

# Installation Instructions for Hot Fix K02004

## Linux for x64

|   |    |
|---|----|
| Foreward.....   | 2  |
| Pre-requisites.....   | 2  |
| Important Notes .....   | 2  |
| Installation .....  | 5  |
| Log in as administrator .....   | 5  |
| Make backups.....   | 5  |
| Stop SAS servers.....   | 5  |
| Install Risk Dimensions Hotfix.....   | 5  |
| Install Risk Management for Insurance ICF .....   | 5  |
| Post Installation Instructions .....  | 6  |
| Initial tasks .....   | 6  |
| Remove erroneous files .....  | 6  |
| Run copy scripts.....   | 6  |
| Restart SAS servers .....   | 7  |
| J71005 for SAS Detail Data Store for Insurance 5.5 .....                                      | 7  |
| Import SPK files.....   | 7  |
| Import updated analysis.spk file for Firmwide Risk Server 2.12.....                           | 7  |
| Import updated configuration.spk file for Firmwide Risk Server 2.12 .....                     | 8  |
| Import updated analysis.spk for Life Risk Server 2.12 .....                                   | 8  |
| Import updated analysis.spk for Market Risk Server 2.12 .....                                 | 9  |
| Import updated analysis.spk for Property Casual Risk Server 2.12 .....                        | 9  |
| Import updated reports.spk for the RMI Common Server component.....                           | 10 |
| Import updated system.spk for the RMI Common Server component .....                           | 10 |
| Import updated utilities.spk for the RMI Common Server component.....                         | 11 |
| Import updated rmi_etl_bridge_212_hf4.spk for the RMI Solution Data Mart (SDM) ETL jobs ..... | 12 |
| Regenerate the Solution Data Mart (SDM) .....   | 14 |
| Update RMI Staging metadata .....   | 14 |
| Rebuild / Redeploy Web application.....   | 15 |
| Step 1: Re-build Web Application .....  | 15 |
| Step 2: Re-deploy Web Applications.....   | 15 |
| Create Shared Entity Data Mart .....  | 15 |
| K22004 for SAS Risk Reporting Repository for Insurance 2.12 .....                             | 16 |
| Updating via the provided sample data:.....   | 16 |

## Foreward

**K02004** is a "container" hot fix that contains the following "member" hot fixes which will update the software components as indicated.

**J71005** updates **SAS Detail Data Store for Insurance 5.5**

**J98004** updates **SAS Firmwide Risk Management for Insurance Server 2.12**

**J99004** updates **SAS Market Risk Management for Insurance Server 2.12**

**K26004** updates **SAS Risk Management for Insurance Mid-Tier 2.12**

**J97004** updates **SAS Risk Management for Insurance Server 2.12**

**K22004** updates **SAS Risk Reporting Repository for Insurance 2.12**

**K01004** updates **SAS Underwriting Risk Management for Life Insurance Server 2.12**

**K21004** updates **SAS Underwriting Risk Management for P&C Insurance Server 2.12**

**K60001** updates **SAS Risk Dimensions Server Component 5.5**

Before applying this hot fix, follow the instructions in [SAS Note 35968](#) to generate a SAS Deployment Registry report, and then verify that the appropriate product releases are installed on your system. The software components and release numbers should match the list of software components updated by the individual hot fix installers.

The hot fix downloaded, K02004pt.zip, includes the updates required for all components listed above on all applicable operating systems. To apply this hot fix on multiple machines, you can either save K02004pt.zip on each machine or save it in a network location that is accessible to all machines.

Do NOT extract the contents of K02004pt.zip. The hot fix installation process will extract the contents as needed.

### ***Pre-requisites***

Risk Dimensions Hotfix K60001 should be installed (see Installation section)

### ***Important Notes***

1. Configurations and related uncompiled macro files for the following reports will be updated in this install.

|            |              |         |
|------------|--------------|---------|
| ASSETS-D1  | IGT4         | SCR-B3D |
| ASSETS-D1Q | Lapses       | SCR-B3E |
| ASSETS-D1S | MCR-B4A      | SCR-B3G |
| ASSETS-D2O | MCR-B4B      | TP-E1   |
| ASSETS-D2T | OF-B1Q       | TP-E1Q  |
| ASSETS-D3  | P&L          | TP-E2   |
| ASSETS-D4  | RC           | TP-E3   |
| ASSETS-D5  | RE-J1 Basic  | TP-E4   |
| ASSETS-D6  | RE-J1 Shares | TP-E6   |
| BS-C1      | RE-J2 Basic  | TP-E7A  |
| BS-C1D     | RE-J2 Shares | TP-E7B  |
| Country-K1 | RE-J3        | TP-F1   |
| Cover-A1A  | RE-SPV       | TP-F1Q  |
| Cover-A1Q  | REJ2 Group   | TP-F2   |
| DurLiab    | SCR-B2A      | TP-F3   |
| G01        | SCR-B2A_B2C  | TP-F3A  |
| G03        | SCR-B2B      | TP-F3B  |
| G04        | SCR-B2C      | TP-F4   |
| IGT1       | SCR-B3A      | V A-C2A |
| IGT2       | SCR-B3B      | V A-C2B |
| IGT3       | SCR-B3C      | V A-C2C |

2. The following reports from the above list have been migrated to the EIOPA provided CP 11 Final QRT templates:

|            |              |         |
|------------|--------------|---------|
| Assets-D1  | IGT3         | SCR-B3E |
| Assets-D1Q | IGT4         | SCR-B3G |
| Assets-D1S | Lapses       | TP-E1   |
| Assets-D2O | MCR-B4A      | TP-E1Q  |
| Assets-D2T | MCR-B4B      | TP-E2   |
| Assets-D3  | OF-B1Q       | TP-E3   |
| Assets-D4  | P&L          | TP-E4   |
| Assets-D5  | RC           | TP-E7A  |
| Assets-D6  | RE-J1 Basic  | TP-E7B  |
| BS-C1      | RE-J1 Shares | TP-F1   |
| BS-C1D     | RE-J2 Basic  | TP-F1Q  |
| Country-K1 | RE-J2 Group  | TP-F2   |
| Cover-A1A  | RE-J2 Shares | TP-F3   |
| Cover-A1Q  | RE-J3        | TP-F3A  |
| DurLiab    | SCR- B3C     | TP-F3B  |
| G01        | SCR-B2A      | TP-F4   |
| G03        | SCR-B2A_B2C  | V A-C2B |
| G04        | SCR-B2B      | V A-C2C |
| IGT1       | SCR-B2C      |         |
| IGT2       | SCR-B3A      |         |

- The following reports, if already existing on your system will not be available after this install as the reports have been dropped from the CP 11 Final QRT templates by EIOPA. Metadata and configurations for the reports have been removed:

|                |     |         |
|----------------|-----|---------|
| C2_ANALYSIS_LF | G10 | IGT5    |
| C2_ANALYSIS_NL | G15 | IGT6    |
| C2_SUMMARY     | G20 | TP-E5   |
| Cover-A1       | G30 | TP-E7   |
|                |     | V A-C2D |

- Following reports were added / updated in the metadata per CP9 and CP 11 Final EIOPA QRT lists:

|                      |              |
|----------------------|--------------|
| Assets-D1Q           | RE-J1 Basic  |
| Assets-D1S           | RE-J1 Shares |
| Assets-D2O           | RE-J2 Basic  |
| Assets- D2T          | RE-J2 Shares |
| Cover-A1A            | SCR_B2A_B2C  |
| Cover-A1Q            | TP-E7A       |
| Duration liabilities | TP-E7B       |
| Lapses               | V A-C2A      |
| Participations       | V A-C2B      |
| P&L Sharing          | V A-C2C      |

- Stored Process (STP) names and descriptions have been updated in the metadata for a large majority of the reports to align with changes per CP 9 and CP 11 Final EIOPA templates. These updates can be applied to the system by importing reports.spk. Details of the import process are available in the section Import updated .spk files. If you need to retain previous versions of these files, they can be retrieved from backup locations as needed.
- As part of this install, support for XBRL reporting has been added. In order to support this feature, the following new tables have been added to the static directory

Newly added tables:

- XBRL\_COMPLEXTYPE
- XBRL\_COMPLEXTYPE\_ENUMERATION
- XBRL\_DIMENSION
- XBRL\_FACTELEMENTS
- XBRL\_FMT
- XBRL\_REPORT
- XBRL\_SCHEMA

- This hot fix should be installed using the same userid that performed the initial software installation.
- On UNIX systems, you may need to adjust file permissions on all new and updated files to meet with your sites security guidelines.
- Before commencing the installation, do check the the RMI wiki for any post release PU13 updates: <http://smteam.sas.com/psd/rmi/KB/PU13.aspx>
- If you have any questions that you feel are not relevant for [support@sas.com](mailto:support@sas.com) then they can be posted to the RMI questions board: <http://smteam.sas.com/psd/rmi/Lists/g/AllItems.aspx>

## Installation

### *Log in as administrator*

You must have Administrator Privileges on your CLIENT or SERVER machine.

### *Make backups*

- Files delivered in this hot fix will be backed up during the installation process. However, it is good general practice to back up your system before applying updates to software.
- Take backups of all .spk files prior to importing newer versions or making any updates to the contents of an existing .spk file. This can be done by first logging into the SAS Management Console (SMC) using the Administrator (sasadm) user, navigating to the appropriate folder containing metadata and exporting the folder contents to a uniquely named .spk file.

### *Stop SAS servers*

First – terminate all active SAS sessions, daemons, spawners and servers.

### *Install Risk Dimensions Hotfix*

The following hotfix should be applied to update Risk Dimensions:

<http://ftp.sas.com/techsup/download/hotfix/HF2/K60.html#K60001>

### *Install Risk Management for Insurance ICF*

Hot Fix K02004 must be installed on each machine where the updated components of the product, listed above, are installed. During the installation process you may see references to all operating systems for which updates are provided in the hot fix. The installation process will determine the operating system and which component(s) of Risk Management for Insurance 2.12 require updating on the machine. See [SAS Note 44810](#) for more details.

The hot fix will be applied using the SAS Deployment Manager (SDM). By default, the SDM will search in the <SASHOME>/InstallMisc/HotFixes/New directory for hot fixes to be applied, but will also prompt for a location if you have downloaded hot fixes to a different directory.

After downloading K02004pt.zip, follow the instructions for applying hot fixes in the [SAS Deployment Wizard and SAS Deployment Manager 9.3: User's Guide](#).

The hot fix installation process generates the log file:

<SASHOME>/InstallMisc/InstallLogs/IT\_date-and-time-stamp.log

for example, IT\_2011-10-31-13.18.21.log. Each attempt to apply a hot fix results in the creation of a new log file giving detailed information regarding the installation process.

Postexec log files are created after the installation is completed and identifies the files that were added, backed up, changed and removed. These log files include the 'member' hot fix

id in the name of the file and are also written to the <SASHOME>/InstallMisc/InstallLogs directory. There is one postexec log for each 'member' hot fix applied (member hot fixes are listed at the top of these instructions).

The content of this hot fix is listed in the [hot fix manifest](#). This completes the installation of K02004. You must perform any "Post-Installation Instructions" documented below to successfully complete the deployment of this hot fix.

## Post Installation Instructions

### *Initial tasks*

#### **Remove erroneous files**

If it exists, the file **rmif\_pm\_cpty\_risk.sas** should be deleted from the *SASFoundation/9.3/ucmacros/rmifirmmva/* folder.

You should also delete (or rename) the file *map\_regulatory\_bond\_type.sas* found in the following locations:

- SASFoundation/9.2/misc/rmicomnsvr/solution\_data\_mart/sampleddata/mapping
- SASFoundation/9.2/misc/rmicomnsvr/martddl/mapping

### **Run copy scripts**

The hotfix provides script files, *copy\_files.bat* and *copy\_files.sh* for Windows and Unix-based operating systems respectively to enable versioning at the SAS product configuration level. The files are located at:

WIN: <SASHOME>/SASFoundation/9.3/misc/rmicomnsvr/batch/hfscripts  
UNIX: <SASHOME>/SASFoundation/9.3/misc/rmicomnsvr/batch/hfscripts

Depending upon the operating system where the hotfix is installed, use a command prompt (using administrator credentials) to change directory to the location of the appropriate script file above. Next, invoke the script file at the location and pass paths to the SASFoundation and SASCONFIG locations at the command line:

*Note: Enclose within double quotes any path that contains spaces.*

WIN: *copy\_files.bat* <SASROOT> <SASCONFIG>

e.g. *copy\_files.bat* "C:/Program Files/SASHome/SASFoundation/9.3" "C:/SAS/Config/Lev1"

UNIX: *copy\_files.sh* <SASROOT> <SASCONFIG>

e.g. *copy\_files.sh* /install/SASHome/SASFoundation/9.3 /install/sas/Config/Lev1

Successful script execution will result in copying of all files from SASFoundation under rmicomnsvr, rmifirmmva, rmlifemva, rmimktmva and rmipcmva to their respective folders under <SASCONFIG>. Prior to copying, the script will move the existing source folders and their contents to a new folder named *source-pre-hf-J97004* on Windows and *source-pre-J97004* on UNIX.

*Note: On UNIX systems, the script will actually copy files from SASFoundation to a directory, source-J97004 and create a 'source' symbolic link to point to that directory. You should verify that the directory and file permissions for the source-J97004 directory and files are in compliance with your site's security policy*

## **Restart SAS servers**

Restart SAS servers & spawners (in the correct order).

## ***J71005 for SAS Detail Data Store for Insurance 5.5***

This hotfix (J71005) was already installed as part of this ICF (K02004pt.zip). However the POST-INSTALLATION INSTRUCTIONS (in document below) should be followed in order to update the physical tables and metadata.

<http://ftp.sas.com/techsup/download/hotfix/HF2/J/J71/J71005/xx/lax/J710051a.pdf>

## ***Import SPK files***

Before importing any of the SPK files, remember to backup existing metadata, and to log into SAS Management Console (SMC) as an Administrator. Then click on the Folders tab.

## **Import updated analysis.spk file for Firmwide Risk Server 2.12**

1. Navigate to the folder Analysis under System -> Applications -> SAS Risk Management for Insurance -> Firmwide Risk Server 2.1
2. Next, right-click on the Analysis folder and select Import SAS Package from the menu
3. Browse to <SASHOME>/SASFoundation/9.3/misc/rmifirmmva/Config/Deployment/Packages folder and select the analysis.spk file.
4. Select the radio button for All Objects and click Next.
5. You should see a list of STPs in the window. Click Next and then Next again.
6. Ensure that you have the correct mappings for the SAS Application Servers.
7. Click Next. On this screen, map source code repository target application servers.
8. Choose the path to the <SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/firmwide/sasstp folder. Click Next.
9. Review the Summary information and click Next if correct. Otherwise, click on the Back buttons to make necessary corrections in earlier steps. The next screen will show the summary information for the import was completed.
10. Click the View Log button and scan the log for any errors. If the import was successful, you should see messages such as "The import process completed successfully" in the log. Click

Ok and then Finish.

### **Import updated configuration.spk file for Firmwide Risk Server 2.12**

1. Navigate to the folder Configuration under System -> Applications -> SAS Risk Management for Insurance -> Firmwide Risk Server 2.12
2. Select all the STPs, right-click and select Delete.
3. Ensure that all STPs have been deleted from the Configuration folder. The stored process configuration has been removed. group so lvenoy
4. Next, right-click on the Configuration folder and select Import SAS Package from the menu
5. Browse to <SASHOME>/SASFoundation/9.3/misc/rmifirmmva/Config/Deployment/Packages and select the configuration.spk file.
6. Select the radio button for All Objects and click Next.
7. You should see a list of STPs in the window. Click Next and then Next again.
8. Ensure that you have the correct mappings for the SAS Application Servers.
9. Click Next.
10. On this screen, map source code repositories between original and target application servers.
11. Choose the path to the <SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/firmwide/sasstp folder. Click Next.
12. Review the Summary information and click Next if correct. Otherwise, click on the Back buttons to make necessary corrections in earlier steps.
13. The next screen should show that the import was completed. Click the View Log button and scan the log for any errors. If the import was successful, you should see messages as “The import process completed successfully” in the log.
14. Click Ok and then Finish.

### **Import updated analysis.spk for Life Risk Server 2.12**

1. Navigate to the folder Analysis under System -> Applications -> SAS Risk Management for Insurance -> Life Risk Server 2.12
2. Select all the STPs, right-click and select Delete. Ensure that all STPs have been deleted from the Analysis folder. The reason these STPs need to be deleted is that a parameter, RR\_INPUTS has been added to most of the STPs. The parameter can be seen by expanding the System parameter group on the Parameters tab.
3. Next, right-click on the Analysis folder and select Import SAS Package from the menu
4. Browse to <SASHOME>/SASFoundation/9.3/misc/rmilifemva/Config/Deployment/Packages and select the analysis.spk file.
5. Select the radio button for **All Objects** and click Next
6. You should see a list of STPs in the window. Click Next and then Next again.
7. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
8. On this screen, map source code repositories between original and target application servers. Choose the path to the <SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/life/sasstp folder.



Click Next.

9. Review the Summary information and click Next if correct. Otherwise, click on the Back buttons to make necessary corrections in earlier steps.
10. The next screen should show that the import was completed. Click the View Log button and scan the log for any errors. If the import was successful, you should see messages such as “The import process completed successfully” in the log.
11. Click Ok and then Finish.

### **Import updated analysis.spk for Market Risk Server 2.12**

1. Navigate to the folder Analysis under System -> Applications -> SAS Risk Management for Insurance -> Market Risk Server 2.12
2. Select all the STPs, right-click and select Delete. Ensure that all STPs have been deleted from the Analysis folder. The reason these STPs need to be deleted is that a parameter, RR\_INPUTS has been added to most of the STPs. The parameter can be seen by expanding the System parameter group on the Parameters tab.
3. Next, right-click on the Analysis folder and select Import SAS Package from the menu
4. Browse to <SASHOME>/SASFoundation/9.3/misc/rmimktmva/Config/Deployment/Packages and select the analysis.spk file.
5. Select the radio button for **All Objects** and click Next
6. You should see a list of STPs in the window. Click Next and then Next again.
7. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
8. On this screen, map source code repositories between original and target application servers. Choose the path to the <SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/market/sasstp folder. Click Next.
9. Review the Summary information and click Next if correct. Otherwise, click on the Back buttons to make necessary corrections in earlier steps. The next screen should show that the import was completed. Click the View Log button and scan the log for any errors. If the import was successful, you should see messages such as “The import process completed successfully” in the log.
10. Click Ok and then Finish.

### **Import updated analysis.spk for Property Casual Risk Server 2.12**

1. Navigate to the folder Analysis under System -> Applications -> SAS Risk Management for Insurance -> Property Casual Risk Server 2.12
2. Select all the STPs, right-click and select Delete. Ensure that all STPs have been deleted from the Analysis folder. The reason these STPs need to be deleted is that a parameter, RR\_INPUTS has been added to most of the STPs. The parameter can be seen by expanding the System parameter group on the Parameters tab.
3. Next, right-click on the Analysis folder and select Import SAS Package from the menu.
4. Browse to <SASHOME>/SASFoundation/9.3/misc/rmipcmva/Config/Deployment/Packages and select the

analysis.spk file.

5. Select the radio button for **All Objects** and click Next.
6. You should see a list of STPs in the window. Click Next and then Next again.
7. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
8. On this screen, map source code repositories between original and target application servers. Choose the path to the  
<SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/nonlife/sasstp folder. Click Next.
9. Review the Summary information and click Next if correct. Otherwise, click on the Back buttons to make necessary corrections in earlier steps.
10. The next screen should show that the import was completed. Click the View Log button and scan the log for any errors. If the import was successful, you should see messages such as "The import process completed successfully" in the log.
11. Click Ok and then Finish.

### **Import updated reports.spk for the RMI Common Server component**

1. Navigate to the folder *Reports* under System -> Applications -> SAS Risk Management for Insurance -> Risk Management for Insurance Server 2.12
2. Select all the *Reports*, right-click and select Delete. Ensure that all *Reports* have been deleted from the Reports folder.
3. Next, right-click on the Reports folder and select **Import SAS Package**
4. from the menu
5. Browse to <SASHOME>/SASFoundation/9.3/misc/rmicommsvr/Config/Deployment/Packages and select the *reports.spk* file.
6. Select the radio button for **All Objects** and click Next
7. You should see a list of *Reports* in the window. Click Next and then Next again.
8. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
9. On this screen, map source code repositories between original and target application servers. Choose the path to the  
<SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/common/sasstp folder. Click Next.
10. Review the Summary information and click Next if correct. Otherwise, click on the Back buttons to make necessary corrections in earlier steps.
11. The next screen should show that the import was completed. Click the View Log button and scan the log for any errors. If the import was successful, you should see a message such as "The import process completed successfully" in the log.
12. Click Ok and then Finish.
13. If required, selectively import metadata from the backup SPK (refer to Step 1) for only those QRTs that were customized earlier and are not delivered in the hot fix.

### **Import updated system.spk for the RMI Common Server component**

1. Navigate to the folder System under System -> Applications -> SAS Risk Insurance -> Risk Management for Insurance Server 2.12

Management

2. Right-click on the System folder and select Import SAS Package from the menu
3. Browse to `<SASHOME>/SASFoundation/9.3/misc/rmicomnsvr/Config/Deployment/Packages` and select the `system.spk` file.
4. Select the radio button for All Objects and click Next
5. You should see a list of STPs in the window. Click Next and then Next again.
6. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
7. On this screen, map source code repositories between original and target application servers. Choose the path to the `<SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/common/sasstp` folder. Click Next.
8. Review the Summary information and click Next if correct. Otherwise,
9. click on the Back buttons to make necessary corrections in earlier steps.
10. The next screen should show that the import was completed. Click the View Log button and scan the log for any errors. If the import was successful, you should see a message such as "The import process completed successfully" in the log.
11. Click Ok and then Finish.
12. You should now see
  - a. A new "Job name" parameter in the Parameters tab for the REPORT\_OPTIONS STP if you had not installed F90004 or F90005.
  - b. A new parameter for XBRL generation.
  - c. A new "Verbose logging" parameter in the Parameters tab for the REPORT\_OPTIONS STP

### Import updated utilities.spk for the RMI Common Server component

1. Navigate to the folder *Utilities* under System -> Applications -> SAS Risk Management for Insurance -> Risk Management for Insurance Server 2.12
2. Delete all objects (customisations will be restored from backup SPK)
3. Right-click on the Utilities folder and select **Import SAS Package** from the menu
4. Browse to `<SASHOME>/SASFoundation/9.3/misc/rmicomnsvr/Config/Deployment/Packages` and select the `utilities.spk` file.
5. Select the radio button for **All Objects** and click Next
6. You should see a list of STPs in the window. Click Next again.
7. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
8. On this screen, map source code repositories between original and target application servers.
9. Choose the path to the `<SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/common/sasstp` folder. Click Next.
10. Review the Summary information and click Next if correct. Otherwise, click on the Back buttons to make necessary corrections in earlier steps.
11. The next screen should show that the import was completed. Click the View Log button and scan the log for any errors. If the import was successful, you should see a message such as "The import process completed successfully" in the log.
12. Click Ok and then Finish.
13. If required, selectively import metadata from the backup SPK (refer to Step 1) for only those STPs that were customized earlier and are not delivered in the hot fix.

## Import updated rmi\_etl\_bridge\_212\_hf4.spk for the RMI Solution Data Mart (SDM) ETL jobs

Following is the summary of newly added, modified and excluded jobs in this hot fix:

### Newly added jobs:

1. RMI\_INT\_100\_I\_ACCOUNT\_CREDIT\_RISK\_MITIGANT
2. RMI\_INT\_100\_I\_CREDIT\_FACILITY\_CR\_MITIGANT
3. RMI\_INT\_100\_I\_EXPOSURE\_CR\_MITIGANT\_RANK
4. RMI\_INT\_100\_I\_FINANCIAL\_POSITION\_CR\_MITIGANT
5. RMI\_INT\_100\_I\_FRA\_INSTRUMENT\_LEG
6. RMI\_INT\_100\_I\_RISK\_FACTOR\_X\_RISK\_FCTR\_CURVE
7. RMI\_STG\_210\_CLOSED\_ASSET\_DERIVATIVE
8. RMI\_STG\_210\_CLOSED\_ASSET\_DERIVATIVE\_TRADE
9. RMI\_STG\_210\_EXPOSURE\_CRM\_LINK
10. RMI\_STG\_210\_GL\_ACCOUNT\_BALANCE\_LOOP
11. RMI\_STG\_210\_GL\_BAL\_SEGMENT\_ATTR\_VAR
12. RMI\_STG\_210\_GL\_BALANCE\_SEGMENT
13. RMI\_STG\_210\_PORTFOLIO
14. RMI\_STG\_210\_QUOTE\_FUND
15. RMI\_STG\_210\_RATE\_PARAM\_GROUP\_X\_PARAMETER
16. RMI\_STG\_210\_RI\_CONTRACT\_COLLATERAL
17. RMI\_STG\_210\_SEGMENTED\_GL\_ACCOUNT\_BALANCE
18. RMI\_STG\_210\_SEGMENTED\_GL\_ACCOUNT\_BALANCE\_LOOP
19. RMI\_STG\_210\_SUB\_LEDGER
20. RMI\_STG\_210\_ENTITY\_SYSTEM\_IDENTITY
21. RMI\_STG\_210\_LINE\_OF\_BUSINESS\_ASSOC
22. RMI\_STG\_230\_CAPITAL\_ALLOCATION
23. RMI\_STG\_230\_CAPITAL\_COST

### Modified Jobs:

1. RMI\_INT\_100\_I\_ASSET\_SGMNT\_X\_EXPOSURE
2. RMI\_INT\_100\_I\_BOND\_INSTRUMENT
3. RMI\_INT\_100\_I\_COUNTERPARTY
4. RMI\_INT\_100\_I\_CREDIT\_CARD\_ACCOUNT
5. RMI\_INT\_100\_I\_CREDIT\_FACILITY
6. RMI\_INT\_100\_I\_CREDIT\_RISK\_MITIGANT
7. RMI\_INT\_100\_I\_EXTERNAL\_ORG
8. RMI\_INT\_100\_I\_FINANCIAL\_INSTRUMENT
9. RMI\_INT\_100\_I\_FINANCIAL\_POSITION
10. RMI\_INT\_100\_I\_FX\_FORWARD\_QUOTE
11. RMI\_INT\_100\_I\_FX\_VOLATILITY\_QUOTE
12. RMI\_INT\_100\_I\_INT\_RATE\_VOLATILITY\_QUOTE
13. RMI\_INT\_100\_I\_INTEREST\_RATE\_QUOTE
14. RMI\_INT\_100\_I\_PHYSICAL\_ASSET
15. RMI\_INT\_100\_I\_RISK\_FACTOR
16. RMI\_INT\_100\_I\_PORTFOLIO
17. RMI\_INT\_100\_I\_REPO\_INSTRUMENT
18. RMI\_INT\_100\_I\_RISK\_FACTOR\_X\_RISK\_FCTR\_CURV
19. RMI\_INT\_100\_I\_SWAP\_INSTRUMENT\_LEG
20. RMI\_INT\_100\_I\_COUNTERPARTY\_CREDIT\_ASSESSMENT
21. RMI\_INT\_105\_I\_FINANCIAL\_ACCOUNT
22. RMI\_INT\_110\_I\_ACCT\_POS\_INST\_FCLTY\_APPEND
23. RMI\_INT\_110\_I\_QUOTE\_VOLATILITY
24. RMI\_STG\_210\_CEDED\_LOSS
25. RMI\_STG\_210\_CLAIM\_HISTORY
26. RMI\_STG\_210\_COUNTERPARTY\_ASSOC
27. RMI\_STG\_210\_COVERED\_PERILS
28. RMI\_STG\_210\_FINANCIAL\_FUND
29. RMI\_STG\_210\_JOIN\_CUSTOMERS
30. RMI\_STG\_210\_RI\_CARRIER\_X\_RI\_CONTRACT\_SECTN
31. RMI\_STG\_210\_FUND\_INSTRUMENT

32. RMI\_STG\_210\_GENERAL\_INSURANCE\_SUBJECT
33. RMI\_STG\_210\_GENERAL\_INSURANCE\_UOE
34. RMI\_STG\_210\_GL\_ACCOUNT\_ASSOC
35. RMI\_STG\_210\_GL\_ACCOUNT\_BALANCE
36. RMI\_STG\_210\_INSURANCE\_SEGMENT
37. RMI\_STG\_210\_INSURED\_ITEM\_LOCATION
38. RMI\_STG\_210\_INTERNAL\_ORG\_ASSOC
39. RMI\_STG\_210\_LIFE\_INSURANCE\_POLICY
40. RMI\_STG\_210\_REINSURANCE\_CONTRACT\_SECTION
41. RMI\_STG\_210\_REINSURANCE\_COVERAGE
42. RMI\_STG\_210\_RI\_CARRIER\_X\_XL\_LAYER
43. RMI\_STG\_210\_SECURITIZATION\_POOL\_MART
44. RMI\_STG\_210\_SUB\_LEDGER
45. RMI\_STG\_210\_XL\_LAYER
46. RMI\_STG\_230\_ASSET\_SGMNT\_X\_EXPOSURE
47. RMI\_STG\_230\_CDO\_INSTRUMENT
48. RMI\_STG\_230\_CASHFLOW\_ACCOUNT
49. RMI\_STG\_230\_CASHFLOW\_FRA
50. RMI\_STG\_230\_CASHFLOW\_INSTRUMENT
51. RMI\_STG\_230\_CONVERSION\_SCHEDULE
52. RMI\_STG\_230\_CONVERTIBLE\_BOND\_INSTRUMENT
53. RMI\_STG\_230\_COUNTERPARTY
54. RMI\_STG\_230\_COUNTERPARTY\_RATINGS
55. RMI\_STG\_230\_CREDIT\_RISK\_MITIGANT
56. RMI\_STG\_230\_DISCRETE\_CARRYING\_COST
57. RMI\_STG\_230\_EMBEDDED\_OPTIONS
58. RMI\_STG\_230\_FINANCIAL\_CONTRACT
59. RMI\_STG\_230\_FINANCIAL\_CONTRACT\_ISSUE
60. RMI\_STG\_230\_FINANCIAL\_EXPOSURE
61. RMI\_STG\_230\_GL\_ACCOUNT
62. RMI\_STG\_230\_OPTION\_INSTRUMENT
63. RMI\_STG\_230\_OPTION\_SCHEDULE
64. RMI\_STG\_230\_QUOTE\_FX
65. RMI\_STG\_230\_QUOTE\_INDEX
66. RMI\_STG\_230\_QUOTE\_IR
67. RMI\_STG\_230\_QUOTE\_IR
68. RMI\_STG\_230\_QUOTE\_VOLATILITY
69. RMI\_STG\_230\_QUOTE\_VOLATILITY
70. RMI\_STG\_230\_REPO\_INSTRUMENT
71. RMI\_STG\_230\_RF\_CURVE\_X\_RF\_GROUP
72. RMI\_STG\_230\_RISK\_DRIVER
73. RMI\_STG\_230\_RISK\_DRIVER\_X\_FIN\_CONTR
74. RMI\_STG\_230\_RISK\_FACTOR
75. RMI\_STG\_230\_RISK\_FACTOR\_CURVE
76. RMI\_STG\_230\_RISK\_FACTOR\_GROUP
77. RMI\_STG\_230\_RISK\_FACTOR\_X\_RISK\_FCTR\_CURVE
78. RMI\_STG\_230\_SWAP\_INSTRUMENT

### Excluded Jobs (due to deprecated SDM tables):

1. RMI\_INT\_100\_I\_ASSET\_SGMNT\_X\_EXPOSURE
2. RMI\_STG\_210\_REINSURANCE\_TREATY
3. RMI\_STG\_210\_COUNTERPARTY\_X\_RI\_TREATY
4. RMI\_STG\_210\_CEDED\_EXPOSURE
5. RMI\_STG\_210\_RATE\_PARAM\_GROUP
6. RMI\_STG\_230\_ASSET\_PORTFOLIO\_SEGMENT
7. RMI\_STG\_230\_ASSET\_SGMNT\_X\_EXPOSURE

### Notes

If you already have existing RMI 2.12 ETL jobs, import the rmi\_etl\_bridge\_212\_hf4.spk file from <SASHOME>/SASRiskManagementForInsuranceMidTier/2.12/ETL folder as explained below.

If RMI 2.12 ETL does not exist, first import *rmi\_etl\_bridge.spk* from the same location.

- A. Login to SAS DI Studio as the Administrator (sasadm) user
- B. Click on the Folders tab
- C. Navigate to the folder, Products
- D. Right-click on the Products folder and select Import SAS Package from the menu
- E. Browse to */SASRiskManagementForInsuranceMidTier/2.12/ETL* and select the *rmi\_etl\_bridge\_212\_hf4.spk* file.
- F. Select the radio button for All Objects and click Next.
- G. Select the objects to Import and click Next
- H. Click Next on 'About metadata connections' Screen
- I. Select the target libraries that correspond to original libraries. Click Next
- J. Select the target tables that correspond to original tables. Click Next.
- K. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
- L. Review the Summary information and click Next.
- M. The next screen should show that the import was completed. Click the View Log button and scan the log for any errors. If the import was successful, you should see a message such as "The import process completed successfully" in the log
- N. Click Ok and then Finish.
- O. Click Ok.

If required, selectively import metadata from the backup SPK (refer to Step 1) for only those QRTs that were customized earlier and are not delivered in the hot fix.

### ***Regenerate the Solution Data Mart (SDM)***

NOTE! This will erase the existing SDM (if there is one).

1. Run the following code in a SAS session with appropriate privileges, and appropriate parameters:

```
%let sysparm==  
  <CONFIGDIR>/AppData/SASRiskManagementForInsurance/2.12/indata;  
%let create_sdm_file_loc=  
  <SASCONFIG>/Applications/SASRiskManagementForInsurance/2.12/source/common/  
  solution_data_mart;  
%inc "&create_sdm_file_loc/create_solution_data_mart.sas";
```

2. Check the SAS log for successful execution of the preceding macro.

### ***Update RMI Staging metadata***

If the ETL bridge has been installed, the following should be executed in order to synchronise the metadata for the RMI Staging library with the physical tables:

```
Options  
  metapass="<password for metadata user>"
```

```

metaport=<port number>
metaprotocol=bridge
metarepository="foundation"
metaserver="<metadata server>"
metauser="<metadata user id>";

proc metalib;
  omr (library="RMI Staging" repname="foundation");
  update_rule (delete noadd);
  report;
run;

```

## ***Rebuild / Redeploy Web application***

This hot fix requires that the Web Application be rebuilt and redeployed. Use the following steps to perform this post-installation task:

### **Step 1: Re-build Web Application**

In order for this step to execute correctly, the Metadata Server must be running.

#### **1.1 Invoke the SAS Deployment Manager 9.3**

From the SASDeploymentManager directory, launch the *sasdm* executable SAS Deployment Manager is installed in the following default location:

<SASHOME>/SASDeploymentManager/9.3

#### **1.2 Select a language in the *Choose Language* box**

#### **1.3 Select Rebuild Web Applications**

#### **1.4 Select Configuration Directory or Enter the Configuration Directory and Level that needs to be updated**

#### **1.5 Specify Connection Information, including the *sasadm* User ID and Password**

#### **1.6 Select *Risk Management for Insurance* as the Web Application to Rebuild**

#### **1.7 Verify the information on the Summary screen and select Start**

#### **1.8 Select Finish when the deployment is complete**

This process will update the *Risk Management for Insurance* ear in <SASCONFIGDIR>/Web/Staging.

A backup of the original ear file will be placed in the directory below:

<SASCONFIGDIR>/Web/Staging/Backup

### **Step 2: Re-deploy Web Applications**

Re-deploy the web applications based on the instructions for the web application server you are using.

## ***Create Shared Entity Data Mart***

1. Delete all user folders found in <SASCONFIG>/AppData/SASRiskManagementForInsurance/2.12/data/userdata

2. Login to **Risk Management for Insurance 2.12** (location can be found in **instructions.html**)
3. Select **File > Select Entity**, choose an entity from the list, and click **OK**.
4. Re-create the shared data mart for that entity.
  - a. Select **File > Manage Shared Data Mart** from the menu and click **Delete**, then click
  - b. **Create** in the same **Manage Shared Data Mart** window.
5. Repeat previous step for each Entity.

### ***K22004 for SAS Risk Reporting Repository for Insurance 2.12***

No data model changes have been made in the latest hotfix. If the previous hotfix, K02003 is already installed, you just need to update the version information of the private RRR location and Shared location as described below.

#### **Updating the version information:**

The Risk Reporting Repository version information is contained as a row entry in the table `rr_version_info`. You can update the version information by opening up the dataset in a SAS session and editing the entry from “21\_M2\_HF3” to “21\_M2\_HF4”. This step is necessary for both the private and shared locations.

If the previous hotfix, K02003 has not been installed, you must first update the structures of the private RRR and Shared locations as described below and then update the version information as described above.

NB: Some tables and/or columns have been removed from the model. The files for these structures may still exist on your installation due to the delivery mechanism; however, code has been added to ignore the pre-existing files when necessary.

NB: If the SDM has been recreated in the previous section, the structures of the Private locations will be automatically updated with the latest reportmart structure. If the SDM has not been recreated, then the following methods can be applied to both the private and shared locations depending on the state of your installation to update the reportmart to the latest structure.

#### **Updating via the provided sample data:**

If a given reportmart location has not been updated by another process, creating the shipped reportmart sample data in a given location will install the data model changes.

The shipped sample data scripts already contain the updates in the RRR data model/formats. If



you would like to utilize the shipped RMI sample data for the RRR without maintaining existing data, create the RRR sample data using the following steps.

Note: The sample data creation script does not depend on the version of the original RRR that is being overwritten. This script will overwrite the existing data and data model. For example, if you are have the RRR 212 version of the RRR and are installing the RRR hotfix, by creating the shipped sample data you do not need to install the "sample data for the previous release". The shipped sample data is a snapshot of the given version.

Submit the following code with your installation specific information:

```
options metauser="<username>" metapass="<password>" metaserver="<server_name>"
metaport=<port_number> metarepository="Foundation";

%rmiinit;
%rmi_batch_create_rrr_sample_data(ENTITY=MAIN
    ,USERNAME=<username>
    ,SCOPE=P);
```

\* If you need to install the reportmart sample data to the Global RRR with the sample data script, you must submit the following code with the additional information and changes:

```
%let rrr_user=<username>;
%let rrr_password=<Password>;

options metauser="<username>" metapass="<password>" metaserver="<server_name>"
metaport=<port_number> metarepository="Foundation";
%rmiinit;
%rmi_batch_create_rrr_sample_data(ENTITY=MAIN
    ,USERNAME=<username>
    ,SCOPE=S);
```

NOTE: It is not recommended that you use this process on the Global RRR unless you are absolutely certain of your specific installation needs. The script, as shown above, deletes the Global RRR and replaces the location with the new version of the RRR with the shipped sample data ONLY. All data in the Global location will be lost using this process.

This completes the installation of hot fix **K02004** on **Linux for x64**.