Installation Instructions for Hot Fix K02006

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Background

K02006 is a "container" hot fix that contains the following "member" hot fixes which will update the software components as needed.

J98006 updates SAS Firmwide Risk Management for Insurance Server 2.12
J99006 updates SAS Market Risk Management for Insurance Server 2.12
J97006 updates SAS Risk Management for Insurance Server 2.12
K22006 updates SAS Risk Reporting Repository for Insurance 2.12
K01006 updates SAS Underwriting Risk Management for Life Insurance Server 2.12
K21006 updates SAS Underwriting Risk Management for P&C Insurance Server 2.12

See <u>What is a container hot fix?</u> in the Hot Fix FAQ for more information about container hot fixes.

Before applying this hot fix, follow the instructions in <u>SAS Note 35968</u> to generate a SAS Deployment Registry report, then verify that the appropriate product releases are installed on your system. The release number information in the Registry report should match the 'member' release number information provided above for the software components installed on each machine in your deployment.

The hot fix downloaded, K02006pt.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 K02006pt.zip on each machine or save it in a network location that is accessible to all machines.

Do NOT extract the contents of K02006pt.zip. The hot fix installation process will extract the contents as needed.

IMPORTANT NOTES

You **must** have previously applied hot fix **K02005** (RMFI PU14) and completed post-installation steps prior to installing and deploying this hot fix.

- Before commencing the installation, do request that your SAS Professional Services Consultant review the RMI wiki for any post release PU15 installation updates: <u>http:\\smteam.sas.com\psd\rmi\KB\PU15.aspx</u>. Available on that site is a "what's new in PUP15" document
- 2. Your SAS Professional Services Consultant may also be able to make use of the online collaboration tool <u>https://hub.sas.com/groups/309-riskmanagementforinsurance</u>

Installation

Log in as appropriate user

This hot fix should be installed using the same userid who performed the initial software installation. That user 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

Terminate all active SAS sessions, daemons, spawners and servers.

Install Risk Management for Insurance ICF

Hot Fix K02006 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 SAS Risk Management for Insurance 2.12 require updating on the machine. See <u>SAS Note 44810</u> 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 K02006pt.zip, follow the instructions for applying hot fixes in the <u>SAS</u> <u>Deployment Wizard and SAS Deployment Manager 9.3: User's Guide</u>.

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 <u>hot fix manifest</u>. This completes the installation of K02006. You must perform any "Post-Installation Instructions" documented below to successfully complete the deployment of this hot fix.

Post Installation Instructions

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\rmicomnsvr\sasmisc\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, rmilifemva, 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-YYYY-MM-DD* on Windows and *source-pre-YYYY-MM-DD* on UNIX.

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

Restart SAS servers

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

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\rmifirmmva\sasmisc\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 repositories between original and target application servers.
- 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 should show that 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 group solvency stored process configuration has been removed.
- 4. Next, right-click on the Configuration folder and select Import SAS Package from the menu
- 5. Browse to <SASHOME>\SASFoundation\9.3\rmifirmmva\sasmisc\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 such as "The import process completed successfully" in the log.
- 14. Click Ok and then Finish.

Import updated reports.spk and reports_cp13.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 from the menu
- 4. Browse to <*SASHOME*>*SASFoundation9.3rmicomnsvrsasmiscConfigDeploymentPackages* and select the *reports.spk* file.
- 5. Select the radio button for All Objects and click Next
- 6. You should see a list of *Reports* in the window. Click Next and then Next again.
- 7. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
- 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.
- 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 a message such as "The import process completed successfully" in the log.
- 11. Click Ok and then Finish.
- 12. Repeat the above for **reports_cp13.spk** in the same location.
- 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 Management for Insurance -> Risk Management for Insurance Server 2.12
- 2. Right-click on the System folder and select Import SAS Package from the menu
- 3. Browse to <*SASHOME*>*SASFoundation**9.3**rmicomnsvr**sasmisc**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.
- 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.

Import updated utilities_sas9.3.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*>*SASFoundation9.3rmicomnsvrsasmiscConfigDeploymentPackages* and select the *utilities_sas9.3.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.
- 9. Choose the path to the <SASCONFIG>\Applications\SASRiskManagementForInsurance\2.12\so urce\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 the other_utilities_sas9.3.spk for the RMI Common Server component

This is to be done after consultation with the solution administrator, as it empowers users to influence the RRR directly.

- 1. Navigate to the folder Utilities under System -> Applications -> SAS Risk Management for Insurance -> Risk Management for Insurance Server 2.12
- 2. Right-click on the Utilities folder and select Import SAS Package from the menu
- 3. Browse to <*SASHOME*>*SASFoundation**9.3**rmicomnsvr**sasmisc**Config**Deployment**Packages* and select the other_utilities_sas9.3.spk file.
- 4. Select the radio button for All Objects and click Next
- 5. You should see a list of STPs in the window. Select only those that your administrator has agreed to. Click Next and then Next again.
- 6. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
- 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.

Important notice about the archival and delete project utilities:

The deployment of these utilities is to done after consideration by the site administrator.

Both these utilities won't – by default – make a full backup of the RRR prior to taking action. They can be configured to do so (change the macro variable parameter BACKUP value to value YES in rmi_extract_archive_rrr.sas). However, that needs to be accompanied by a server setting change to allow the XCMD option (see <u>here</u> for background information). If this is not possible, and not taking a backup before the archival process seems too risky then you are advised not to deploy this utility.

If you have chosen to deploy the stored process ARCH *(archiving of an RRR project)* as part of the "other utilities" then you will also need to specific a metadata parameter risk.archive.loc in the SAS Management Console. To that end, locate the Configuration management plugin. Right-click "Risk Management For Insurance Server 2.12" and click on the "Advanced" tab. Add the parameter.

Import Data Interface (DIRR) SPKs

Depending on your environment (X command enabled?) you may be able to leverage a batch script for importing the DIRR SPks – see **rmi_dirr_import_spk.sas**. This script will dynamically update the library definitions using the subprop file. Alternatively, the manual import steps are as follows:

- 1. Right click on the Products folder and select Import SAS Package from the menu.
- 2. Import the 3 packages below in sequence from the following directory: <SASHOME>\SASFoundation\9.3\rmicomnsvr\sasmisc\Config\Deployment\Packages
 - 1. \rrr\dirr_rrr_metadata_93.spk
 - 2. \etl\dirr_table_metadata_93.spk PROVIDE LIBRARY DEFINITIONS!
 - 3. \etl\dirr_etl_93.spk

For information:

- 1. Jobs must be deployed before they can be executed
- 2. A batch script for execution is available see rmi_dirr_run_etl.sas.

Regenerate the Solution Data Mart (SDM)

NOTE! This will erase and overwrite the existing SDM.

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

%rmiinit; %rmi_create_sdm();

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

The above process will deploy the Solution Data Mart on your environment. By design, this deployment process will materialize the default configuration ("S2_PREPARATORY_PHASE") set in the Solution data mart:

- Analytics: Technical Specification for the preparatory phase (EIOPA 14\209 14\210)
- Reporting: Guidelines on preparing for SII (EIOPA Sep 2013).

Alternatively, other configuration sets can be added by running the following code:

%rmiinit;

%rmi_add_new_configuration_set(

, cards_file_dir = <complete path to where the configuration set cards file reside>
);

Example of cards_file_dir:

<SASCONFIG>\Applications\SASRiskManagementForInsurance\2.12\source\common\sasmisc\s olution_data_mart\sampledata_append_prepphase_dirr

Other append-able configuration sets are:

- SOLVENCY2_LVL2_OCT2011 (sampledata_append_lvl2)
- SOLVENCY2_LVL2_DIRR_ENABLED (sampledata_append_lvl2_dirr)
- S2_PREPARATORY_PHASE_DIRR (sampledata_append_prepphase_dirr)
- S2_PREPARATORY_PHASE_LIGHT (sampledata_append_prepphase_light)
- S2_DELEGATED_ACTS_OCT2014 (sampledata_append_delactsoct2014)
- S2_DELEGATED_ACTS_OCT2014_DIRR (sampledata_append_delactsoct2014_dirr)

For background around these configuration sets, please refer <u>here</u>. Note also that a configuration set can be removed with the rmi_delete_config_set.sas macro.

Regenerate the Shared \ Private Entity Data Marts (SEDM & PEDM)

Now run the following steps:

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

Login to Risk Management for Insurance 2.12 (location can be found in instructions.html)

Select File > Select Entity, choose an entity from the list, and click OK.

- 2. Re-create the shared data mart for that entity.
 - Select File > Manage Shared Data Mart from the menu and click Delete, then click
 - b. Create in the same Manage Shared Data Mart window.
- 3. Repeat previous step for each Entity.

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;
```

Import the DPM data management utility for the RMI Common Server component

- 1. Right-click on the Products folder and select Import SAS Package from the menu
- 2. Browse to <*SASHOME*>*SASFoundation**9.3**rmicomnsvr**sasmisc**Config**Deployment**Packages* *dpm* and select the dpm_interface_metadata_sas9.3.spk file.
- 3. Select the radio button for All Objects and click Next
- 4. You should see a list of libraries and tables in the window. Click Next and then Next again.
- 5. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
- 6. On this screen, map source code repositories between original and target application servers. Click Next.
- 7. Review the Summary information and click Next if correct. Otherwise,
- 8. Click on the Back buttons to make necessary corrections in earlier steps.
- 9. 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.
- 10. Navigate to the folder Utilities under System -> Applications -> SAS Risk Management for Insurance -> Risk Management for Insurance Server 2.12
- 11. Right-click on the Utilities folder and select Import SAS Package from the menu
- 12. Browse to <*SASHOME*>*SASFoundation**9.3**rmicomnsvr**sasmisc**Config**Deployment**Packages* *dpm* and select the dpm_loader_stp_sas9.3.spk file.
- 13. Select the radio button for All Objects and click Next
- 14. You should see a list of libraries and tables in the window. Click Next and then Next again.
- 15. Ensure that you have the correct mappings for the SAS Application Servers. Click Next.
- 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.
- 16. Review the Summary information and click Next if correct. Otherwise,
- 17. click on the Back buttons to make necessary corrections in earlier steps.
- 18. 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.
- 19. Click Ok and then Finish.

SAS Risk Reporting Repository for Insurance 2.12

Data model changes have been made to the SAS Risk Reporting Repository. You must update the structures of the private RRR location and Shared location.

There are different ways in which to apply the new structure. Please select one of the following methods that is applicable to your installation(s).

NB: In this release of the SAS Risk Reporting Repository previously marked deprecated 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 post-installation tasks for F12006 have been applied, the structures of the Private locations will be automatically updated with the latest reportmart structure for the F120089 post- installation tasks and the subsequent methods are not necessary for applying the data model changes to private RRR locations. The following methods can be applied to both the private and shared locations depending on the state of your installation.

1 - 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 RRRI 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>
, CONFIG_SET_ID = [see list earlier in the doc]
```

```
, SCOPE = P
);
```

Note that the CONFIG_SET_ID used above will determine the type of QRTs that can be generated from the sample data (eg Level 2 or CP13).

* If you need to recreate an empty Global RRR, you must submit the following code with the additional information and changes:

```
%rmiinit;
%let rrr_user=<username>;
%let RRR_password=<password>;
libname RD_RPT "<path to shared RRR>";
%createrrr(libref=RD_RPT);
```

* 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 <u>not recommended</u> 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.

2 - Updating an existing install with alter\migration scripts:

If you have existing data in your reportmart and wish to only apply the data model changes, execute the following alter script:

%cc_21_m2_hf5_to_21_m2_hf6_aft. Follow the instructions inside this .sas file to execute.

This file will be typically located in the following directory:

Win: <SASHOME>\SASFoundation\9.3\rskrpti\sasmisc\alterscripts\ rrr21m2hf5_to_rrr21m2hf6 Unix: <SASHOME>\SASFoundation\9.3\misc\rskrpti\alterscripts\ rrr21m2hf5_to_rrr21m2hf6

This completes the installation of hot fix K02006