SAS OpRisk Monitor 3.4.1

Unix Install Instructions for Hot Fix 341orm12

Introduction

This document describes the steps necessary to install and deploy the SAS OpRisk Monitor 3.4.1 Hot fix Release 341orm12 for a Unix environment. ***Please take a moment to read through this entire document before attempting to install the hot fix.*** There are four steps to this hot fix that must all be completed:

0) Preparing for the hot fix
1) Installation of the updates to the SAS OpRisk Monitor Admin and Web Components
2) Installation and configuration of the updates to the SAS OpRisk Monitor Server Component
3) Deployment of the SAS OpRisk Monitor Web Components update (optional)

Fix Details

0. Preparing for the Hot Fix

This hot fix contains new versions of files that you may have customized previously. To avoid losing your changes, make a backup copy of the following files:

- WEB-INF/classes/configdata.properties
- Any other file(s) that you have customized

After the hot fix is installed, you will be able to use the backup copy to help you apply the same customizations to the new version of the files.

1. Obtaining the Hot Fix

1.1 Download the Hot Fix Bundle

You should perform these installation steps for *each machine* where the following OpRisk Monitor components have been installed.

- SAS OpRisk Monitor Web Components
- SAS OpRisk Monitor Admin Tools Components
- SAS OpRisk Monitor Server Components

Save the hot fix bundle (archive file) from the SAS Technical Support Hot Fix web site (http://ftp.sas.com/techsup/download/hotfix/341orm.html), to a directory for installation using the SAS user
account that originally installed SAS OpRisk Monitor. This is typically the SAS account. The name of the downloaded archive file will vary depending on the unix platform. The downloaded file will be one of the following:

- 341orm12r6.tar for AIX
- 341orm12s6.tar for Solaris

1.2 Install the Web and Admin Tools Components

Unarchive the tar file using the following command:

```
tar -xvf 341orm12xxx.tar
```

where xxx is the appropriate suffix for your unix platform. Since most of the updates will be on your midtier machine, you should begin on that server. Apply to other machines as appropriate.
This will extract the following files into a new 341orm04_xxx directory. For example, the AIX tar file 341orm04r6.tar will extract into 341orm04_r64. Sample output from the above tar command is shown below. The sizes of the files will vary based on the unix platform. The sample below shows messages from an AIX tar file extract.

```
x 341orm12_r64/ormonitoradm_r64.tar
x 341orm12_r64/ormonitorweb_r64.tar
x 341orm12_r64/ormonitorsrv_r64.tar
```

For each component installed on your server, you'll need to unarchive the tar file and run the setup script. The files within the component archives are named similarly, so you'll need to unarchive and execute the setup scripts one by one.

Sample AIX process shown below:

 Step 1: Unarchive the component tar file

```
tar -xvf ormonitorweb_r64.tar
```

This creates 3 new files in the r64 subdirectory:

```
Setup_AIX_Power
media.inf
setup.jar
```

Step 2**:** Run the Setup script to lay down component files. Log file log.txt is written to the destination directory mentioned by the hotfix installer.

```
cd r64
chmod +x Setup*
Setup_AIX_Power
```

Note that you must turn on the execute bit for the setup script the first time you perform the unarchive. This setup command runs an InstallShield wizard which will guide you through the installation.

Step 3: Repeat steps 1 and 2 (above) for component ormonitoradm. Installing component ormonitorsrv is covered in section **2. Install and Configure the Server Component.**

The hot fix bundle will install updates to several files in the installation directory (typically /usr/local/SAS/OpRiskMonitor/Tools/3.2).

Important: Any customization applied to earlier installs should be re-applied at this point.

1.3 Update the database

If your current installed version is prior to hot fix 5, a patch is included in the hotfix code that does two things:
1.3.1. Creates tables and associated indexes to address the performance issue with the ORA Chooser component.
1.3.2. Increases the size of Aux_str* columns to 4000 bytes for Issues and Action plans.
To run this patch, access the admin tools and run patchdb after installing the hot fix. Alternately, you can deploy the new code, restart the OpRisk Monitor web application, and login to OpRisk Monitor using the admin account. You will then be prompted to patch the database using the OpRisk Monitor interface.

2. Install and Configure the Server Component

2.1 Installing the 341orm12 hotfix on the Server Tier

The 341orm12 hotfix contains files for the OpRisk Monitor Server Tier. An installer should have been downloaded to the machine where SAS Foundation is installed. To install this part of the hotfix:

1. Locate the tar file containing the server tier files. It is named ormonitorsrv_*XXX*.tar, where *XXX* is specific to the operating system. Ex: ormonitorsrv_s64.tar is the Solaris version.

2. Change to the <SAS Install Dir>/SAS_9.1 folder.

3. Run the following command to install the files:

tar –xvf <location of tar file>/ormonitorsrv_xxx.tar

4. Once the installer has finished, check that the following files have been updated:

file
<SAS Install Dir>/SAS_9.1/sashelp/ormonrpt.sas7bdat
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva /control/columns.csv
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva /control/rm_code_labels_en.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_code_labels_pl.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_code_labels_ru.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_code_labels_uk.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_cube_labels_pl.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_cube_labels_ru.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_cube_labels_uk.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_flg_pl.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_flg_ru.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_flg_uk.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva /control/rm_labels_en.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_ labels_pl.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_ labels_ru.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva/control/rm_ labels_uk.txt
<SAS Install Dir>/SAS_9.1/ misc/ormonitormva /control/tables.csv
<SAS InstallDir>/SAS_9.1/sasstp/ormonitormva/risk_heatmap.sas

<SAS Install Dir>/SAS_9.1/ ucmacros/ormonitormva/orm_dm_createtables.sas
<SAS Install Dir>/SAS_9.1/ ucmacros/ormonitormva/orm_dm_createviews.sas
<SAS Install Dir>/SAS_9.1/ ucmacros/ormonitormva/orm_export_to_var.sas
<SAS Install Dir>/SAS_9.1/ ucmacros/ormonitormva/orm_kris_to_var.sas
<SAS Install Dir>/SAS_9.1/ ucmacros/ormonitormva/orm_rm_createtables.sas

2.2 Removal of Control Files and Formats from Previous Runs

 If the server tier code (aka the reporting code) has been run previously, delete the SAS data tables and catalogs in the OPCNTL and OPFMTS libraries. These files must be deleted before running the updated reporting code or the results will be incorrect. See the OpRisk Monitor Administrator's Guide for more information on the reporting code and the OPCNTL and OPFMTS libraries.

2.3 Updating Metadata for the Reporting Code

The reporting code also relies upon metadata about the database used by OpRisk Monitor. This metadata must be updated when the hot fix is applied. To do this, delete all entries from the "OpRisk Transactional Schema" under SAS Libraries in the Data Library Manager of the SAS Management Console. Then re-import the tables for the updated database. See SAS Management Console User's Guide for more information on how to work with SAS Libraries in the SAS Management Console.

3. Deployment of SAS Oprisk Monitor Web Components

3.1 Update the monitor.war file

Note: Monitor.war will typically be located in /home/sasl/SAS/<plan name>/Lev1/web/webapps.

1. Paste the commands below into a sh file and save this into the INSTALLDIR typically located at /usr/local/SAS/OpRiskMonitor/3.2/monitor or depending on your installation this could be different.

```
jar uvf monitor.war  components/AdditionalInformation.jsp
jar uvf monitor.war  components/calendar/CalendarPopup.jsp
jar uvf monitor.war  components/ora/DimensionTreeChooser.jsp
jar uvf monitor.war  components/ora/OraEditor.jsp
jar uvf monitor.war  components/ora/OraEditorStaticScript.jsp
jar uvf monitor.war  components/ora/OraScript.jsp
jar uvf monitor.war  components/ora/OraViewer.jsp
jar uvf monitor.war  components/treechooser/SearchTreeChooser.jsp
jar uvf monitor.war  preWait.jsp
jar uvf monitor.war  script/common.jsp
jar uvf monitor.war  script/modalPopup.js
jar uvf monitor.war  tiles/CSA/assessment/assessments.jsp
jar uvf monitor.war  tiles/CSA/assessment/questionnairesScript.jspf
jar uvf monitor.war  tiles/CSA/assessmentWizard/additionalInformation.jsp
jar uvf monitor.war  tiles/CSA/assessmentWizard/questionnaires.jsp
jar uvf monitor.war  tiles/CSA/controls.jsp
jar uvf monitor.war  tiles/CSA/irm/inherentRisk.jsp
jar uvf monitor.war  tiles/CSA/irm/RiskProfileEditor.jsp
jar uvf monitor.war  tiles/CSA/questionnaire/questionnaire.jsp
jar uvf monitor.war  tiles/CSA/riskDrivers.jsp
```

```
jar uvf monitor.war  tiles/CSA/riskInstanceWizard/details.jsp
jar uvf monitor.war  tiles/CSA/riskTypes.jsp
jar uvf monitor.war  tiles/CSA/templates.jsp
jar uvf monitor.war  tiles/dimension/DimensionNodeEditor.jsp
jar uvf monitor.war  tiles/dimension/DimensionNodeMappings.jspf
jar uvf monitor.war  tiles/iap/ActionPlanCommonContent.jspf
jar uvf monitor.war  tiles/iap/ActionPlanCosts.jspf
jar uvf monitor.war  tiles/iap/ActionPlanEditContent.jsp
jar uvf monitor.war  tiles/iap/ActionPlanRequiredFields.jsp
jar uvf monitor.war  tiles/iap/ActionPlanViewHeader.jsp
jar uvf monitor.war  tiles/iap/IssueCommonContent.jspf
jar uvf monitor.war  tiles/iap/IssueEditContent.jsp
jar uvf monitor.war  tiles/iap/IssueQuery.jsp
jar uvf monitor.war  tiles/iap/IssueRequiredFields.jsp
jar uvf monitor.war  tiles/iap/IssueViewHeader.jsp
jar uvf monitor.war  tiles/insurancepolicy/InsurancePolicyEditor.jsp
jar uvf monitor.war  tiles/insurancepolicy/InsurancePolicyQuery.jsp
jar uvf monitor.war  tiles/KRI/observations/observationEditor.jsp
jar uvf monitor.war  tiles/KRI/requests/requestEditor.jsp
jar uvf monitor.war  tiles/layout/footer.jsp
jar uvf monitor.war  tiles/layout/menu.jsp
jar uvf monitor.war  tiles/layout/menu.xml
jar uvf monitor.war  tiles/reports/heatmapViewEdit.jsp
jar uvf monitor.war  tiles/roles/RoleEditor.jsp
jar uvf monitor.war  tiles/user/UserEditor.jsp
jar uvf monitor.war  tiles/yesno.jsp
jar uvf monitor.war  WEB-INF/classes/application_pl.properties
jar uvf monitor.war  WEB-INF/classes/application_ru.properties
jar uvf monitor.war  WEB-INF/classes/application_uk.properties
jar uvf monitor.war  WEB-INF/classes/configdata.properties
jar uvf monitor.war  WEB-INF/classes/customMessages.properties
jar uvf monitor.war  WEB-INF/classes/customMessages_ja.properties
jar uvf monitor.war  WEB-INF/classes/customMessages_ko.properties
jar uvf monitor.war  WEB-INF/classes/customMessages_pl.properties
jar uvf monitor.war  WEB-INF/classes/customMessages_ru.properties
jar uvf monitor.war  WEB-INF/classes/customMessages_uk.properties
jar uvf monitor.war  WEB-INF/classes/customMessages_zh_TW.properties
jar uvf monitor.war  WEB-INF/classes/framework_pl.properties
jar uvf monitor.war  WEB-INF/classes/framework_ru.properties
jar uvf monitor.war  WEB-INF/classes/framework_uk.properties
jar uvf monitor.war  WEB-INF/classes/server.properties
jar uvf monitor.war  WEB-INF/classes/server_ar.properties
jar uvf monitor.war  WEB-INF/classes/server_de.properties
jar uvf monitor.war  WEB-INF/classes/server_es.properties
jar uvf monitor.war  WEB-INF/classes/server_fr.properties
jar uvf monitor.war  WEB-INF/classes/server_it.properties
jar uvf monitor.war  WEB-INF/classes/server_ja.properties
jar uvf monitor.war  WEB-INF/classes/server_ko.properties
```

```
jar uvf monitor.war  WEB-INF/classes/server_nl.properties
jar uvf monitor.war  WEB-INF/classes/server_pl.properties
jar uvf monitor.war  WEB-INF/classes/server_pt_BR.properties
jar uvf monitor.war  WEB-INF/classes/server_ru.properties
jar uvf monitor.war  WEB-INF/classes/server_uk.properties
jar uvf monitor.war  WEB-INF/classes/server_zh_TW.properties
jar uvf monitor.war  WEB-INF/lib/sas.oprisk.framework.server.jar
jar uvf monitor.war  WEB-INF/lib/sas.oprisk.framework.server.tools.jar
jar uvf monitor.war  WEB-INF/lib/sas.oprisk.monitor.jar
jar uvf monitor.war  WEB-INF/lib/sas.oprisk.server.jar
jar uvf monitor.war  WEB-INF/lib/sas.oprisk.server.base.jar
jar uvf monitor.war  WEB-INF/struts-config.xml
jar uvf monitor.war  WEB-INF/tiles.xml
jar uvf monitor.war  WEB-INF/validation.xml
jar uvf monitor.war  WEB-INF/web.xml
```

2. Change the script to be executable using the chmod +x command.
3. Ensure the location of the java jar command is on your PATH.
4. Change directory to $INSTALLDIR.
5. Copy monitor.war from /home/sasl/SAS/<plan name>/Lev1/web/webapps to $INSTALLDIR.
6. Run the script you created while in directory $INSTALLDIR.
7. Move the updated monitor.war into /home/sasl/SAS/<plan name>/Lev1/web/webapps, then redeploy as specified in section 3.2 below.

3.2 Redeploy the web application

Tomcat:
Copy the updated monitor.war file to <TOMCAT_HOME>/webapps. If liveDeploy is off, you can reload the monitor application or restart Tomcat to redeploy SAS OpRisk Monitor.

WebLogic:
From the WebLogic Server Console, go to Deployments -> Web Application Modules and delete the monitor Web application. Then click on the Deploy a New Web Application Module to redeploy SAS OpRisk Monitor.

WebSphere:
Please refer to the SAS note SN-33539 for a complete set of additional configuration steps if you are using Websphere 6.0.
For WebSphere 6.0.2.15, it may be necessary to reapply changes in your deployed SAS OpRisk Monitor web application's was.policy file. Review the was.policy information in monitor.war.ear/META-INF, or refer to your instructions.html document for details on how to update file was.policy.
From the WebSphere Administrator's Console, stop the monitor application and uninstall the monitor application.
Then redeploy from Applications -> Install New Application.

3.3 Register the SAS OpRisk Monitor Server stored processes for reporting in SAS Management Console

1) If changes have been made to any of the stored processes from a previous installation then please make a backup by exporting them to a new package file (.spk). Once this has been completed please skip step 2) and go to step 3).

2) If you have never registered SAS OpRisk Monitor stored processes then first, to set up the path, bring up the properties dialog on any stored process. Select the Execution tab click on the "Manage" button. Add a source code repository for the path:

C:\Program Files\SAS\SAS_9.1/sasstp/ormonitormva for a UNIX server

C:\Program Files\SAS\SAS 9.1\ormonitormva\sasstp for a Windows server

3) Next, right click on BI Manager, select import and import the package file OpRiskStoredProcesses.spk from the OpRisk Monitor Mid-Tier installation C:\Program Files\SAS\OpriskMonitor\3.2\Config.

If you have any questions or concerns regarding the installation of this hot fix, please do not hesitate to contact SAS Technical Support:

Phone: (919) 677-8008
Email: support@sas.com
Web: http://support.sas.com/techsup/contact/submit_emits2.html