

SAS® IT Resource Management

Windows Installation Instructions for Hot Fix 311is04

Introduction

This document describes the steps necessary to install and deploy the SAS IT Resource Management 3.1.1 hot fix Release 311is04 for the Windows environment. Prior to installing hot fix 311is04, SAS IT Resource Management 3.1.1 sites must follow the steps listed in [SAS Note 30753](#).

Please take a moment to read through this entire document before beginning the install of this hot fix. There are five installation steps to this hot fix that must be completed:

1. **Create the appropriate backups**
2. **Extract the four components from the hot fix package**
3. **Install the individual components that apply to your system**
4. **Deploy or Migrate SAS IT Resource Management Metadata**
5. **Existing SAS IT Resource Management sites must redeploy (a.k.a schedule) all SAS IT Resource Management jobs using SAS Data Integration Studio.**

The hot fix 311is04 addresses the issue(s) in Release 3.1.1 of SAS IT Resource Management software on Windows as documented in the "Issue(s) Addressed" section of the hot fix download page:

<http://ftp.sas.com/techsup/download/hotfix/itrm311.html#311is04>

Note: Before installing this hot fix, make sure that the "last updated" date found at the end of this document matches the date of the copy of the 311IS04wn.pdf document found on the download page.

IMPORTANT NOTES:

1. You must have SAS IT Resource Management 3.1.1 installed on your system before applying this hot fix.
2. You must have Administrator Privileges on your CLIENT or SERVER machine.
3. All currently active SAS sessions, daemons, spawners and servers must be terminated before applying this hot fix. Once the hot fix has been installed, the appropriate servers should be restarted.
4. Applying Hot Fix 311IS04 or later might cause an increase in WORK library disk space in SAS IT Resource Management - see Usage Note [34440](#).
5. **Existing SAS IT Resource Management sites only:** sites must redeploy all existing SAS IT Resource Management jobs after applying this hot fix. By default, this hot fix will cause the SAS IT Resource Management jobs to rebuild the information maps that already exist. Because rebuilding the information maps is not required as part of this hot fix implementation, the following SAS statement can be placed at the top of each aggregation job that does not require the information maps to be rebuilt:
`%LET SKIPINFOMAPS=YES;`

Any future modifications to the aggregation job will require that the job be redeployed. As a result of the redeploying the job, this line will not be generated because it will require that the information maps be regenerated.

ATTENTION:

A portion of the content that is being delivered with 311is04 changes the way that metadata is deployed for SAS IT Resource Management. In the event that you need to create a new ITMS repository (or reinitialize your existing ITMS repository) you should follow the deployment steps as specified for the new installation of SAS IT Resource Management.

If you are performing a new installation of SAS IT Resource Management:

You will need to apply this hot fix prior to completing your installation. As a result of software updates provided with this hot fix, you will need to follow a different process to deploy the “Required” and “Adapters” metadata for SAS IT Resource Management. Previously you would follow the steps in the instructions.html document to create the ITMS repository, deploy the Required metadata, and deploy the metadata for the individual Adapter(s). With the application of this hot fix you should STOP following the SAS IT Resource Management specific steps in the instructions.html document AFTER you complete the step entitled “Create the ITMS Repository”. You will deploy both Required and Adapter metadata using the deployITRM_win.bat script as specified in the instructions at the end of this hot fix document. Upon completing the installation of this hot fix, you should return to your instructions.html document and continue with any remaining steps following the section entitled “Load SAS IT Resource Management Metadata”.

If you are applying this hot fix to an existing installation of SAS IT Resource Management:

You will need to invoke the deployITRM_win.bat script to migrate your existing ITMS repository to the hot fix release version (3.1.1.4).

Installation Details

1. Create the appropriate backups

Technical Support strongly suggests that you back up the files being replaced by this hot fix. You should always try to include the current date in the name of the backup file created to distinguish between versions of backup files. By doing this you will maintain a history of the file, which will be helpful when multiple iterations of a hot fix have been applied to the same file.

*** IMPORTANT NOTE: For the jar files, these backups must be created in a directory other than the directory in which the original file resides.

For example, copy the file

```
c:\foo\sas.foo.jar
```

to

```
c:\foo_backup\sas.foo.jar.07012006
```

where 07012006 is the date when the hot fix is applied.

The <date> extension MUST be appended AFTER the .jar extension as it appears above.

1.1 Backing up client components

The files that should be backed up for this hot fix that are contained in the client updates in the itmsscore and itmclient components:

C:\Program Files\SAS\SASETLStudio\9.1\sas.solutions.itms.common.jar
C:\Program Files\SAS\SASETLStudio\9.1\sas.solutions.itms.logical.jar
C:\Program Files\SAS\SASETLStudio\9.1\sas.solutions.itms.omil.jar
C:\Program Files\SAS\SASETLStudio\9.1\plugins\sas.solutions.itms.sdisplugins.jar
C:\Program Files\SAS\SASETLStudio\9.1\plugins\sas.solutions.itrm.sdisplugins.jar

1.2 Relocating the server-side jar file backup

The server updates contained in the itmssmvadata install will be automatically backed up and so do not require you to manually back up any server components. However, be sure to use the recommendations above for the jar file backup process and move the backup that is automatically created for

<SASHOME>\itmssmvadata\sasmisc\sas.solutions.itms.omil.jar

(named sas.solutions.itms.omil.jar.### where ### is 000, 001, etc) to a different directory.

2. Extract the four components from the hot fix package

The hot fix package downloaded is a self extracting executable named 311is04wn.exe. Launching the executable will extract four components into c:\311is04, as follows:

311is04itmsscorewn.exe - contains updates to the SAS IT Management Solutions Core Components client
311is04itmclientwn.exe - contains updates to the ITRM client
311is04itmssdatatierwn.exe - contains updates to the ITRM metadata server
311is04itmssmvadatawn.exe - contains updates to the ITRM server

3. Install the individual components that apply to your system.

Follow the instructions in each section below to install each of the four components of hot fix 311IS04.

3.1.1 Installing Updates to the SAS IT Management Solutions Core Components Client -- 311is04itmsscorewn.exe

Run 311is04itmsscorewn.exe on the machine where the SAS IT Management Solutions Core Components client is installed (this may require copying the file to the appropriate machine). Launching this executable will initiate the install wizard, which will guide you through the setup process. The following files will be installed:

C:\Program Files\SAS\SASETLStudio\9.1\sas.solutions.itms.common.jar
C:\Program Files\SAS\SASETLStudio\9.1\sas.solutions.itms.logical.jar
C:\Program Files\SAS\SASETLStudio\9.1\sas.solutions.itms.omil.jar
C:\Program Files\SAS\SASETLStudio\9.1\plugins\sas.solutions.itms.sdisplugins.jar
C:\Program Files\SAS\SASETLStudio\9.1\LogicalTypes.config

NOTE: This component must be updated on **EVERY** client machine that is being used.

3.1.2 Installing Updates to the SAS IT Resource Management Client -- 311is04itrmclientwn.exe

Run 311is04itrmclientwn.exe on the machine where the SAS ITRM client is installed (this may require copying the file to the appropriate machine). Launching this executable will initiate the install wizard, which will guide you through the setup process. The following file will be installed:

C:\Program Files\SAS\SASETLStudio\9.1\plugins\sas.solutions.itrm.sdisplugins.jar

NOTE: This component must be updated on **EVERY** client machine that is being used.

Sections 3.1.1 and 3.1.2 complete the installation of the client portion of hot fix 311is04 on Windows. Proceed with the following steps if your SAS IT Resource Management server is in a Windows environment.

3.2 Installing Updates to the SAS IT Management Solutions Core Components Data Tier -- 311is04itmsdatatierwn.exe

This step is performed on the machine where the SAS ITRM metadata server is installed.

There are three steps to this portion of the hot fix that must all be completed:

- 1) Back up your existing directories
- 2) Extraction of the updates to the SAS IT Resource Management 3.1.1 itmsdatatier Component
- 3) Copying the updated content to the appropriate target locations

You should be logged in to the server hosting your SAS ITRM Metadata Server using the same userid as was used for the original installation. Failure to do so may result in errors due to file system permission limitations.

In the directions below, there are references to different directory locations. In general, these directories are located as follows:

<Utilities directory>, this should be similar to C:\SAS\ITRM\Lev1\Utilities
<SAS install directory>, this should be similar to C:\Program Files\SAS

3.2.1 Backup your existing directories

Prior to copying any new content into any of the directories listed above, you should backup the existing content. You should select a non-temporary location on your file system for these backups to be written to. To do this, use a file archive/compression program such as WinZip.

Change directory to your "Utilities directory"

Archive/compress the SASITMSCoreComponents directory to a backup file such as:

<backup location>/UtilDir_SASITMSCoreComponents_pre-311is04.zip.

Change directory to your "SAS install directory"

Archive/compress the SASITMSCoreComponents directory to a backup file such as:

<backup location>/InstallDir_SASITMSCoreComponents_pre-311is04.zip.

3.2.2 Run 311is04itmsdatatierwn.exe on the machine where the SAS ITRM server is installed (this may require copying the file to the appropriate machine). Launching this executable will install the following files in c:\311is04\itmsdatatier:

```
deployITRM_win.bat
ExtractDeploy.jar
sas.solutions.itms.omil.jar
```

3.2.3 Copy the files from the extracted location

You will need to copy the new files that have been extracted to your utilities and installation locations.

- a) Copy the file deployITRM_win.bat from:

```
c:\311is04\itmsdatatier\
```

to your user home directory. Typically:

```
C:\Documents and Settings\
```

- b) Copy the file ExtractDeploy.jar from:

```
c:\311is04\itmsdatatier\
```

to:

```
<SAS install directory>\SASITMSCoreComponents\3.1\DataTier\Utilities
and
<Utilities directory>\SASITMSCoreComponents\Utilities
```

- c) Copy the file sas.solutions.itms.omil.jar from:

```
c:\311is04\itmsdatatier\
```

to:

```
<SAS install directory>\SASITMSCoreComponents\3.1\DataTier\Java
and
<Utilities directory>\SASITMSCoreComponents\Java
```

Using the updated Extract/Deploy functionality for moving IT data marts after installation

Originally provided as a means of moving an IT data mart from one release to another, the functionality contained in the ExtractDeploy.jar file can be used to move an IT data mart between repositories for the same release. If you need to move IT data marts after the successful completion of this hot fix installation, you can find the documentation for this feature [here](#).

3.3 Installing Updates to the SAS IT Management Solutions Core Components MVA Data -- 311is04itmsmvadatawn.exe

Run 311is04itmsmvadatawn.exe on the machine where the SAS ITRM server is installed (this may require copying the file to the appropriate machine). Launching this executable will initiate

the install wizard, which will guide you through the setup process. The following files will be installed with the respective modified dates:

<!SASHOME>\itmsmvadata\sasmacro\rmaplhf.sas	12/05/2008
<!SASHOME>\itmsmvadata\sasmacro\rmdplmd.sas	12/05/2008
<!SASHOME>\itmsmvadata\sasmacro\rmpdb2dm.sas	12/05/2008
<!SASHOME>\itmsmvadata\sasmacro\rmpurgdm.sas	12/05/2008
<!SASHOME>\itmsmvadata\sasmacro\rmssetftr.sas	12/05/2008
<!SASHOME>\itmsmvadata\sasmacro\rmverchk.sas	12/05/2008
<!SASHOME>\itmsmvadata\sasmacro\rmvinst.sas	12/05/2008
<!SASHOME>\itmsmvadata\sashelp\itms.sas7bcat	12/03/2008
<!SASHOME>\itmsmvadata\sashelp\itms_formats.sas7bcat	12/03/2008
<!SASHOME>\itmsmvadata\sashelp\itms_msg.sas7bdat	12/03/2008
<!SASHOME>\itmsmvadata\sashelp\itms_msg.sas7bndx	12/03/2008
<!SASHOME>\itmsmvadata\sasmisc\ITRMExch.DCS	12/05/2008
<!SASHOME>\itmsmvadata\sasmisc\ITRMSrvr.DCS	12/05/2008
<!SASHOME>\itmsmvadata\sasmisc\sas.solutions.itms.omil.jar	12/03/2008

4. Deploy or Migrate SAS IT Resource Management Metadata

You should be logged into the machine hosting your SAS ITRM metadata server using the same userid that was used for both your original installation and for your hot fix installation.

In the Introduction section of this document, you were directed to terminate all SAS servers. You will now need to restart your metadata server before proceeding with the steps in one of the following sections.

Note that the steps below differ depending on your installation scenario. The first section is for performing a new installation and the second is for updating an existing installation.

If you have an existing IT Resource Management installation and need to create a new ITMS repository, or reinitialize your existing ITMS repository, you should follow the deployment steps as if you are performing a new installation of SAS IT Resource Management.

- **If you have applied this hot fix as part of a NEW installation of SAS IT Resource Management:**

You should modify the deployITRM_win.bat script that you copied to your user's home directory in step 3.3.3. The required changes are listed in the script file, and are reiterated below.

You must assign values to the following variables by providing the appropriate site specific information to the right of the equal sign:

DACTION	initialize (since in this scenario you want to initialize a new ITMS repository)
DSERVER	server hosting the MetadataServer (ie. server.domain.company.com)
DPORT	port that the MetadataServer is listening on
DUSER	userid to connect and perform desired action with (ie. sasadm)
DPASS	appropriate password for specified DUSER
SAS_ROOT	the path to the SAS executable (ie. C:\Program Files\SAS\SAS 9.1)

In addition, if you do not have a JAVA_HOME environment variable already specified, you should uncomment (by removing the string "rem") the line:

```
rem set JAVA_HOME=
```

and supply a valid path. This should be something similar to C:\j2sdk1.4.2_09, but do not include "bin" as part of the path.

Once you have completed the modifications to the deployITRM_win.bat script, you should open a command prompt window and change directory to the location containing that file.

Submit the deployITRM_win.bat file by typing its name in the command prompt window:

```
C:\Homedir>deployITRM_win.bat
```

During the execution of this script you should see the following messages output to your command prompt window:

```
=== Starting action: initialize

=== Getting ITMSFactory
ITMSFactory initialized at <date/time>

=== Acquired ITMSFactory: com.sas.solutions.itms.omil.ITMSFactory@<Factory ID>

Beginning to deploy metadata to the ITMS repository
Deploying initial ITMS metadata.
Completed deploying initial ITMS metadata.
Deploying All ITMS Adapters.
Completed deploying all ITMS Adapters.
Refreshing Metadata Server.
Server has been paused.
Server has been resumed.
Completed refresh of Metadata Server.

=== Completed run with result:
Completed initialization of the ITMS repository

=== Disposing ITMSFactory: com.sas.solutions.itms.omil.ITMSFactory@<Factory ID>

=== ITMSFactory has been disposed.
```

- **If you have applied this hot fix to an EXISTING installation of SAS IT Resource Management:**

You should modify the deployITRM_win.bat script that you copied to your user's home directory in step 3.3.3. You will use this script to migrate your existing ITMS repository to version 3.1.1.4. The required changes are listed in the script file, and are reiterated below.

You must assign values to the following variables by providing the appropriate site specific information to the right of the equal sign:

DACTION	hotfix (since in this scenario you want to apply the 311is04 hot fix to an existing ITMS repository)
DSERVER	server hosting the MetadataServer (ie. server.domain.company.com)
DPORT	port that the MetadataServer is listening on
DUSER	userid to connect and perform desired action with (ie. sasadm)
DPASS	appropriate password for specified DUSER
SAS_ROOT	the path to the SAS executable (ie. C:\Program Files\SAS\SAS 9.1)

In addition, if you do not have a JAVA_HOME environment variable already specified, you should uncomment (by removing the string "rem") the line:

```
rem set JAVA_HOME=
```

and supply a valid path. This should be something similar to C:\j2sdk1.4.2_09, but do not include "bin" as part of the path.

Once you have completed the modifications to the deployITRM_win.bat script, you should open a command prompt window and change directory to the location containing that file.

Submit the deployITRM_win.bat file by typing its name in the command prompt window:

```
C:\Homedir>deployITRM_win.bat[Enter]
```

During the execution of this script you should see messages similar to the following output to your command prompt window:

If you are applying this hot fix to an ITRM installation that previously had hot fix 311IS03 applied

```
=== Starting action: hotfix

=== Getting ITMSFactory
ITMSFactory initialized at <date/time>

=== Acquired ITMSFactory: com.sas.solutions.itms.omil.ITMSFactory@<Factory ID>

Beginning to migrate ITMS repository from 311IS03 to 311IS04
Deploying new 311IS04 metadata.
Completed deploying new 311IS04 metadata.
Modifying ITRM SoftwareComponent for 3.1.1.4.
SoftwareComponent version has been changed to 3.1.1.4.20080920.03114
Completed modifying ITRM SoftwareComponent.
Refreshing Metadata Server.
```


Server has been paused.
Server has been resumed.
Completed refresh of Metadata Server.
Completed migration of ITMS repository from 311IS03 to 311IS04

=== Completed run with result:
Upgraded from version 3.1.1.3 to 3.1.1.4.

=== Disposing ITMSFactory: com.sas.solutions.itms.omil.ITMSFactory@<Factory ID>

=== ITMSFactory has been disposed.

If you are applying this hot fix to an ITRM installation that did not have hot fix 311IS03 applied

=== Starting action: hotfix

=== Getting ITMSFactory
ITMSFactory initialized at <date/time>

=== Acquired ITMSFactory: com.sas.solutions.itms.omil.ITMSFactory@<Factory ID>

Beginning to migrate ITMS repository from 311 to 311IS03
Tag existing Staged Tables for reconnection later.
Retrieving existing Staged Tables
Associating deployment keyword with Staged Tables
NO previously tagged Staged Tables found.
Tagged <number of> Staged Tables for reconnection.
Refreshing Metadata Server.
Server has been paused.
Server has been resumed.
Completed refresh of Metadata Server.
Identifying TableCollections to delete.
TableCollections have been deleted.
Refreshing Metadata Server.
Server has been paused.
Server has been resumed.
Completed refresh of Metadata Server.
Deleting existing Adapters.

The following is repeated for each Adapter that the existing ITMS repository contains:

Deleting Adapter <Name>
Adapter was deleted = true
Refreshing Metadata Server.
Server has been paused.
Server has been resumed.
Completed refresh of Metadata Server.

Modifying existing ITMS repository for 3.1.1.3.
Deleted previous version Adapter SC = true
Completed modifying existing ITMS repository.
Deploying new 311IS03 metadata.
Completed deploying new 311IS03 metadata.
Deploying All ITMS Adapters.
Completed deploying all ITMS Adapters.
Reconnecting Staged Tables.
Found <number of> deployment specific metadata items.
Reconnected <number of> Staged Tables with their TemplateTableXML.
Refreshing Metadata Server.
Server has been paused.
Server has been resumed.
Completed refresh of Metadata Server.
Modifying ITRM SoftwareComponent for 3.1.1.3.
SoftwareComponent version has been changed to 3.1.1.3.20080204.03113
Completed modifying ITRM SoftwareComponent.
Refreshing Metadata Server.
Server has been paused.

```
Server has been resumed.  
Completed refresh of Metadata Server.  
Completed migration of ITMS repository from 311 to 311IS03
```

```
=== Completed run with result:  
Upgraded from version 3.1.1.0 to 3.1.1.3.
```

```
Beginning to migrate ITMS repository from 311IS03 to 311IS04  
311IS04 metadata has already been deployed - will not redeploy updates.  
Modifying ITRM SoftwareComponent for 3.1.1.4.  
SoftwareComponent version has been changed to 3.1.1.4.20080920.03114  
Completed modifying ITRM SoftwareComponent.  
Refreshing Metadata Server.  
Server has been paused.  
Server has been resumed.  
Completed refresh of Metadata Server.  
Completed migration of ITMS repository from 311IS03 to 311IS04
```

```
=== Completed run with result:  
Upgraded from version 3.1.1.3 to 3.1.1.4.
```

```
=== Disposing ITMSFactory: com.sas.solutions.itms.omil.ITMSFactory@c980c9
```

```
=== ITMSFactory has been disposed.
```

The amount of time to complete a migration operation will depend on how many and which Adapters have been deployed to the existing 3.1.1 ITMS repository.

5. Existing SAS IT Resource Management sites must redeploy (a.k.a schedule) all SAS IT Resource Management jobs using SAS Data Integration Studio.

Existing SAS IT Resource Management sites must redeploy all existing SAS IT Resource Management jobs after applying this hot fix. By default, this hot fix will cause the SAS IT Resource Management jobs to rebuild the information maps that already exist. Because rebuilding the information maps is not required as part of this hot fix implementation, the following SAS statement can be placed at the top of each aggregation job that does not require the information maps to be rebuilt:

```
%LET SKIPINFOMAPS=YES;
```

Any future modifications to the aggregation job will require that the job be redeployed. As a result of the redeploying the job, this line will not be generated because it will require that the information maps be regenerated.

This completes the installation of hot fix 311is04 on Windows.

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