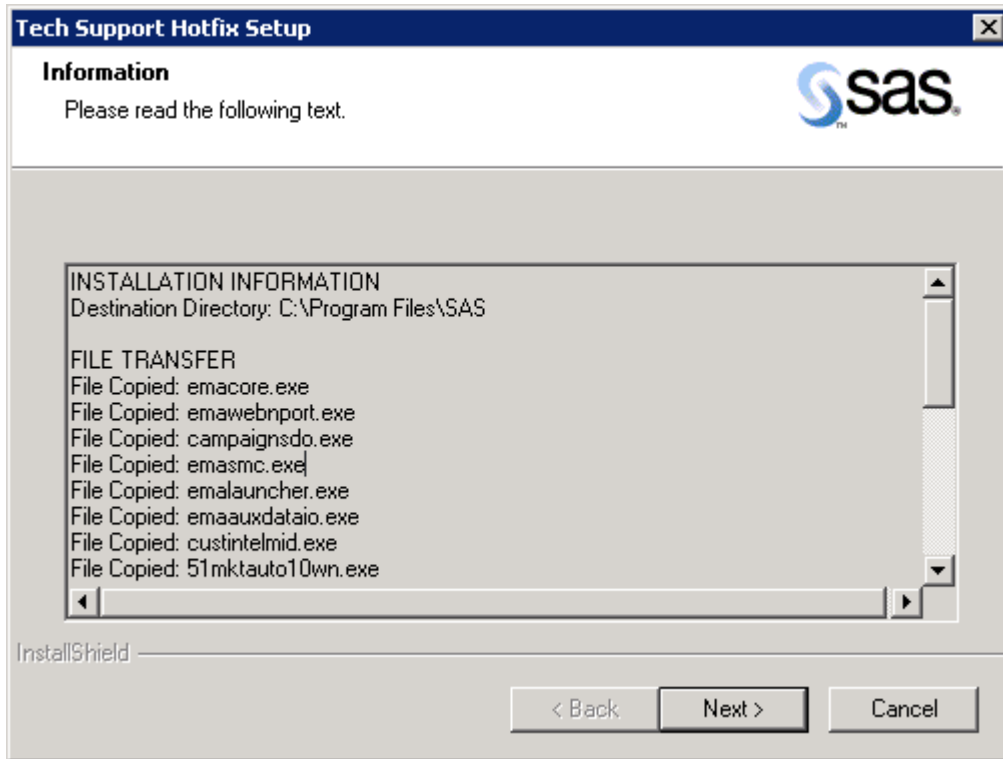
This is normal behavior. Choose the "Cancel" button and the hot fix installation will continue with the next component.

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:

```
Tech Support Hotfix Setup                                    ×

   Information
      Please read the following text.                        Ssas.


   ┌─────────────────────────────────────────────────────────┐ ▲
   │INSTALLATION INFORMATION                                  │
   │Destination Directory: C:\Program Files\SAS              │
   │                                                         │
   │FILE TRANSFER                                            │
   │File Copied: emacore.exe                                │
   │File Copied: emawebnport.exe                            │
   │File Copied: campaignsdo.exe                            │
   │File Copied: emasmc.exe                                 │
   │File Copied: emalauncher.exe                            │
   │File Copied: emaauxdataio.exe                           │
   │File Copied: custintelmid.exe                           │
   │File Copied: 51mktauto08wn.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 51ma12wn.log is written to that SAS directory which contains the messages in this
window. The executable files are downloaded into c:\51ma12 and removed as each installer completes.

Once the installer has completed its extraction, the hot fix install directory (c:\51ma12) will contain the
eight .exe files listed above.

Run 51ma12wn.exe on each machine where MA components are installed. This will run and then delete
each of the executables except the 51mktaout10wn.exe. This will used on the SAS Compute Tier to
update SAS Marketing Automation macros and stored processes.

___ **Installer Ran Successfully**

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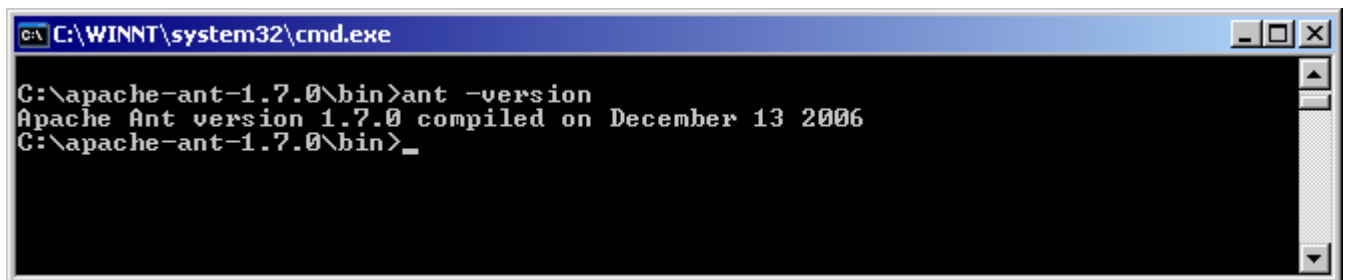
2.1 Download Ant to Run the Post Configuration Script

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).

To verify the installation, use a command prompt to navigate the apache-ant-1.7.0\bin folder and run:

   ant -version

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 for Marketing Automation Server

The 51ma12 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\Config. Note this directory will contain a log called emacore_hf.log after the execution of this script.

Stop the SAS Remote Services server before running the ant 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 (for example, C:\SAS\MA51Plan) 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 (For example, 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\Config\emacore_hf.xml"
-Dconfig.dir="c:\SAS\MA51Plan" -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 a size of 697 kb.

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

___ **Restart Remote Services**

2.4: Run the Post-configuration Ant script for Customer Intelligence Reporting
The 51ma12 hot fix has installed a post-configuration script, custintelmid_hf.xml, that will repackage sas.analytics.crm.ma.ccsservice.war with updated code. You will find custintelmid_hf.xml in the SAS installation directory: C:\Program Files\SAS\SASCustomerIntelligenceReporting\5.1\Config. As with the previous step, execute the custintelmid_hf.xml script by using Apache Ant.

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 custintelmid_hf.xml script (all on one line)

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

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

Example:
```
ant -f "c:\Program
Files\SAS\SASCustomerIntelligenceReporting\5.1\Config\custintelmid_hf.xml"
-Dconfig.dir="c:\SAS\MA51Plan" -Dtemp.dir="c:\temphf"
```

```
-Dinstall.loc="C:\Program Files\SAS\SASCustomerIntelligenceReporting\5.1"
```

Verify sas.analytics.crm.ma.ccsservice.war

The ant script will copy an updated sas.analytics.crm.ma.ccservice.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. It will also create a log custintelmid_hf.log in C:\Program Files\SAS\SASCustomerIntelligenceReporting\5.1

The Customer Intelligence Reporting war module needs to be redeployed in its respective application server (Weblogic or Websphere) for the changes to take effect.

____ Successfully executed custintelmid_hf.xml script

2.5: Deployment of the MA Core jar file

If you are deploying to **BEA WebLogic**, please now follow the instructions under section 2.5.1: Deployment Instructions for BEA WebLogic.

If you are deploying to **IBM WebSphere**, please now follow the instructions under section 2.5.2: Deployment Instructions for IBM WebSphere.

2.5.1: Deployment Instructions for BEA WebLogic.

After logging into the Weblogic console, Navigate to Deployments==> Applications==> MAAppServer ==> MACore in the left panel. (Note that your application name may vary. The example below uses the name MACore.) Click the Configuration tab to verify your deployment path is the Lev1\web\webapps\exploded directory where the updated ear now resides.

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

Click the 'Redeploy' button under the Actions column.

<div align="center">
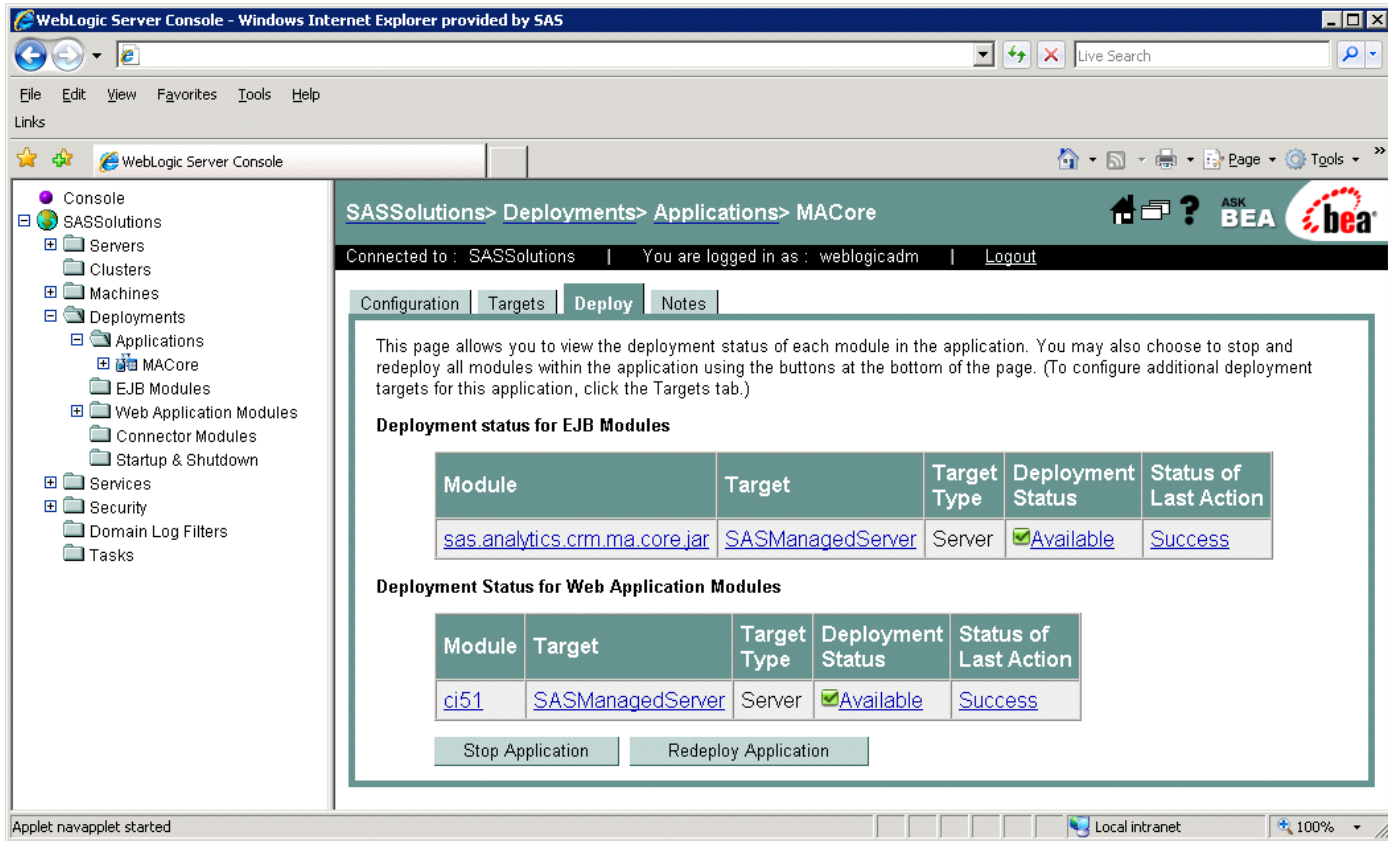
___ **Weblogic Application Server Deployed**

</div>

This completes the application server deployment of the hot fix to Weblogic. Please now skip to Section 3.

2.5.2: Deployment Instructions for IBM WebSphere.

Deploying the Marketing Automation Application Server will involve uninstalling the current Marketing Automation Application, and redeploying the new 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>\profiles\AppSrv01\config\cells\<machine name>\applications\Marketing Automation 5.a.ear\deployments\Marketing Automation 5.1\META-INF

Where **<was_home>** is the 'home' folder location for WebSphere:
For example: `C:\IBM\WebSphere\AppServer`

- From your Websphere console, choose Applications, Enterprise Applications and then use the Stop button to stop the **Marketing Automation 5.1** application.
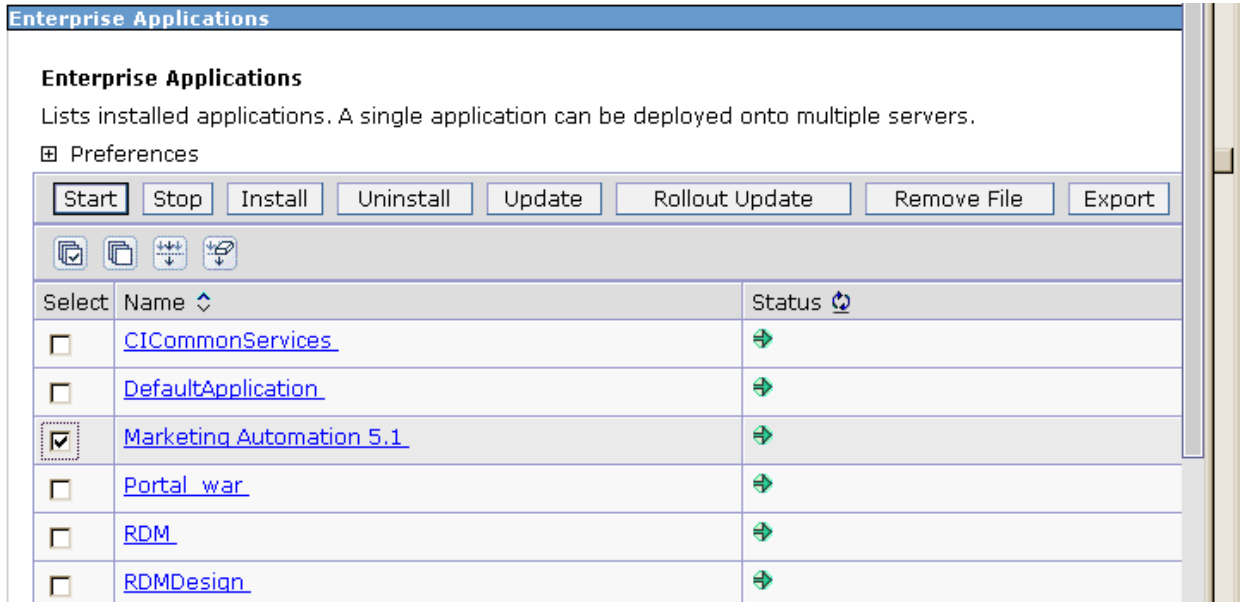
- Choose the *Uninstall* button to uninstall the **Marketing Automation 5.1** application from your Websphere console.
- Save the configuration
- Next, the newly configured **Marketing Automation 5.1 application** needs to be reinstalled.
- The deployed location of the configured ear file is typically 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 file system" radio button
- Select Browse button and navigate to the MA ear file **(<config-dir>/Lev1/ web/webapps/sas.analytics.crm.ma.core.ear**)
- Choose Next
- Choose Next
- Choose Continue on the Application Security Warnings panel
- Step 1: Choose Next
- Step 2: Choose Next
- Step 3: Choose Next
- Step 4: Choose Next
- Step 5: Choose Next
- Step 6: Check the "Select" box for Web Module "SAS Customer Intelligence Servlets" then Choose Next
- Step 7: Choose Next
- Step 8: Choose Finish
- Save

     b) *Applications->Enterprise Applications*
- Select Marketing Automation 5.1 link
- Classloader Mode: PARENT_LAST

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• Apply/Save

c) Locate your saved copy of the WAS.policy file, and copy it back to its original location at **<was_home>**\profiles\AppSrv01\config\cells\<Machine Name>\applications\Marketing Automation 5.1.ear\deployments\Marketing Automation 5.1\META-INF

d) *Applications->Enterprise Applications*
   • Select Marketing Automation 5.1 check box
   • Select Start button

   ## ___ Websphere Application Server Deployed

3. Deployment of the Customer Intelligence Reporting War file

If you are deploying to **BEA WebLogic**, please now follow the instructions under section 3.1.1 Deployment Instructions for BEA WebLogic.

If you are deploying to **IBM WebSphere**, please now follow the instructions under section 3.1.2: Deployment Instructions for IBM WebSphere.

3.1.1: Deployment Instructions for BEA WebLogic.

- After logging into the Weblogic console, Navigate to Deployments==> Web Application Modules ==> sas.analytics.crm.ma.ccsservice 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 Deploy tab in order to redeploy the war file.

- Click the 'ReDeploy' button under the Actions column.
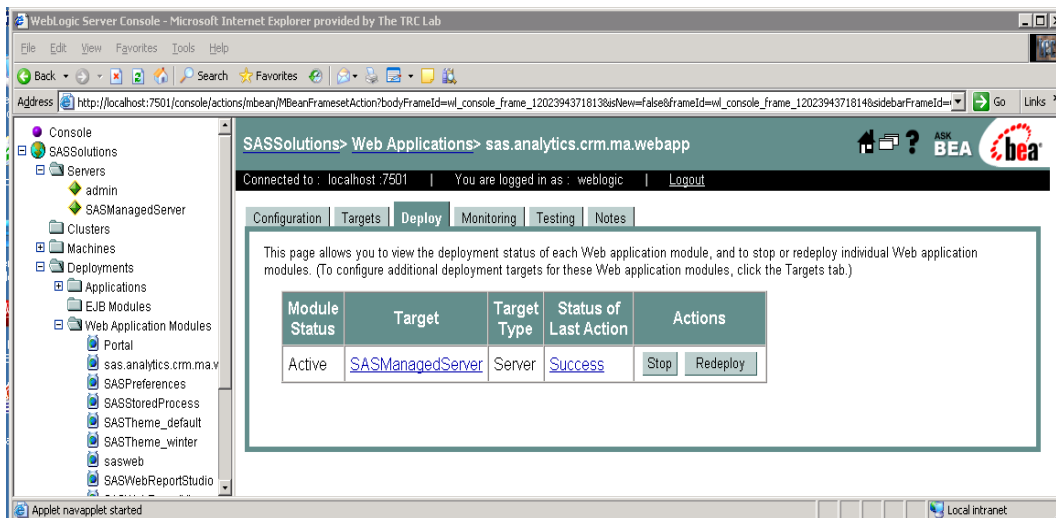
___ Weblogic Customer Intelligence Reporting war Deployed

This completes the Customer Intelligence reporting war file deployment to Weblogic. Please now skip to Section 4.

3.1.2: 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 CICommonServices (sas_analytics_crm_ma_ccsservices_war)

Enterprise Applications

Lists installed applications. A single application can be deployed onto multiple servers.

⊞ Preferences

| Start | Stop | Install | Uninstall | Update | Rollout Update | Remove File |

Select	Name ⇕	Status ↻
☑	CICommonServices	✖
☐	DefaultApplication	➡
☐	Marketing Automation 5.1	➡
☐	Portal_war	➡
☐	RDM	➡

- Select the *update* button to update CICommonServices
- On the next screen, fill in the path to the sas.analytics.crm.ma.ccsservice.war file (`<config_dir>`\Lev1\web\webapps)
- Type /ccs as the Context Root

⦿ Full application

Select this option to replace the enterprise archive (*.ear) file for an installed application. The uploaded enterprise archive replaces the existing installed application.

Upload the replacement application.

○ Local file system

Specify path

[   ] [Browse...]

⦿ Remote file system

Specify path

[D:\SAS\MidTier\Lev1\web\webapps\sas.analytics.] [Browse...]

Context root

[/ccs]   Used only for standalone Web modules (.war files)

Help

Field
Spec
the r
insta
mod

Page
More
this

- Choose Next
- Choose Next
- 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

- Select *Step 4 Summary*
- Finish
- Save
- Navigate to Applications->Enterprise Applications
- Select *CICommonServices* link (sas_analytics_crm_ma_ccsservices_war)
- Change the Classloader Mode to *Parent_Last*
- Under the startup options section, enter *10* for the starting weight field.
- Apply and Save
- Navigate to Applications->Enterprise Applications
- Select *CICommonServices* check box
- Select *Start* button

___ Websphere Customer Intelligence Reporting war Deployed

4. Changes required to the Customer Intelligence Reporting deployment

If you have already installed the 51MA05 hot fix you should have already reconfigured the JMS messaging. If so skip this section and continue to section 5.

JMS messages enqueued on the CICommonCHTricklingInsertQueue or the CICommonRHTricklingInsertQueue have reliable persistence. Changes were made as part of the MA5105 hotfix to make these transient. The deployment of the CI JMS messages needs to change due to this change in persistence.

If deployed to **BEA WebLogic**, please now follow the instructions under section 4.1.1 Changes for BEA WebLogic.

If deployed to **IBM WebSphere**, please now follow the instructions under section 4.1.2: Changes for IBM WebSphere.

4.1.1: Changes for BEA Weblogic

After logging into the Weblogic console, Navigate to Services==> JMS==> Servers ==> CICommonJMSServer in the left panel. (Note that your CICommonJMSServer name may vary. The example below uses the name CICommonJMSServer.)

Double click on CICommonJMSServer and change

Persistent Store: to None

Then Navigate to Services==> JMS==> Stores ==> CICommonFileStore and right click and delete the CICommonFileStore

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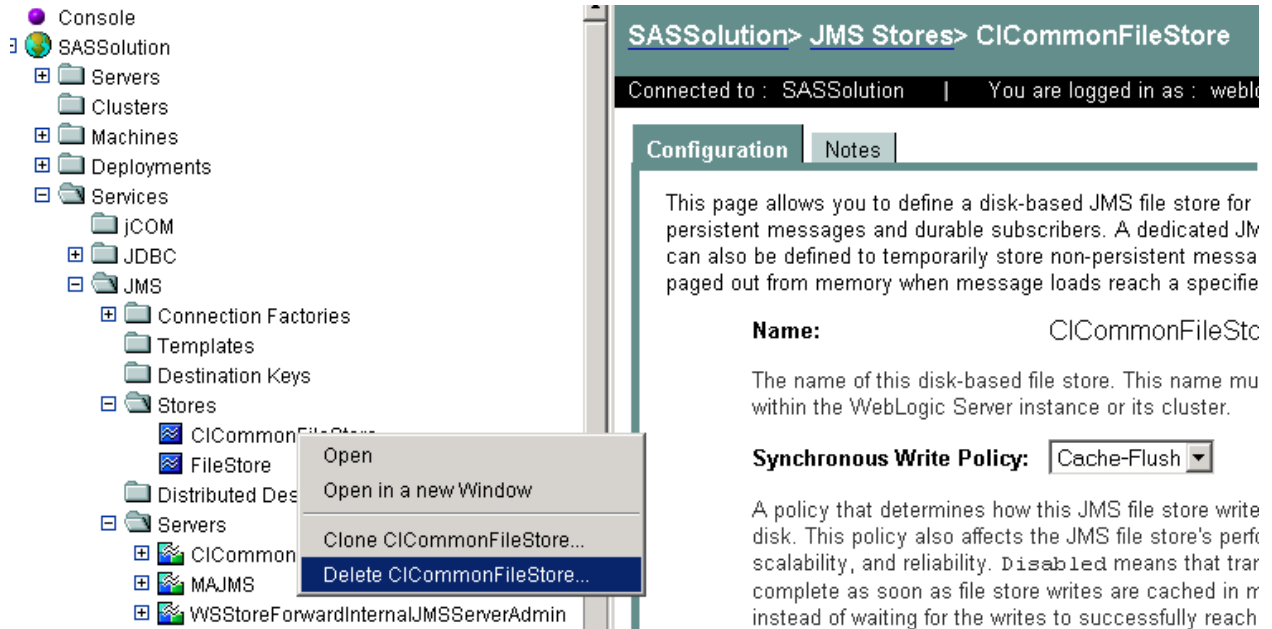
Then Navigate to Services==> JMS==> ConnectionFactories ==> CICommonQueueConnectionFactory
and double click and Change Default Delivery Mode to NON-Persistent
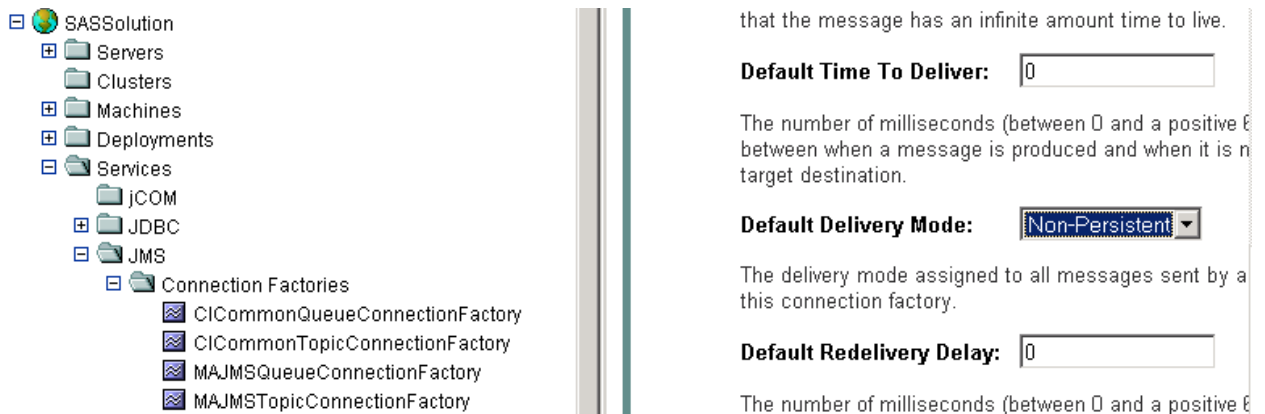
Then Navigate to Services==> JMS==> ConnectionFactories ==> CICommonTopicConnectionFactory
and double click and Change Default Delivery Mode to NON-Persistent
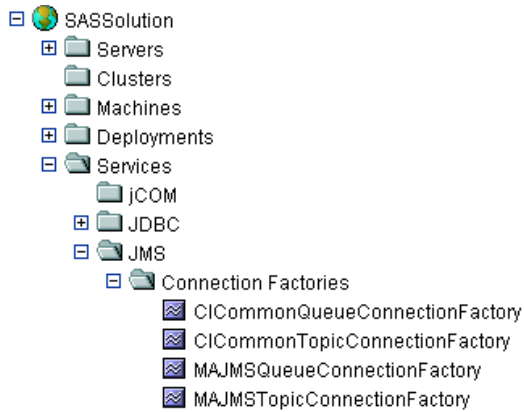
Then Navigate to Services==> JMS==> Servers ==> CICommonJMS==>Destinations ==> All Destinations shown e.g. CICommonCHTricklingInsertQueue

Leave the Enable Store setting to default (which means it will use the JMS servers Store settings)

You have now completed all changes needed for CICommon on weblogic

___ **Weblogic changes completed**

Please now skip to Section 5.

4.1.2: Changes for IBM WebSphere

After logging into the WebShere console, Navigate to Service Integration==> Buses==> CICOMMONBUS ==> Destinations on right of the screen. (Note that your bus name may vary. The example below uses the name CICOMMONBUS.) You will see a list of CICommon Queue's and Topic's of which the
CICommonCHTricklingInsertQueue
CICommonRHTricklingInsertQueue
Need to be edited

Double click on CICommonCHTrickingInsertQueue and

Under *Quality of service* section ensure

a. Enable Producers to over-ride default reliability - Should be checked
b. Default Reliability - Reliable Non Persistent
c. Maximum Reliability - Reliable Non Persistent

See example below:

Click on Apply and then Save

Double click on CICommonRHTrickingInsertQueue and

Under *Quality of service* section ensure

a. Enable Producers to over-ride default reliability - Should be checked
b. Default Reliability - Reliable Non Persistent
c. Maximum Reliability - Reliable Non Persistent

See example below:

Click on Apply and then Save

You have now completed all changes needed for CICommon on Websphere

___ **Websphere changes completed**

5. 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 6. Campaign Management customers (which are not Marketing Automation packages) do not have this component and therefore, must skip this step.

5.1: Run the Post-configuration Ant script

The 51ma12 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\Config. 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\Config\emawebnport_hf.xml"
-Dconfig.dir="c:\SAS\MA51Plan" -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.

5.2: Deployment of the SAS Campaign Web Studio war

If you are deploying to **BEA WebLogic**, please now follow the instructions under section 5.2.1: Deployment Instructions for BEA WebLogic.

If you are deploying to **IBM WebSphere**, please now follow the instructions under section 5.2.2: Deployment Instructions for IBM WebSphere.

5.2.1: 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.
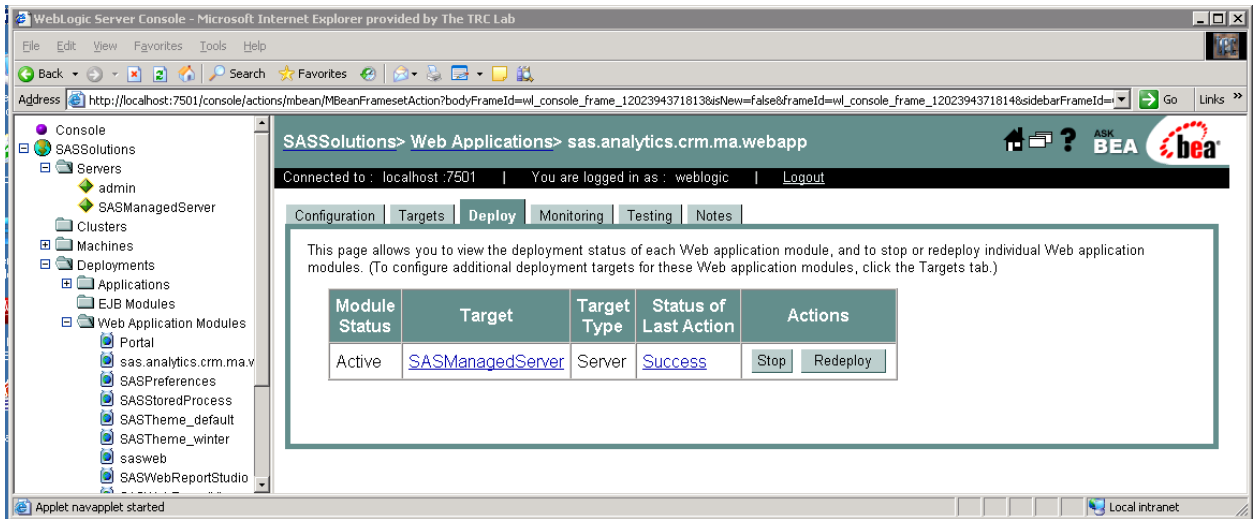
_____ **Weblogic Campaign Web Studio Deployed**

This completes the application server deployment of the hot fix to Weblogic. Please now skip to section 6.

5.2.2: Deployment Instructions for IBM WebSphere.

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

- Navigate to *Applications->Enterprise Applications*
- Select the *Stop* button to stop sas_analytics_crm_ma_webapp_war
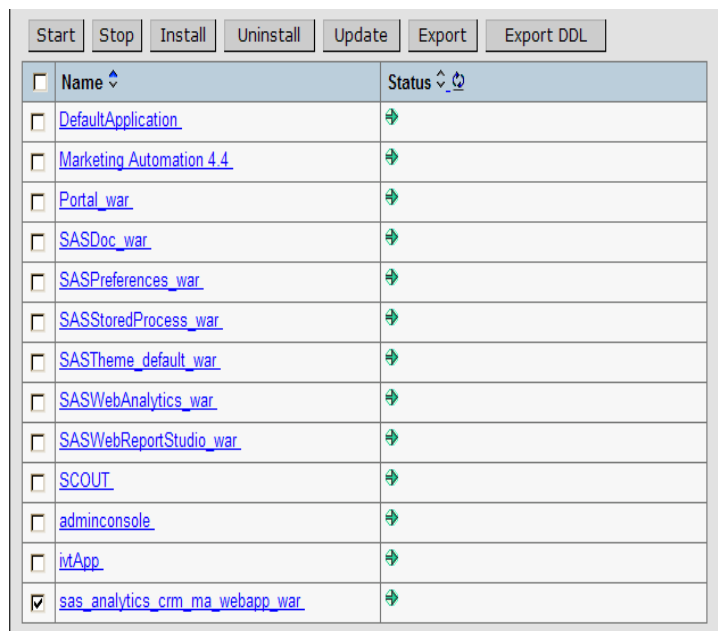
- Select the *update* button to update sas_analytics_crm_ma_webapp
- On the next screen, fill in the path to the sas.analytics.crm.ma.webapp_war file (`<config_dir>`\Lev1\web\webapps)

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- 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:	ⓘ 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.
	○ Local path: [ ] Browse...	
	◉ Server path: \\applications\sas_analytics	
Context Root:	Used only for standalone Web modules (*.war)	ⓘ You must specify a context root if the module being installed is a WAR module.
	ma	

[Next] [Cancel]

*

- Choose Next
- Choose Next
- 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]

- Select *Step 4 Summary*
- Finish
- Save
- Navigate to Applications->Enterprise Applications
- Select *sas_analytics_crm_ma_webapp_war* check box
- Select *Start* button

____ Websphere Campaign Web Studio Deployed

6: Installing 51ma12 Hot Fix on the SAS Compute Server

The 51ma12 hotfix contains files for the Marketing Automation Server Tier. An installer will have been downloaded to the server on which SAS Foundation resides (The SAS Compute Server) into the directory C:\51ma12.

Click on the 51mktauto11wn.exe to install the hotfix. Once the hotfix installer has finished, check that the following files have been updated.

<SAS Install Dir>\SAS_9.1\ma\cmacros\sasmacr.sas7bcat   new date of 3/26/2008
<SAS Install Dir>\SAS_9.1\ma\sasstp\ma_cdi_update_ch.sas   new date of 5/28/2008
<SAS Install Dir>\SAS_9.1\ma\sasstp\ma_cdi_update_rh.sas   new date of 4/1/2008

<SAS Install Dir>\SAS_9.1\ma\sasmisc\mapublish.map new date of 10/22/2008 needs to be copied to the MAMisc folder. To know the location of this folder open the file <Config Dir>\Lev1\SASMain\appserver_autoexec.sas. Copy the mapublish.map to the path specified in the line : "libname MAMisc '..\MAMisc';" (default location: <Config Dir>\Lev1\SASMain\Data\MAMisc).

___ SAS Compute Server updated

7: Common Data Model DDL and Alter Scripts

Released Version DDL and Alter Scripts

SAS Customer Intelligence is delivered with Data Description Language (DDL) scripts to be used at installation time to create the SAS Customer Intelligence reporting Common Data Model on the underlying database. (C:\Program Files\SAS\SAS 9.1\ma\sasmisc\ciddlxxx.sas)

The scripts that accompany the 5.1 release of Customer Intelligence do not include any changes introduced by subsequent hot-fixes. These updates have been provided through 'alter' DDL scripts that accompany the hot-fixes.

New customer sites that have not configured the Common Data Model should refer to the product documentation on how to configure the common data model for the first time. Then create it before running any of the alter DDL scripts. The alter scripts must then be applied in sequence following successful creation and configuration of the Common Data Model tables.

If you already have hot fixes applied then please skip to the hot fix after the latest you have installed.
All DDL scripts are installed to C:\Program Files\SAS\SAS 9.1\ma\sasmisc

51MA01 Hot Fix

The Customer Intelligence hot-fix (51MA01) introduced alter scripts to modify the key of the CI_RESPONSE_HISTORY table and to add a new column to the CI_CAMPAIGN table: CAMPAIGN_FOLDER_TXT. These scripts are designed to alter a Customer Intelligence 5.1 Common Data Model that has already been installed using the DDL that was shipped with the Customer Intelligence 5.1 release. The following files are provided by the service-pack in the C:\Program Files\SAS\SAS 9.1\ma\sasmisc location

	File	Supported DB
1	cia01ora.sas	Oracle
2	cia01db2.sas	DB2
3	cia01trd.sas	Teradata
4	cia01sqs.sas	SQL Server
5	cia01spd.sas	SPDS

Appendix A: of this document provides specific guidance on how to apply the 51MA01 alter scripts.

51MA02 Hot Fix

The Customer Intelligence hot-fix (51MA02) introduced a new DDL script for support of the Netezza database platform. The script comprised a full DDL that can be used to create the physical data structures for the Common Data Model tables on Netezza. The script included changes and updates that were introduced in 51MA01 so no additional alter script is required for Netezza. The file is named as follows:

	File	Supported DB
6	ciddlntz.sas	Netezza

If you have already installed the 51ma01 hot fix and are not using Netezza as your database then this

script need not be run

51ma12 Hot Fix

The 51ma12 hot fix contains a second set of alter scripts one for each supported platform as well as introducing a new DDL script for support of the Neoview database platform and an update to the Netezza DDL.

The alter scripts provide updates to add five new budget columns to the CI_COMMUNICATION table.

Again, these scripts are designed to alter a Customer Intelligence 5.1 Common Data Model that has already been installed using the DDL that was shipped with the Customer Intelligence 5.1. These scripts should only be applied after the scripts from 51MA01 have been applied. The second set of alter script files are named as follows:

	File	Supported DB
1	cia02ora.sas	Oracle
2	cia02db2.sas	DB2
3	cia02trd.sas	Teradata
4	cia02sqs.sas	SQL Server
5	cia02spd.sas	SPDS

The full Netezza DDL discussed under the 51MA02 hot fix has been superseded the new versions incorporates changes needed in 51ma12

A new DDL was added to support Neoview.

Customers who wish to use the Common Data Model with either Netezza or Neoview should refer to the product documentation on how to configure the common data model for the first time and apply these scripts accordingly. No alter scripts are provided for these two database platforms.

The Netezza and Neoview DDL scripts are named as follows:

	File	Supported DB
6	ciddlntz.sas	Netezza
7	ciddlneo.sas	Neoview

Appendix A: Instructions for applying changes to the Common Data Model

The 51ma01 hotfix has supplied Alter DDL scripts for the Customer Intelligence 5.1 Common Data Model. New customer sites that have not configured the Common Data Model should refer to the product documentation on how to configure the common data model for the first time before running the Alter DDL scripts.

The hot fix delivers Alter table DDL to modify the key of the CI_RESPONSE_HISTORY table and to add a new column to the CI_CAMPAIGN table: CAMPAIGN_FOLDER_TXT. These Alter Table DDLs will alter a Customer Intelligence 5.1 Common Data Model that has already been installed using the DDL that was shipped with the Customer Intelligence 5.1 product. The following files are downloaded with the hotfix.

Oracle DDL: cia01ora

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DB2 DDL: cia01db2
SQL Server DDL: cia01sqs
SPD Server DDL: cia01spd
Teradata DDL: cia01trd

PLEASE NOTE: Prior to running any Alter table DDL, you must apply an update to the data in your CI_RESPONSE_HISTORY table(s). The primary key is being changed to add two columns: TREATMENT_SK and CELL_PACKAGE_SK. TREATMENT_SK was delivered in the original DDL script with a setting of "NULL". TREATMENT_SK will now be set to "NOT NULL" to comply with the requirements of being a member of the primary key. All rows of data that contain a null value in the TREATMENT_SK column must be updated to a 'NOT NULL" value (-1).

Sample code to update TREATMENT_SK in the CI_RESPONSE_HISTORY table:

```
PROC SQL;
UPDATE <YOUR CI_RESPONSE_HISTORY TABLE>
 SET TREATMENT_SK = -1
   WHERE TREATMENT_SK IS NULL;
QUIT;
```

Overall code changes required before executing the DDL scripts:

1. If the CI_RESPONSE_HISTORY table was renamed when initially created, to allow for multiple subjects or business contexts, rename the table specified in the alter table statements to match the table created by your install.

2. If the CONSTRAINT names were renamed when initially created to allow for multiple subjects or business contexts, rename the constraint names in the alter table statements to match the constraints created by your install.

3. Modify the SUBJECT_ID column in the list of primary key columns in the execute statement, to match the modifications that were made when the table was initially created. The SUBJECT_ID column was a placeholder column name in the original CI 5.1 CI_RESPONSE_HISTORY DDL and should have been modified with key columns to a customer specific subject.

4. If multiple CI_RESPONSE_HISTORY tables were created to accommodate multiple subjects and business contexts, copy and repeat all EXECUTE statements that contain the alter table code. Make the changes listed in 1, 2 and 3 above to each set of alter table code for each Response History table that you have uniquely created in your schema.

   *** This completes the changes to CI_RESPONSE_HISTORY ***

Install specifics for Teradata customers:

Since the change to the CI_RESPONSE_HISTORY table requires a change to the primary key of the table, the above alter table instructions do not apply to Teradata. Teradata will not allow a primary key to be dropped and dropping the key is necessary to accomplish this modification to the table.

Prior to running the supplied Teradata code, perform the following tasks:

- If data exists in your CI_RESPONSE_HISTORY table, save the data to another table. This hot fix requires deletion of the CI_RESPONSE_HISTORY table, so saving the data is essential.

- Drop the existing CI_RESPONSE_HISTORY table.

Make the following changes to the supplied code for the CI_RESPONSE_HISTORY table:

1. If the CI_RESPONSE_HISTORY table was renamed when initially created to allow for multiple subjects or business contexts, rename the table specified in the create table statements to match the table created by your install.

2. If the primary key constraint name was renamed when initially created to allow for multiple subjects or business contexts, rename the constraint name in the create table code statements to match the constraints created by your install.

3. Modify the SUBJECT_ID column in the list of primary key columns in the execute statement, to match the modifications that were made when the table was initially created. The SUBJECT_ID column was a placeholder column name in the original CI 5.1 CI_RESPONSE_HISTORY DDL and should have been modified with key columns to a customer specific subject.

4. If multiple CI_RESPONSE_HISTORY tables were created to accommodate multiple subjects and business contexts, copy and repeat all EXECUTE statements that contain the create table code. Make the changes listed in 1, 2 and 3 above to each set of create table code for each Response History table that you have uniquely created in your schema.

5. Reload the saved data from your existing CI_RESPONSE_HISTORY table to the newly created CI_RESPONSE_HISTORY table.

   *** This completes the changes to the CI_RESPONSE_HISTORY table. ***

Install specifics for DB2 customers:

The DB2 Alter table code has to be run in two passes. First make the changes listed above in the section titled: **Overall code changes required before executing the DDL scripts**. Next, after the primary key is dropped and the TREATMENT_SK column in the CI_RESPONSE_HISTORY table has been set to NULL in the first section of SQL code, you must have your DBA *REORG* the CI_RESPONSE_HISTORY table. This is a DB2 requirement and you cannot continue until this is done!

   After your DBA has run the *REORG* on the CI_RESPONSE_HISTORY table, you must un-comment the final set of Proc SQL code statements provided in the last section of the DDL script and run only this SQL code to create the new primary key on the CI_RESPONSE_HISTORY table. This completes the changes to your DB2 CI_RESPONSE_HISTORY table.