

SAS® IT Resource Management

Solaris 64 Bit 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 Solaris 64 bit 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 for this hot fix. There are five installation steps to this hot fix that must be completed:

1. **Extract the two components from the hot fix package**
2. **Install the individual components that apply to your system**
3. **Deploy or Migrate SAS IT Resource Management Metadata**
4. **Install the client portion of the Windows hot fix**
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 Solaris 64 bit 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 311IS04s6.pdf document found on the download page.

IMPORTANT NOTES:

- You must have SAS IT Resource Management 3.1.1 installed on your system before applying this hot fix.
- You must have Administrator Privileges on your CLIENT or SERVER machine.
- 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.
- The instructions below assume that SAS 9.1.3 (9.1 TS1M3) is installed in /usr/lib/sas913. If you have installed SAS 9.1.3 in a different location, you will need to modify the paths below.
- This download is intended for customers running a Solaris 64 bit server.
- To install the Windows client updates, you must download the Windows version of this hot fix and install the appropriate client pieces on your Windows system.
- Applying Hot Fix 311IS04 or later might cause an increase in WORK library disk space in SAS IT Resource Management - see Usage Note [34440](#).
- **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_unx.sh 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_unx.sh script to migrate your existing ITMS repository to the hot fix release version (3.1.1.4).

Installation Details

1. Extract the two components from the hot fix package

The hot fix package downloaded is a compressed tar file named 311is04s6.tar. Download this file to the user's root directory. Uncompress the tar file with this command:

```
$> cd ~  
$> tar -xf 311is04s6.tar
```

This will extract two components to the user's 311is04 subdirectory:

1. 311is04itmsdatatiers6.tar.Z - contains updates to the ITRM metadata server
2. 311is04itmsmvadatas6.tar.Z - contains updates to the ITRM server

Please note:

This download is intended for customers running a Solaris 64 bit server. To install the Windows client updates, you must download the Windows version of this hot fix and install the appropriate client pieces on your Windows system.

2. Install the individual components that apply to your system

Installing 311is04itmsdatatiers6.tar.Z

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 be completed:

- 1) Backup 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 /usr/SAS/ITRM/Lev1/Utilities
 <SAS install directory>, this should be similar to /usr/SAS

2.1.1 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 the tar command as follows:

Change directory to your Utilities directory and issue the following tar command:

```
tar -cvf <backup location>/UtilDir_SASITMSCoreComponents_pre-311is04.tar SASITMSCoreComponents
```

Change directory to your SAS install directory and issue the following tar command:

```
tar -cvf <backup location>/InstallDir_SASITMSCoreComponents_pre-311is04.tar SASITMSCoreComponents
```

2.1.2 Extract the contents from the archive file.

Execute this command to extract the contents of the itmsdatatier package:

```
$> cd ~/311is04
$> uncompress -c 311is04itmsdatatiers6.tar | tar -xf -
```

This will extract the following files into your 311is04/itmsdatatier directory:

```
deployITRM_unx.sh
ExtractDeploy.jar
sas.solutions.itms.omil.jar
```

2.1.3 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_unx.sh from:

311is04/itmsdatatier

to your user home directory. Typically:

/u/<userid>

b) Copy the file ExtractDeploy.jar from:

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:

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](#).

2.2 Installing 311is04itmsmvadatas6.tar.Z

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

2.2.1 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.

For example, copy the file

/usr/lib/sas913/foo/sas.foo.jar

to

/usr/lib/sas913/foo/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.

The files that should be backed up are:

```
<!SASROOT>/sasautos/rmaplhf.sas (note: this will only exist if you previously installed hot fix 311is03)
<!SASROOT>/sasautos/rmdplmd.sas (note: this will only exist if you previously installed hot fix 311is03)
<!SASROOT>/sasautos/rmpdb2dm.sas
<!SASROOT>/sasautos/rmpurgdm.sas
<!SASROOT>/sasautos/rmsetftr.sas
<!SASROOT>/sasautos/rmverchk.sas (note: this will only exist if you previously installed hot fix 311is03)
<!SASROOT>/sasautos/rmvinst.sas (note: this will only exist if you previously installed hot fix 311is02 or
311is03)
<!SASROOT>/misc/itmsmvadata/sas.solutions.itms.omil.jar
```

*** IMPORTANT NOTE: The backup of the jar file must be created in a directory other than the one containing the original version.

2.2.2 Follow these steps to install the package

```
$> cd /usr/lib/sas913
$> uncompress -c $HOME/311is04/311is04itmsmvadatas6.tar | tar -xf -
```

2.2.3 Execute the script that will update the hot fix installation history file

This script MUST be executed from the !SASROOT directory.

```
$> pwd
/usr/lib/sas913
$> install/admin/hotfix/histupd_311is04mva
```

The following files will be installed:

```
<!SASROOT>/sasautos/rmaplhf.sas
<!SASROOT>/sasautos/rmdplmd.sas
<!SASROOT>/sasautos/rmpdb2dm.sas
<!SASROOT>/sasautos/rmpurgdm.sas
<!SASROOT>/sasautos/rmsetftr.sas
<!SASROOT>/sasautos/rmverchk.sas
<!SASROOT>/sasautos/rmvinst.sas
<!SASROOT>/hotfix/sashelp/itms.sas7bcat
<!SASROOT>/hotfix/sashelp/itms_formats.sas7bcat
<!SASROOT>/hotfix/sashelp/itms_msg.sas7bdat
<!SASROOT>/hotfix/sashelp/itms_msg.sas7bndx
<!SASROOT>/misc/itmsmvadata/ITRMExch.DCS
<!SASROOT>/misc/itmsmvadata/ITRMSrvr.DCS
<!SASROOT>/misc/itmsmvadata/sas.solutions.itms.omil.jar
```

3. Deploy or Migrate SAS IT Resource Management Metadata

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

You will need to restart your metadata server before proceeding with the steps in one of the following sections.

Note that the steps 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_unx.sh` script that you copied to your user's home directory in step 2.1.3. 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 installation directory (ie. /usr/sas/SAS_9.1)

In addition, if you have a `JAVA_HOME` environment variable already specified, you should comment (by adding the string "#") to the line:

```
JAVA_HOME=/opt/java1.4
```

otherwise change the value to a valid path. Do not include "bin" as part of the path.

Once you have completed the modifications to the `deployITRM_unx.sh` script, you should submit the script from a command line using the following syntax:

```
./deployITRM_unx.sh
```

During the execution of this script you should see the following messages output to your shell:

```
=== 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_unx.sh` script that you copied to your user's home directory in step 2.1.3. You will use this script to migrate your existing ITMS repository to version 3.1.1.4. The required changes are listed in the 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 installation directory (ie. /usr/sas/SAS_9.1)

In addition, if you have a `JAVA_HOME` environment variable already specified, you should comment (by adding the string "#") to the line:

```
JAVA_HOME=/opt/java1.4
```

otherwise change the value to a valid path. Do not include "bin" as part of the path.

Once you have completed the modifications to the `deployITRM_unx.sh` script, you should submit the script from a command line using the following syntax:

```
./deployITRM_unx.sh
```

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.

4. Install the client portion of the Windows hot fix

To install the Windows client updates, you must download the Windows version of this hot fix and install the appropriate client components on your Windows system(s). In the “Windows Installation Instructions for hot fix 311is04” document, you should review both the introduction and section 1 and perform steps 1.1, 2, 3.1, and 3.2 on each client machine.

Please note:

There are 2 separate client pieces that should be installed: one for the SAS IT Management Solutions Core Components Client and one for the SAS IT Resource Management Client.

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 Solaris 64 bit.

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