Planning for Maintenance Releases and Product Upgrades for SAS® 9.2

The correct bibliographic citation for this manual is as follows: SAS Institute Inc. 2010. *Planning for Maintenance Releases and Product Upgrades for SAS® 9.2*. Cary, NC: SAS Institute Inc.

Planning for Maintenance Releases and Product Upgrades for SAS ® 9.2

Copyright © 2010, SAS Institute Inc., Cary, NC, USA

SAS Institute Inc., SAS Campus Drive, Cary, North Carolina 27513.

1st electronic book, August 2010
2nd electronic book, November 2010
3rd electronic book, December 2010
4th electronic book, February 2011
5th electronic book, April 2011
6th electronic book, June 2011
7th electronic book, September 2011
8th electronic book, October 2011

SAS® Publishing provides a complete selection of books and electronic products to help customers use SAS software to its fullest potential. For more information about our e-books, e-learning products, CDs, and hard-copy books, visit the SAS Publishing Web site at **support.sas.com/publishing** or call 1-800-727-3228.

SAS® and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

Other brand and product names are registered trademarks or trademarks of their respective companies.

Contents

PART 3 Product-Specific Maintenance Releases   115

PART 4 New Product Releases   127

Part 1

General Information about Maintenance Releases and Product Upgrades

Chapter 1
Using This Documentation

About This Document

This document describes how applying a maintenance release or upgrading to a new product release might affect your site.

This document is organized into the following parts:

* "General Information about Maintenance Releases and Product Upgrades" provides information that is common to applying maintenance releases and upgrading products.

  This part contains the following information:

  * a brief summary of this document

  * a brief announcement about new product releases, product-specific maintenance releases, and future product updates

  * an explanation of product release numbers and how you can determine what products you are running at your site

  * how you can use the installation files to verify or troubleshoot your installation

* "Third Maintenance Release for SAS 9.2" describes how to apply the third maintenance release for SAS 9.2.

  This part contains the following information:

  * brief descriptions of the SAS 9.2 release and the three subsequent maintenance releases

  * how to prepare your site before you apply the third maintenance release for SAS 9.2

- • how to install the third maintenance release by using the SAS Deployment Wizard and how you can verify that the installation was successful

- • any configuration steps that you might need to perform after the installation is complete

- • how the third maintenance release for SAS 9.2 affects other SAS products and any product-specific tasks that you are required to complete to ensure that your programs and SAS applications work correctly after you apply the maintenance release

- • "Product-Specific Maintenance Releases" provides more information about maintenance releases for other SAS products. Not all SAS products have maintenance releases. Review the contents of this part to determine whether the products at your site have additional updates to apply.

- • "New Product Releases" provides more information about the new product releases that shipped after the third maintenance release for SAS 9.2. Review the contents of this part to determine whether the products at your site have a new product release.

When to Review This Document

Applying the Third Maintenance Release for SAS 9.2

If you are currently running SAS 9.2 at your site, you are encouraged to apply the third maintenance release for SAS 9.2. Maintenance releases are cumulative, so when you apply the third maintenance release, you also receive any updates that were made in the first and second maintenance release of SAS 9.2.

Review this document before you apply the third maintenance release to determine the following information:

- • how the changes in the maintenance release will affect your site

- • the specific installation and configuration steps that you need to perform at your site

For more information, see Chapter 6, "Checklists for Applying the Third Maintenance Release for SAS 9.2," on page 25.

Note: You do not need to review this document in the following situations:

- • You are migrating to SAS 9.2 from a previous SAS release. If the **Product** field in your Software Order E-mail lists TS2M3, then your SAS 9.2 order includes the third maintenance release for SAS 9.2. When you install and configure SAS 9.2, the steps for applying a maintenance release (which are described in this document) do not apply to you.

- • Your site requested a maintenance release before the third maintenance release for SAS 9.2 shipped in May 2010. In this case, your site might be applying the second maintenance release for SAS 9.2. To determine what version of SAS you are running at your site, see Chapter 4, "Reviewing Your SAS Order Information," on page 13. For more information about how to apply the second maintenance release for SAS 9.2 at your site, see `http://support.sas.com/documentation/cdl/en/whatsdiff/62567/HTML/default/viewer.htm`.

The SAS installation representative at your site can request the third maintenance release for SAS 9.2. For more information, see **http://support.sas.com/software/maintenance**.

Applying a Product-Specific Maintenance Release

Individual products can ship their own maintenance releases. For more information, see "Product-Specific Maintenance Releases and the Third Maintenance Release for SAS 9.2" on page 121.

Review this document to determine the following information:

- whether a product at your site has shipped a maintenance release

- how the changes in the maintenance release will affect your site

- how the product-specific maintenance release relates to the third maintenance release for SAS 9.2

- the product-specific installation and configuration steps that you need to perform at your site

For more information, see Chapter 13, "Checklists for Applying a Product-Specific Maintenance Release," on page 117.

Upgrading to a New Product Release

Many new releases of existing SAS products depend on the third maintenance release for SAS 9.2. When you run the SAS Deployment Wizard to upgrade to the new product release, SAS automatically detects any files on your system that are older than the files in your order. If you have not applied the third maintenance release for SAS 9.2, then this maintenance release is automatically applied. If you have already applied the third maintenance release for SAS 9.2, the SAS Deployment Wizard still identifies any files that need to be updated. Therefore, if you are applying the maintenance release as well as upgrading a product, you need to complete all of the installation and configuration steps for the third maintenance release that are described in this document.

Even if you have installed the third maintenance release for SAS 9.2, review this document to determine the following information:

- what products will be upgraded at your site. For more information, see "Assessing the Effect on Products at Your Site" on page 137.

- the specific installation and configuration steps that you need to perform at your site

For more information, see Chapter 16, "Checklists for Upgrading to a New Product Release," on page 129.

Note: After you have installed the products in an order, you cannot install products from an order with an earlier revision number. For example, if your site is currently running the products from an order with a 10w20 revision number, then you cannot install products from an order with a 10w06 revision number. For more information about revision numbers, see Chapter 4, "Reviewing Your SAS Order Information," on page 13.

Additional Resources

Resources for New Features and Enhancements

To identify all of the updates in a maintenance release or a new product release, use this document in conjunction with the following documents and SAS Web sites:

- The Issues Addressed Web site for SAS 9.2 maintenance releases is compiled by SAS Technical Support and lists the specific problems that were fixed in the second and third maintenance releases for SAS 9.2. (The first maintenance release was a localization-only release, and no specific problems were fixed.) Customers who want to review a summary of all the issues that were addressed for a SAS product should review this Web site.

- *What's New in SAS 9.2* describes new features and enhancements to products that are available in SAS 9.2. The What's New documentation is cumulative and is updated whenever there is an update of a SAS product. Review the What's New topics for your products whenever you receive a product update.

- SAS 9.2 product-specific documents, such as a product's Help or user's guide, provide detailed information about how to use the new features and enhancements.

To access these documents and SAS Web sites, see **http://support.sas.com/software/maintenance/**.

Other Required Documentation

Often, this document refers you to other SAS documentation for conceptual information or additional steps. Here is the other documentation that you will need to complete the steps for applying a maintenance release or upgrading to a new product:

- *SAS Intelligence Platform: Installation and Configuration Guide*

- *SAS Intelligence Platform: System Administration Guide*

- *SAS Intelligence Platform: Web Application Administration Guide*

To access these documents, see **http://support.sas.com/documentation/onlinedoc/intellplatform**.

Chapter 2
Current and Planned Updates to Specific SAS Products

Product-Specific Maintenance Releases

SAS 9.2 has had three maintenance releases. In addition, some SAS products have also shipped a product-specific maintenance release.

Product-specific maintenance releases are available for the following products:

- "SAS BI Dashboard 4.3_M2" on page 123
- "SAS Merchandise Intelligence 4.2_M1" on page 124
- "SAS Offer Optimization for Communcations 5.2_M1" on page 124
- "SAS OpRisk VaR 4.1_M2" on page 125
- "SAS Risk Dimensions 5.3_M1" on page 125
- "SAS Risk Management for Insurance 2.1_M1" on page 125
- "SAS Text Miner 4.2_M1" on page 126

New Product Releases

Since the release of the third maintenance release for SAS 9.2, SAS has shipped new releases of several products. If your order has a revision number of 10w30 or later, then your order might include a new product release. For more information, see Chapter 4, "Reviewing Your SAS Order Information," on page 13.

If you license any of these products at your site, review the following topics:

- "SAS Add-In 4.3 for Microsoft Office" on page 151
- "SAS BI Dashboard 4.3" on page 152
- "SAS Clinical Data Integration 2.2" on page 155
- "SAS Data Surveyor for Clickstream 2.2" on page 156

Future Plans to Deprecate Functionality

As you plan to apply the third maintenance release for SAS 9.2, note that SAS plans to deprecate the following functionality in a future release:

• SAS Web OLAP Viewer for Java will have no new releases. It has been replaced by functionality that is available in SAS Web Report Studio 4.3.

• SAS Visual Data Explorer will be deprecated in SAS 9.3.

• In SAS 9.3, the NLSCOMPATMODE option will be deprecated and the NLS compatibility mode will no longer be supported. For more information, see the *SAS National Language Support: Reference Guide*.

• The Replication Wizard in SAS Management Console has been deprecated. For more information, see SAS Note 40834 at `http://support.sas.com/kb/40/834.html` or contact SAS Technical Support.

Chapter 3
Understanding Product Release Numbers

Understanding Technical Support Numbers

Each installation of SAS has a unique Technical Support number. The format of a Technical Support Number is TS*x*M*y*. Examples of Technical Support numbers include TS1M0 (for the initial release of SAS 9.2) and TS2M3 (for the third maintenance release for SAS 9.2).

To determine which SAS release you are running at your site, open SAS and review the information at the top of the log when SAS starts. You can also view the version number by selecting **Help ⇨ Help about SAS**.

Note: In SAS documentation or on SAS Web sites, you might see TS2Mx. This product number is a generic reference to all maintenance releases for SAS 9.2.

Product-Specific Release Numbers for Other SAS Products

SAS products use product-specific release numbers. To determine what products are running at your site, generate a deployment registry report. For more information, see .

The following table shows examples of some product release numbers for products that shipped in SAS 9.2 (TS2M0):

Table 3.1   *Examples of Product Release Numbers*

Product Name	Release Number
Base SAS	9.2

Product Name	Release Number
SAS Data Integration Studio	4.21
SAS Management Console	9.2
SAS Web Report Studio	4.2

Understanding Maintenance Release Numbers

After you install a maintenance release, the product release number for updated products changes to include maintenance-specific identification, such as M1. This maintenance number is incremented by one for each maintenance release of that product. However, a maintenance release (such as the second or third maintenance release for SAS 9.2) might not contain updates for all SAS products. Therefore, maintenance numbers can differ across SAS products. To determine the maintenance numbers for products at your site, generate a deployment registry report. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

The following table shows some of the maintenance release numbers in the third maintenance release for SAS 9.2:

Table 3.2 *Examples of Maintenance Release Numbers for SAS Products*

Product Name	Release Number
Base SAS	9.21_M3
SAS Data Integration Studio	4.21_M2
SAS Management Console	9.2_M2
SAS Web Report Studio	4.2_M2

As this table shows, most products in the third maintenance release for SAS 9.2 have a maintenance release number of M2. However, Base SAS has a maintenance release number of M3.

The maintenance release numbers are different because there have been three maintenance releases for Base SAS. The first maintenance release did not contain product updates. Instead, it contained localized Help for the SAS Intelligence Platform products.

The second maintenance release for SAS 9.2 did contain product updates. For this maintenance release, the maintenance release number for Base SAS was incremented to M2. However, other products in the table were not delivered in the first maintenance release for SAS 9.2. Because this was the first time that these products were included in a maintenance release, their maintenance release number was M1.

For the third maintenance release, both Base SAS and the other products in the table are being updated. Therefore, all of the maintenance release numbers are incremented by 1.

As a result, Base SAS has a maintenance release number of M3, and the other SAS products have a maintenance release number of M2.

For more information about product numbers in SAS 9.2, see **http://support.sas.com/software/92/productnumbers.html**.

Determining the Product Release Numbers for Products at Your Site

Before applying a maintenance release or upgrading to a new product release, you need the product release numbers for all SAS products at your site. To determine these product release numbers for each machine in your SAS deployment, generate a deployment registry report and save it for future reference. For more information about how to generate this report, see SAS Note 35968 at **http://support.sas.com/kb/35/968.html**.

The deployment registry report lists all of the SAS 9.2 products that are installed in the same SAS installation directory.

Note: The deployment registry report lists all of the installed products. These products might not be deployed or configured at your site.

For example, if your deployment includes an installation of SAS Web Report Studio 4.2, then the deployment registry report could include the following entry:

```
Host: wx6
Product Code: citationweb
Version: 4.2
Display Name: SAS Web Report Studio
Display Version: 4.2_M1
```

The Display Version field shows that SAS Web Report Studio 4.2_M1 is installed at your site. The maintenance release number (M1) indicates that SAS Web Report Studio has been updated in one of the maintenance releases for SAS. (In this case, SAS Web Report Studio was updated in the second maintenance release for SAS 9.2.) For more information about maintenance release numbers and how these numbers are incremented for each SAS product, see "Understanding Maintenance Release Numbers" on page 10.

Note: It is recommended that you generate a deployment registry report before you apply any update and that you save this report for future reference. However, if you did not generate a deployment registry report before you applied the maintenance release or upgraded to a new product release, you can determine your product release number for each SAS product at your site by reviewing the Deployment Summary that is generated by the SAS Deployment Wizard. For more information, see "About the Deployment Summary" on page 18.

Chapter 4

Reviewing Your SAS Order Information

What Is in My Order?

When determining what products will be updated at your site, it is often useful to review the list of products in your software order. SAS provides two resources that you can use to determine what is in your order and when your order was placed.

- "Software Order E-mail" on page 13

- "SAS Order Information" on page 14

Software Order E-mail

The Software Order E-mail (SOE) is sent to you after you request a maintenance release, a product upgrade, or a new SAS product. Here is an example of the information that you might see in the SOE if you requested the third maintenance release for SAS 9.2:

The introductory text states that you are receiving this e-mail because you requested a maintenance release. By using the information in the **Product** field, you can confirm that you are downloading the third maintenance release for SAS 9.2. The third maintenance release is represented by TS2M3.

You can use the revision numbers in the **Product** field to determine when your order was placed. In this example, the revision number is Rev. 920_10w34, which means that the order was placed in the 34th week of 2010. If your order includes the third maintenance release for SAS 9.2, then the revision number in the **Product** field is 10w20 or later.

It is recommended that you use the same SAS Software Depot as you used for your initial SAS 9.2 installation. By using the same SAS Software Depot, SAS downloads only the files that have changed since your initial installation. If you create a new SAS Software Depot, then SAS downloads all of the files for SAS 9.2 and any products in your order.

SAS Order Information

After you download your order to an existing SAS Software Depot, you can use the SAS Order Information (SOI) file to determine what products were in your order and when the order was placed. The location of the SOI is in your SAS Software Depot in `install_doc\`*`order-number`*`\soi.html`.

Here is an example of the information that you might see in the SAS Order Information file.

Information for Tech Support Site 00000001:

Site Name:	*your-site-name*
Tech Support Site Number:	00000001
Contracts Site Number:	000001
Order Type:	Planning
Operating System:	*your-operating-system*
Product:	SAS 9.2 TS2M3, Rev. 920_10w34

Product(s) Ordered	**Expiration Date**
Base SAS	December 31, 2010
Credit Scoring for SAS Enterprise Miner Client	December 31, 2010
SAS Enterprise Guide	December 31, 2010
SAS Enterprise Miner Personal Client	December 31, 2010
SAS Model Manager Report Registration Client	December 31, 2010
SAS Text Miner Client	December 31, 2010
SAS Text Miner for Spanish	December 31, 2010

When you run the SAS Deployment Wizard, SAS identifies the product files in your SAS Software Depot that need to be updated based on your order. By default, all orders that are 10w20 or later include the third maintenance release for SAS 9.2. The third maintenance release is represented by TS2M3 in the **Product** field. If you have not applied the third maintenance release for SAS 9.2 at your site, then this maintenance release is applied when you run the SAS Deployment Wizard.

You can use the revision numbers in the **Product** field to determine when your order was placed. In this example, the revision number is Rev. 920_10w34, which means that the order was placed in the 34th week of 2010. If your order includes the third maintenance release for SAS 9.2, then the revision number in the **Product** field is 10w20 or later.

Chapter 5
Understanding the SAS Installation Files

What Is an Installation File?

When you apply a maintenance release or upgrade to a new product release, SAS automatically creates several files that you can use to determine what products were updated, verify that the update was successful, and troubleshoot any errors. For more information about each of the installation files that you might use, see the following topics:

- "About the Instructions.html and UpdateInstructions.html Files" on page 17

- "About the Deployment Summary" on page 18

- "About the Audit Files" on page 20

About the Instructions.html and UpdateInstructions.html Files

After you install SAS for the first time, configure a new product, or reconfigure an existing product, you must complete the manual steps in the Instructions.html file to complete your deployment. The latest version of the Instructions.html file is available from a link in the SAS Deployment Wizard and in the **SAS-configuration-directory/Levn/Documents/** directory. The Instructions.html file contains the validation steps for the last task that you performed. Previous versions of the Instructions.html file are available from the **SAS-configuration-directory/Levn/Backup** directory. You might need to refer to a previous Instructions.html file to complete your deployment.

After you install a maintenance release or upgrade to a new product release, you could see an UpdateInstructions.html file, which contains the configuration steps that you must manually complete. The UpdateInstructions.html file could contain a subset of steps from the original Instructions.html file, or it could contain new steps that you must complete because you are applying a maintenance release or upgrading to a new product. The latest version of the UpdateInstructions.html file is available from the **SAS-configuration-directory/Levn/Documents/** directory. Previous versions of the UpdateInstructions.html file are available from the **SAS-configuration-directory/Levn/Backup** directory.

About the Deployment Summary

How to Locate the Deployment Summary

During the installation process, a Deployment Summary is saved in the **SAS-installation-directory** directory. If you exit the SAS Deployment Wizard without installing any updates, then the Deployment Summary is not saved to this directory.

Note: A Deployment Summary for each previous installation is saved in the home directory of the user ID that was used to install SAS. The Deployment Summary for the latest installation of the maintenance release is always available from **SAS-installation-directory/InstallMisc/InstallLogs/**.

About Each Section in the Deployment Summary

Update Summary

The Update Summary lists the products that were updated. Only products that were previously installed on your machine are updated during a maintenance release or when you upgrade to a new product release. The updates are divided into two categories:

- The Products to Install category lists any new products that you are installing or any products that you are upgrading to a new release.

- The Products to Upgrade category lists the products that will be updated when you apply a SAS maintenance release or a product-specific maintenance release.

For each product in the Update Summary, there are two columns of release numbers:

- The Installed column lists the product release number that was on your machine before you applied the maintenance release or product upgrade.

- The Updated column lists the product release number that is on your machine after you have applied the maintenance release or product upgrade.

Here is an example of output that you might see in the Deployment Summary:

Update Summary

Products to Install:	Installed	Updated
SAS Web Application Themes	9.23	9.24

Products to Upgrade:	Installed	Updated
SAS Management Console	9.2_M1	9.2_M2
SAS Deployment Tester Plug-in for SAS Management Console	1.3_M1	1.3_M2
SAS Table Server Plug-ins for SAS Management Console	9.2_M1	9.2_M2
SAS Web Infrastructure Client	9.2_M1	9.2_M2
SAS Forecast Server Plug-ins for SAS Management Console	3.1_M2	3.1_M3
SAS ESRI Map Manager Plug-in for SAS Management Console	9.2_M1	9.2_M2
SAS Enterprise Miner Plug-in for SAS Management Console	6.1_M1	6.1_M2
SAS Foundation Services	2.1_M1	2.1_M2
SAS Web Infrastructure Platform	9.2_M1	9.2_M2
SAS Analytics Platform	1.5_M2	1.5_M3
SAS Information Delivery Portal	4.2_M1	4.2_M2
SAS Web Report Studio	4.2_M1	4.2_M2
SAS Shared Services	9.2_M1	9.2_M2
SAS Information Delivery Portal JPS Extension	4.2_M1	4.2_M2
SAS BI Dashboard	4.2_M1	4.2_M2
SAS Help Viewer for the Web	9.2_M2	9.2_M3
SAS Information Delivery Portal Help and Documentation	4.2_M2	4.2_M3

For each product in the Deployment Summary, review the information in the "Product-Specific Details and Post-Configuration Requirements" chapter in Parts 2, 3, and 4 to determine the configuration steps that are necessary for your site. If you do not complete these configuration steps, you might experience unexpected behavior or errors that will affect the use of your SAS software.

- To complete the post-configuration steps for the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2.

- To complete the post-configuration steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3.

- To complete the post-configuration steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

Installation Section

The Installation section lists whether each product update installed successfully. In the following example, all products installed successfully, so you can complete any post-configuration steps for these products.

Installation

Completed successfully - SAS Deployment Manager
Completed successfully - SAS Management Console (Update)
Completed successfully - SAS Deployment Tester Plug-in for SAS Management Console (Update)
Completed successfully - SAS Table Server Plug-ins for SAS Management Console (Update)
Completed successfully - SAS Web Infrastructure Client (Update)
Completed successfully - SAS Forecast Server Plug-ins for SAS Management Console (Update)
Completed successfully - SAS ESRI Map Manager Plug-in for SAS Management Console (Update)
Completed successfully - SAS Enterprise Miner Plug-in for SAS Management Console (Update)
Completed successfully - SAS Foundation Services (Update)
Completed successfully - SAS Web Infrastructure Platform (Update)
Completed successfully - SAS Analytics Platform (Update)
Completed successfully - SAS Information Delivery Portal (Update)
Completed successfully - SAS Web Report Studio (Update)
Completed successfully - SAS Shared Services (Update)
Completed successfully - SAS Information Delivery Portal JPS Extension (Update)
Completed successfully - SAS BI Dashboard (Update)
Completed successfully - SAS Help Viewer for the Web (Update)
Completed successfully - SAS Information Delivery Portal Help and Documentation (Update)

However, if a product installation failed or completed with errors (such as the SAS Add-In for Microsoft Office in the following example), review the audit files for that product. For more information, see "About the Audit Files" on page 20.

Completed successfully - SAS Information Map Studio (Update)
Completed successfully - SAS Intelligence Platform Object Framework (Update)
Completed successfully - SAS Locale Setup Manager (Update)
Completed successfully - SAS Metadata Bridges (Update)
Completed successfully - SAS OLAP Cube Studio (Update)
Completed successfully - SAS Web Application Themes
Completed with errors - SAS Add-in for Microsoft Office
Completed successfully - SAS Data Integration Studio
Completed successfully - SAS Data Integration Studio (Update)
Completed successfully - SAS Enterprise Guide

About the Audit Files

Audit files identify all of the changes that occurred during an installation of a SAS maintenance release (such as the third maintenance release for SAS 9.2) or a product-specific maintenance release (such as SAS Text Miner 4.2_M1). The audit files list each file that was added, deleted, or replaced. All audit files are saved in the *SAS-installation-directory*/**InstallMisc/InstallLogs/Maintenance** directory.

For each SAS product that is updated in a maintenance release, there are two audit files:

- *product-identification*_**preexec.log** lists all of the files that will be updated when you install the maintenance release.

- *product-identification*_**postexec.log** lists all of the files that were updated when you installed the maintenance release.

In the filename, *product-identification* contains the 12–byte code of the SAS product that is associated with that audit file. To determine the name of the SAS product that is associated with a 12–byte code, you can generate a deployment registry report. For more information about how to generate this report, see SAS Note 35968 at **http://support.sas.com/kb/35/968.html**.

This report lists all of the SAS 9.2 products that are installed in the SAS installation directory. For example, if your deployment includes SAS Web Report Studio 4.2, then this report would include the following entry:

```
Host: wx6
Product Code: citationweb
Version: 4.2
Display Name: SAS Web Report Studio
Display Version: 4.2_M2
```

From this entry, you can determine that a product code of citationweb represents SAS Web Report Studio, so any audit files with "citationweb" in the filename are for SAS Web Report Studio.

Part 2

Third Maintenance Release for SAS 9.2

Chapter 6

Checklists for Applying the Third Maintenance Release for SAS 9.2

Audience for the Third Maintenance Release for SAS 9.2

If you are currently running SAS 9.2 at your site, then review this document before ordering the third maintenance release for SAS 9.2. Reviewing this document will help you understand how the third maintenance release will affect your site.

If you have already ordered the third maintenance release for SAS 9.2, your Software Order E-mail states which maintenance release is in your order. If your order includes the third maintenance release for SAS 9.2, then SAS 9.2 TS2M3 appears in the **Product** field. For more information, see "Reviewing Your SAS Order Information" on page 13.

The information in this document does not apply in the following scenarios:

- if you are installing SAS 9.2 for the first time.

- if you are migrating to SAS 9.2 and in your Software Order E-mail, TS2M3 appears in the **Product** field.

- if your site requested a maintenance release before the third maintenance release for SAS 9.2 shipped in May 2010, then your site might be applying the second maintenance release for SAS 9.2. The Technical Support Number for this release is TS2M2. For more information about how to apply the second maintenance release for SAS 9.2 at your site, see **http://support.sas.com/documentation/ cdl/en/whatsdiff/62567/HTML/default/viewer.htm**.

Applying the Third Maintenance Release for SAS 9.2

Resources to Review before You Request a SAS Maintenance Release

Before you request the third maintenance release for SAS 9.2, you might want to know what new functionality is available and how installing the maintenance release could affect your site. The following table lists the information that you want to gather before installing the third maintenance release for SAS 9.2 and where to find that information.

Table 6.1 *Resources for Determining How a Maintenance Release Will Affect Your Site*

Question	Resources to Review
What SAS products are currently installed at my site?	"Determining the Product Release Numbers for Products at Your Site" (p. 11)
What new features and enhancements are available in the third maintenance release for SAS 9.2?	To create a comprehensive list of the new features and enhancements for the SAS products at your site, see the following Web sites:
	• The Issues Addressed Web site for SAS 9.2 maintenance releases is compiled by SAS Technical Support and lists the specific problems that were fixed in the second and third maintenance releases for SAS 9.2. (The first maintenance release was a localization-only release, and no specific problems were fixed.) Customers who want to review a summary of all the issues that were addressed for a SAS product should review this Web site.
	• *What's New in SAS 9.2* describes new features and enhancements to products that are available in SAS 9.2. The What's New documentation is cumulative and is updated whenever there is an update of a SAS product. Review the What's New topics for your products whenever you receive a product update.
	• SAS 9.2 product-specific documents, such as a product's Help or user's guide, provide detailed information about how to use the new features and enhancements.
Is there additional support for operating environments or third-party software?	"Planning Information for Specific Operating Environments" (p. 41)
	"Updates to Third-Party Software" (p. 42)

Question	Resources to Review
What are the disk space requirements?	"Estimating Disk Space Requirements" (p. 33)

Creating a Pre-Installation Checklist for the Third Maintenance Release for SAS 9.2

Before you install the third maintenance release, determine what specific tasks need to be completed at your site. During this process, you will create a custom checklist for your site. Some tasks must be performed by all sites, but other tasks are required only if you license that particular SAS product. The following table lists the sections that you need to review in order to create this custom checklist.

Table 6.2 Resources for Creating a Pre-Installation Checklist

Question	Resources to Review
Do I need to back up my current SAS files?	"Creating and Removing Backup Files" (p. 34)
What happens to any site customizations when I apply the third maintenance release for SAS 9.2?	"Effect on Customizations" (p. 37)
What SAS products will be updated?	"Assessing the Effect on Products at Your Site" (p. 34)
Do any of my SAS products require pre-installation steps?	"Product-Specific Details and Post-Configuration" chapter in Parts 2, 3, and 4 • To complete any pre-installation steps for the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2. • To complete any pre-installation steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3. • To complete any pre-installation steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.
What happens if I upgrade a SAS 9.2 (TS1M0) installation?	"Upgrading a SAS 9.2 (TS1M0) Installation" (p. 44)

Creating an Installation and Post-Configuration Checklist for the Third Maintenance Release for SAS 9.2

During this process, you will create a custom checklist for your site. Some tasks must be performed by all sites, but other tasks are required only if you license that particular SAS product. The following table lists the sections that you need to review in order to create this custom checklist.

Table 6.3 Resources for Creating an Installation and Post-Configuration Checklist

Question	Resources to Review
What steps do I need to take if my deployment includes a Web application server?	"Undeploying SAS Web Applications and Stopping the Web Application Servers" (p. 38)
How do I install the third maintenance release for SAS 9.2?	"How to Install and Configure the Third Maintenance Release for SAS 9.2" (p. 45)
What post-configuration steps are required for each product at my site?	"Product-Specific Details and Post-Configuration" chapter in Parts 2, 3, and 4 • To complete post-configuration steps for the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2. • To complete post-configuration steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3. • To complete post-configuration steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.
How can I install a new product?	"Adding a New Product after Applying a Maintenance Release" (p. 48)

Chapter 7

Understanding the Maintenance Releases for SAS 9.2

Overview of the SAS Maintenance Releases

To optimize performance and support, SAS encourages you to install the SAS 9.2 maintenance releases. Maintenance releases are cumulative. For example, the third maintenance release contains all of the new features and enhancements from the first, second, and third maintenance releases. If you choose not to install a maintenance release, then you will automatically receive all of the content in that maintenance release when you next upgrade your version of SAS.

In general, any hot fixes that were released since SAS 9.2 (TS2M0) are included in each maintenance release. However, a hot fix for your product might be released after the third maintenance release for SAS 9.2. To verify that you have the latest hot fixes for the products at your site, see Technical Support Hot Fixes at `http://ftp.sas.com/techsup/download/hotfix/hotfix.html`.

Note: Before you apply any hot fixes, generate a deployment registry report to determine what release of each SAS product you currently have installed at your site. For more information about how to generate this report, see SAS Note 35968 at `http://support.sas.com/kb/35/968.html`.

Policy Statement for SAS Maintenance Releases

SAS has the following policy for maintenance releases:

* When you install a new SAS product, you receive the maintenance release that was available when you placed your order.

- SAS creates custom maintenance packages based on the software that is licensed at your site. You do not select the products to update.

- Because of the dependencies between SAS products, you cannot perform the following tasks:

  - You cannot partially install a maintenance release. The SAS deployment tools determine which SAS products to update. You must upgrade all of the SAS software in a specific deployment whether that deployment is on one machine or multiple machines.

  - You cannot uninstall a maintenance release.

- Maintenance releases are cumulative. For example, the third maintenance release contains all of the new features and enhancements from the first, second, and third maintenance releases.

- Maintenance releases update the SAS software that is currently deployed at your site.

- Before installing a maintenance release, it is recommended that you back up your current SAS deployment. For more information, see "Creating and Removing Backup Files" on page 34.

Note: SAS maintenance releases do not include any updates to DataFlux products or to JMP. To access software updates for these products, see the following Web sites:

- the DataFlux Customer Care Portal at **http://dataflux.com/Customer-Care-Portal.aspx**

- JMP Software Updates at **http://www.jmp.com/support/downloads/jmp_software_updates.shtml**

Description of Each SAS 9.2 Release

Overview

The following topics highlight some of the important new features and enhancements in each SAS 9.2 release. Because these releases are cumulative, each SAS 9.2 release incorporates the functionality that was introduced in an earlier release. Each SAS release is identified by a Technical Support number. For more information, see "Understanding Technical Support Numbers" on page 9.

Details about the new features and enhancements are available in the product documentation. A good starting point is the "What's New" topic for the product.

Third Maintenance Release for SAS 9.2 (TS2M3)

The third maintenance release for SAS 9.2 (TS2M3) was released in May 2010. The third maintenance release includes all updates from the first and second maintenance releases for SAS 9.2.

Highlights of the third maintenance release include the following:

- migration across platforms within the same family of operating systems. For example, you can migrate content from one version of Windows to any other version of Windows.

- the ability to change the host names (including the network domains) of server machines in your deployment. For more information, see **"Using the SAS Deployment Manager to Update Host Name References"** in the *SAS Intelligence Platform: System Administration Guide*.

- use of the SAS Deployment Wizard to install a subset of the products that are licensed at your site. This functionality helps reduce the number of products that are installed on a given machine. This functionality is not available for planned deployments.

- support for AIX 7 and Red Hat Enterprise Linux (RHEL) 6. For more information, see **http://support.sas.com/resources/sysreq/hosts/**.

- additional support for third-party software, such as Firefox 3.6, the Platform Suite for SAS Version 5.1, and WebSphere 6.1 on z/OS. For more information, see **http://support.sas.com/resources/thirdpartysupport/**.

  Also, you can now run Oracle WebLogic Administration Server and Oracle WebLogic Managed Server as Windows services. For more information, see **"Running Servers as Windows Services"** in the *SAS Intelligence Platform: System Administration Guide*.

- performance improvements in SAS/ACCESS. Also, the new SAS/ACCESS Interface to Aster *n*Cluster is available.

- SAS/GRAPH ODS Graphics Designer is now production.

- SAS Scoring Accelerator for Netezza is available.

- a new release of SAS Scalable Performance Data Server, which includes a new graphical user interface.

- in SAS OLAP Cube Studio, the ability to define security on SAS OLAP cubes through a batch interface.

New releases of SAS/ETS, SAS/OR, and SAS/STAT are shipping in conjunction with the third maintenance release for SAS 9.2. When you apply the third maintenance release for SAS 9.2, these products are updated to SAS/ETS 9.22, SAS/OR 9.22, and SAS/STAT 9.22. For more information about these products, see **http://support.sas.com/rnd/app/AnalyticalProducts922.html**.

Second Maintenance Release for SAS 9.2 (TS2M2)

The second maintenance release for SAS 9.2 (TS2M2) was released in September 2009. The second maintenance release includes all the updates from the first maintenance release.

Highlights of the second maintenance release include the following:

- updates for Base SAS, the SAS Intelligence Platform products, and the SAS Enterprise tools and clients.

- increased product stability.

- enhanced security options within OLAP cubes.

- expanded support in SAS/ACCESS for Relational Databases to include SQL Pass-Through. Also, new SAS/ACCESS engines for Greenplum and Sybase IQ were added.

- expanded in-database processes for Teradata.

- enhanced support for redeploying Web applications and tools to identify deployed software.

- additional support for operating systems, such as Windows Server 2008.

- additional support for third-party software, such as Java 6, WebLogic 10.0, and WebLogic 10g Release 3.

First Maintenance Release for SAS 9.2 (TS2M1)

The first maintenance release for SAS 9.2 was released in June 2009. This release includes localized Help (in several languages) for the SAS Intelligence Platform products and SAS Enterprise clients.

No hot fixes for SAS products were included in the first maintenance release.

SAS 9.2 (TS2M0)

The second release for SAS 9.2 was released in March 2009. It consisted of an update to the technologies in the SAS Enterprise Intelligence Platform.

SAS 9.2 (TS1M0)

The initial release of SAS 9.2 consisted of new Base SAS capabilities, updated statistical methods, analytical procedures and graphing capabilities, the introduction of SAS Stat Studio, and enhancements to the core visualization technologies.

Chapter 8

Preparing Your Site for the Third Maintenance Release for SAS 9.2

Estimating Disk Space Requirements

When you apply the third maintenance release for SAS 9.2, SAS automatically performs some tasks that increase the disk space requirement for a SAS deployment:

- backs up any file that will be modified during this update. For more information, see "Creating and Removing Backup Files" on page 34.

- explodes the EAR files for the Web applications.

Four areas that might require additional disk space include the SAS Software Depot, SAS installation directories, SAS configuration directories, and space for the deployed SAS Web applications. The specific size increase depends on how SAS is deployed at your site.

Some of this increase in disk space is temporary because you can remove some files after applying a maintenance release. For more information, see "Creating and Removing Backup Files" on page 34.

Creating and Removing Backup Files

Note: Before you apply a maintenance release, you must stop all your SAS servers. It is recommended that you back up all the files in your SAS installation and configuration directories. Create backups of the installation and configuration directories for SAS for each machine in your deployment, and use these backups if you need to restore your previous SAS deployment. For more information, see **"Best Practices for Backing Up and Restoring Your System"** in the *SAS Intelligence Platform: System Administration Guide*.

When you apply a maintenance release, SAS automatically backs up any file in the SAS installation directory that will be modified during this update. These backups are saved in the maintenance directory for each product. The general format of this directory path is *SAS-installation-directory/product/release/maintenance*. Here are two examples of these backup directories:

- For Base SAS 9.2: *SAS-installation-directory/SASFoundation/9.2/maintenance*

- For SAS Web Report Studio 4.2: *SAS-installation-directory/SASWebReportStudio/4.2/maintenance*

If disk space is limited, then after the maintenance release has been installed, you can use the SAS Update File Cleanup Utility to remove the backups that SAS created. This utility must be run under the user ID that was used to install SAS. For more information about how to use this utility, see the following resources:

- **"Remove Update Backup Files"** in the *SAS Intelligence Platform: Installation and Configuration Guide*

- Installation Note 40363 at **http://support.sas.com/kb/40/363.html**

Assessing the Effect on Products at Your Site

Step 1: Review the List of Products to Be Updated

Before you apply the third maintenance release for SAS 9.2, you should review the list of products that will be updated on a machine. From the SAS Deployment Wizard, you can generate a Deployment Summary. For more information, see "About the Deployment Summary" on page 18. The list of product updates could vary for each machine at your site. Therefore, you need to generate a Deployment Summary on every machine that runs SAS 9.2.

Note: If no product updates are required for a machine, then you will not see a
Deployment Summary, and your installation of the maintenance release is complete
on that machine.

To view SAS products that will be updated on a machine:

1. Run the SAS Deployment Wizard from the software depot that contains your
   maintenance order. You must use the same user ID that you used to install SAS 9.2.

   Note: If you are running in a Windows environment, you must be an administrator
   to run the SAS Deployment Wizard, but you do not have to use the same user ID
   that you used to install SAS 9.2. If you are running in a UNIX environment, you
   must use the same user ID that you used to install SAS 9.2. For both operating
   environments, the SDW.log file indicates whether your user ID is different from
   the one that you used to install SAS 9.2.

Table 8.1   *How to Start the SAS Deployment Wizard*

Operating System	How to Start the SAS Deployment Wizard
Windows	Double-click **setup.exe** in the highest-level directory of your SAS Software Depot.
UNIX	Execute **setup.sh** from the highest-level directory of your SAS Software Depot.
OpenVMS on HP Integrity	Type the following command: **run setup_vms.exe**.
z/OS	Run **setup.rexx** from the highest-level directory of your SAS Software Depot. To use a temporary directory other than **/tmp**, specify **– templocation *new-temp-dir***.

2. In the Review Required Updates step, click **Print** to print the Deployment Summary
   for your site. Review the list of products in the Update Summary section. For more
   information, see "Update Summary" on page 18.

Alternatively, you can copy and paste this content into another document, such as an e-mail or a spreadsheet. In a spreadsheet, you can sort the data alphabetically by product name.

Note: If no product updates are required, then the Deployment Summary does not appear, and you can exit the SAS Deployment Wizard.

3. Because you are not installing any software at this time, click **Cancel** to exit the SAS Deployment Wizard.

After reviewing the contents of the Deployment Summary and assessing the effect on products at your site, you can install these product updates by restarting the SAS Deployment Wizard.

Note: When you exit the SAS Deployment Wizard, a copy of the Deployment Summary is not saved to the **/InstallMisc/InstallLogs/**. A Deployment Summary is not saved to this directory until you install the software update.

Step 2: Review Post-Configuration Requirements for Each Product

After obtaining this list of products, review the "Product-Specific Details and Post-Configuration Requirements" chapter in Parts 2, 3, and 4 of this document.

- For post-configuration steps for applying the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2.

- For post-configuration steps for applying a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3.

- For post-configuration steps for upgrading to a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

Reviewing these product topics now will enable you to do the following tasks:

- prepare for any feature changes that will affect your site

- customize the process for installing a maintenance release at your site

- plan for additional time to complete any post-configuration steps for each updated product

If no topic is listed for a product, then no post-configurations steps are required for that product.

Effect on Customizations

Customizations to EAR Files

In the third maintenance release for SAS 9.2, SAS rebuilds and redeploys the enterprise archive (EAR) files for all Web applications at your site. (Examples of Web applications include SAS Web Report Studio and the SAS Information Delivery Portal.) Therefore, customizations that you made to the EAR files after initial deployment might be lost.

Here are examples of customizations that you might have specified in your EAR files:

- changes to the context root for Web applications, such as the SAS Information Delivery Portal and the SAS BI Dashboard. After your initial installation of SAS, you might have customized the URL that is used to access a SAS Web application at your site. However, after applying the third maintenance release for SAS 9.2, this customization is lost, and you must specify this customization again in order for your site-specific URL to work.

- customizations for Web authentication. For more information, see the "Restore Customizations for Web Authentication" topic for your Web application server in "Additional Configuration Steps for Your Web Application Servers" on page 49.

Customizations to the Server Configuration Files

For the SAS Metadata Server, SAS Application Servers, SAS/SHARE Servers, and SAS Table Servers, SAS provides configuration files that you can use to specify site-specific modifications to the server's start-up options and the autoexec.sas file. Any configuration file that you can modify contains **_usermods**. Any modifications to these files are not overwritten when you apply a maintenance release or upgrade to a new product.

For more information, see **"Reference: Configuration Files for SAS Servers"** in the *SAS Intelligence Platform: System Administration Guide*.

Record Any Additional Customizations at Your Site

After your initial installation of SAS, you might have made additional customizations at your site. Before you apply the third maintenance release for SAS 9.2, note any customizations that you made so you can restore these customizations after you apply the maintenance release. For more information, see **"Using Configuration Manager"** in the *SAS Intelligence Platform: Web Application Administration Guide*.

For example, you might have configured properties or specified settings for the SAS Web applications by using the Configuration Manager plug-in for SAS Management

Console. After you apply the third maintenance release for SAS 9.2, these customizations are lost.

Undeploying SAS Web Applications and Stopping the Web Application Servers

Why You Need to Undeploy the SAS Web Applications

When you apply the third maintenance release for SAS 9.2, SAS automatically performs these tasks:

- rebuilds all SAS Web applications

- configures and restarts your Web application servers

In order to apply the third maintenance release, you must undeploy any SAS Web applications on the tier where you are applying the maintenance release and stop any Web application servers that run SAS Web applications. For more information, see the following topics:

- "Oracle WebLogic Server" on page 38

- "WebSphere Application Server" on page 39

- "JBoss Application Server" on page 39

Oracle WebLogic Server

Complete these steps:

1. Stop and delete all SAS Web applications.

   a. Open the WebLogic Administration Console.

   b. In the **Domain Structure** panel, select **Deployments**.

   c. In the **Change Center** panel, click **Lock and Edit**.

   d. In the **Summary of Deployments** panel, select the check boxes for all SAS Web applications. Then select **Stop ⇨ Force Stop Now**.

   e. In the **Force Stop Application Assistance** panel, click **Yes**.

   f. In the **Summary of Deployments** panel, refresh the view until all selected applications show a Prepared state.

      Note: The SAS managed servers should still be running.

   g. In the **Summary of Deployments** panel, select the check boxes for all the SAS Web applications, and then click **Delete**.

   h. In the **Delete Application Assistant** panel, click **Yes**. A message confirms the deletion of the selected deployments.

   i. In the **Change Center** panel, click **Activate Changes**.

2. Stop the managed servers for the Web applications (such as SASServer1 and SASServer2). For more information, see **"Starting or Stopping an Oracle WebLogic Server"** in the *SAS Intelligence Platform: System Administration Guide*.

3. Stop the Administration Server and the Node Manager.

WebSphere Application Server

Complete these steps:

1. Stop all SAS Web applications. In the WebSphere Administrative Console, select the check box for each SAS Web application, and then click **Stop**.

2. Uninstall all SAS Web applications.

   - In the WebSphere Administrative Console, select the check box for each SAS Web application, and then click **Uninstall**.

   - After the SAS Web application is uninstalled, click **Review**, select the **Synchronize changes with nodes** check box, and then click **Save**.

3. Stop the application servers for the SAS Web applications (such as SASServer1). For more information, see **"Starting or Stopping an IBM WebSphere Application Server or an IBM WebSphere Application Server Network Deployment"** in the *SAS Intelligence Platform: System Administration Guide*.

   Note: Do not stop the WebSphere Deployment Manager (dmgr) server and nodeagent server. These servers must be running when you apply the third maintenance release for SAS 9.2.

   - the dmgr server

     In the **<WAS_INSTALL_ROOT>/profiles/<dmgr-profilename>/bin** directory, run **startManager.bat** in Windows environments or execute **startManager.sh** in UNIX environments.

     By default, **<dmgr-profilename>** is SASDmgr01.

   - the nodeagent server

     In the **<WAS_INSTALL_ROOT>/profiles/<node-profilename>/bin** directory, run **startNode.bat** in Windows environments or execute **startNode.sh** in UNIX environments.

     The default for **<node-profilename>** depends on your current SAS 9.2 deployment.

     - For an existing SAS 9.2 (TS2M0) deployment, **<node-profilename>** is SASAppSrv01.

     - If you are running the second maintenance release for SAS 9.2 (TS2M2), **<node-profilename>** is SAS*machine-name*01.

JBoss Application Server

Complete these steps:

1. Stop the JBoss application server. For more information, see **"Starting or Stopping a JBoss Application Server"** in the *SAS Intelligence Platform: System Administration Guide*.

2. Create a backup of the ***JBoss-home-directory*/server/ SASServer*n*/deploy_sas** directory.

   a. Delete the ***JBoss-home-directory*/server/SASServer*n*/tmp** directory and all of its contents.

   b. Copy the contents of the ***JBoss-home-directory*/server/SASServer*n*** directory to a **SASServer*n*_premaint** directory.

      Note: If a **SASServer*n*_premaint** directory does not exist, then this directory is created when you run the **cp –R** command in UNIX environments or the **xcopy** in Windows environments.

      On UNIX, enter the following commands at the UNIX prompt:

      ```
      cd <JBoss-home-directory>/server
      cp -R SASServer<n> SASServer<n>_premaint
      ```

      On Windows, you can copy the files by using Windows Explorer or by entering the following commands at a DOS prompt:

      ```
      cd <JBoss-home-directory>\server
      xcopy /E /I SASServer<n> SASServer<n>_premaint
      ```

3. Delete the EAR files for all SAS Web applications from the ***JBoss-home-directory*/server/SASServer*n*/deploy_sas** directory.

4. If you have configured your environment to use restrictive policies, then disable restrictive policy handling for JBoss. For more information, see **"Configuring and Deploying Restrictive Policy Files"** in the *SAS Intelligence Platform: Web Application Administration Guide*.

   Note: If you have multiple servers (such as SASServer1 and SASServer2), then you must disable the restrictive policy files on all these servers.

   To manually disable the use of SAS restrictive policy files:

   a. On Windows, open the ***JBoss-home-directory*\bin\SASServer1.bat** file. On UNIX, open the ***JBoss-home-directory*/bin/SASServer1.sh** file.

   b. In the start_as_script section, remove the following parameters from the JAVA_OPTS line.

      • **–Djava.security.manager**

      • **–Djava.security.policy=*JBoss-home-directory*\server \SASServer1\sas.restrictive.permissions.policy**

   If JBoss is running as a Windows service:

   a. On Windows, open the ***JBoss-home-directory*\server \SASServer1\wrapper.conf** file.

   b. Remove the following parameters from the wrapper.conf file.

      • **wrapper.java.additional.##=–Djava.security.manager**

      • **wrapper.java.additional.##=Djava.security.policy=*JBoss -home-directory*\server\SASServer1\conf \sas.restrictive.permissions.policy**

When you apply the maintenance release, the restrictive policy file might be re-created automatically, or you might have to create this file manually. For more information, see "Restore Restrictive Policy Settings" on page 58.

5. To prevent issues when you are compiling the JSP pages in the updated applications, delete the contents of the **JBoss-home-directory/server/SASServern/ work** directory.

Planning Information for Specific Operating Environments

Additional Support for Operating Systems

In the second maintenance release for SAS 9.2, support was added for the following operating systems.

- Windows Server 2008

- SuSE SLES 11

In the third maintenance release for SAS 9.2, support was added for the following operating systems.

- AIX 7

- Red Hat Enterprise Linux (RHEL) 6

To determine the level of support for each operating environment (for example, exactly which editions of Windows Server 2008 are supported), see **http:// support.sas.com/resources/sysreq/hosts**.

Installing a Maintenance Release in a UNIX Environment

Modifying the Date-and-Time Stamps for Non-Versioned Files

Note: The **tar** command is the recommended method for copying and moving a SAS deployment in UNIX because this command preserves the date-and-time stamps of the files. The information in this topic is relevant only if you used the **cp** command without the **-p** option (which is required to preserve the date-and-time stamps on your files) to copy your SAS deployment from one location to another.

The installation process for a maintenance release uses the date-and-time stamps for some non-versioned files to determine whether the file needs to be updated. If you copied a deployment of SAS 9.2 (using the **cp** command without the **-p** option), then the maintenance release might not install properly because the date-and-time stamps on the copied files might be different from the deployment that was installed using the SAS Deployment Wizard. In order for the maintenance release to install correctly, the date-and-time stamps of the copied files must be February 20, 2009.

To change the date-and-time stamp of your files to February 20, 2009, enter the following command from the SAS installation directory:

```
find . | xargs touch -t 200902200000.00
```

You must run this UNIX command under the user ID that was used to install SAS 9.2. You can modify the attributes of these SAS files under that user ID only.

Using Pluggable Authentication Models (PAM) for Authentication

SAS deployments can be configured to integrate with various authentication technologies. In the third maintenance release for SAS 9.2, SAS provides a better way to specify PAM authentication when initially configuring a system. (A new deployment option for PAM authentication was added to the SAS Deployment Wizard in the third maintenance release for SAS 9.2. For more information, see *SAS Intelligence Platform: Installation and Configuration Guide*.)

Sites that are applying the third maintenance release for SAS 9.2 will already have integrated with the PAM authentication process. For these sites, the new process will not affect their deployment.

Installing a Maintenance Release in a z/OS Environment

If you are installing a maintenance release in a z/OS environment, you should not complete the steps described in "How to Install and Configure the Third Maintenance Release for SAS 9.2" on page 45. Instead, you should refer to the following resources:

- Installation and maintenance instructions for z/OS environments are available from Installation Note 36008 at **http://support.sas.com/kb/36/008.html**.

- After you install the maintenance release, you need to restart your SAS servers. For more information, see **"Starting and Stopping SAS Servers on z/OS"** in the *SAS Intelligence Platform: System Administration Guide*.

Note: If your z/OS environment does not have Java or an X11 display, then you might have used basicins.rexx to install SAS 9.2. If you used basicins.rexx, then you will not have a **SAS-installation-directory/deploymntreg** directory. Before installing the third maintenance release for SAS 9.2, contact SAS Technical Support for additional instructions on how to install the maintenance release at your site.Support for the basicins.rexx script was dropped in the second maintenance release for SAS 9.2. If your order is from 09w44 or later, then you used the linemode.rexx script, and you will have a **SAS-installation-directory/ deploymntreg** directory. Therefore, this note does not apply to you.

Updates to Third-Party Software

Additional Support for Third-Party Software

In the second maintenance release for SAS 9.2, support was added for the following software.

Table 8.2   *New Support for Third-Party Components*

Third-Party Component	Additional Considerations
Java 6	Your Web application server must also support Java 6. To determine whether your Web application server supports Java 6, see **http://support.sas.com/ resources/thirdpartysupport/**.

Third-Party Component	Additional Considerations
Firefox 3	Some SAS products support only a specific version of Firefox. For additional restrictions, review the requirements for the SAS software at your site.
WebLogic 10.0	None.
WebLogic 10g Release 3	• WebLogic 10g Release 3 requires JDK 6. • Beginning with WebLogic 10g Release 3, the official product name is Oracle WebLogic Server. Previously, the product name was BEA WebLogic Server. When reviewing your product documentation, you might see either term used. However, both names refer to a WebLogic Server.

In the third maintenance release for SAS 9.2, support was added for the following software.

Table 8.3 *New Support for Third-Party Components*

Third-Party Component	Additional Considerations
Firefox 3.6	Firefox 3.6 is now supported wherever Firefox 3.0.x was supported.
Platform Suite for SAS Version 5.1	If your order contains the Platform Suite for SAS, then the Platform Suite for SAS Version 5.1 is included with the third maintenance release for SAS 9.2. For more information about how to install the Platform Suite for SAS Version 5.1, see **http://support.sas.com/ rnd/scalability/grid/gridinstall.html**. If you are using the Platform Suite for SAS Version 4.1, it is recommended that you do not upgrade to Version 5.1 unless you need to upgrade. To upgrade to Version 5.1, contact SAS Technical Support.
WebSphere 6.1 on z/OS	None.

Requirements for Third-Party Software

Verify that your site is using the required versions of third-party software for the third maintenance release for SAS 9.2. For example, if you are using an Oracle WebLogic Server, an IBM WebSphere Application Server, or a JBoss Application Server, you might need to apply a patch before installing the maintenance release. For Web browsers (such as Firefox), you might want to review the operating systems that are supported.

For more information about the requirements for third-party software, see **http:// support.sas.com/resources/thirdpartysupport/** and **Upgrading Web Application Servers Used with the Third Maintenance Release**.

Upgrading a SAS 9.2 (TS1M0) Installation

After you apply the third maintenance release for SAS 9.2, the release number in the SAS log is TS2M3.

When you apply a maintenance release, the SAS Deployment Wizard automatically upgrades your SAS installation directories to include updated versions of all the products that are currently deployed. Because of product dependencies, you cannot choose which products are updated. If you have a multi-machine deployment, you need to update all machines when you apply maintenance.

The maintenance releases for SAS 9.2 use the functionality in SAS 9.2 TS2M0 as a baseline.

If you are running SAS 9.2 TS1M0 at your site, then before you apply a maintenance release, review the upgrade information for your operating environment:

• If you are running in a Windows environment, then the SAS Deployment Wizard automatically upgrades the contents of your SAS installation directories to include the content in the maintenance release.

• If you are running in a UNIX or z/OS environment, then the SAS Deployment Wizard does not automatically upgrade your SAS 9.2 TS1M0 installation. For these operating environments, you must specify a new SAS installation directory. Any customizations, such as configuration scripts and librefs, need to be created for this new SAS installation directory. Until you delete the SAS installation directory for SAS 9.2 TS1M0, your installation of SAS 9.2 TS1M0 continues to be available to users at your site.

Updating the SID File in Metadata for SAS Solutions

If you are adding a SAS solution to an existing SAS 9.2 deployment, or if you need to renew your software license for a SAS solution, then you need to update the SID file (SAS installation data file) in the metadata. Starting with the October 2009 release of SAS 9.2, you can update the SID file by using the SAS Deployment Manager. For more information, see **Updating the SID File in Metadata for SAS Solutions** in the *SAS Intelligence Platform: Installation and Configuration Guide*.

Chapter 9

Installing the Third Maintenance Release for SAS 9.2

How to Install and Configure the Third Maintenance Release for SAS 9.2

When installing the third maintenance release for SAS 9.2 in a multiple machine deployment, you must apply the maintenance release in a specific order. For more information, see **"Installation Order Rules for Multiple Machine Deployments"** in the *SAS Intelligence Platform: Installation and Configuration Guide*.

Note: If you are installing in a z/OS environment, see the installation and maintenance instructions in Installation Note 36008 at **http://support.sas.com/kb/ 36/008.html**.

Note: To specify a different version of the Java Runtime Environment (JRE) that you want to use with the SAS Java applications, see **"Specify a Different JRE"** in the *SAS Intelligence Platform: Installation and Configuration Guide*.

To install the third maintenance release for SAS 9.2:

1. If your deployment includes a Web application server, undeploy all of your SAS Web applications. For more information, see "Undeploying SAS Web Applications and Stopping the Web Application Servers" on page 38.

2. Terminate all active SAS sessions, daemons, spawners, and servers. It is important to stop the SAS servers in the inverse order that they were started. For more information, see **"Overview of Server Operation"** in the *SAS Intelligence Platform: System Administration Guide*.

    Note: When you start the installation process, the System Requirements Wizard runs, and you might need to reboot your machine. If this happens, you must terminate all active SAS sessions, daemons, spawners, and servers again.

3. Verify that all machines where you are installing the maintenance release have SAS 9.2 software installed.

Note: When installing a maintenance release, you must use the same operating system accounts that you used to install SAS 9.2.

4. For each machine in your deployment, start the SAS Deployment Wizard from the highest-level directory in your SAS Software Depot. You can start the SAS Deployment Wizard in the following ways:

Table 9.1 *How to Start the SAS Deployment Wizard*

Operating System	How to Start the SAS Deployment Wizard
Windows	Double-click **setup.exe** in the highest-level directory of your SAS Software Depot.
UNIX	Execute **setup.sh** from the highest-level directory of your SAS Software Depot.
OpenVMS on HP Integrity	Type the following command: **run setup_vms.exe**.

5. If any product updates are required, then the SAS Deployment Wizard goes into update mode. In the Select Deployment Step, select **Install SAS Software** to install those product updates on that machine.

Updates that are installed in a maintenance release apply only to software that is already installed at your site. No new software is installed during a maintenance installation. If your software order includes new products for your site, see "Adding a New Product after Applying a Maintenance Release" on page 48.

Note: If a machine does not require any product updates, then the SAS Deployment Wizard will not go into update mode, and the installation of the maintenance release on that machine is complete. Click **Cancel** to exit the SAS Deployment Wizard.

6. After the deployment is complete, click **Next** in the SAS Deployment Wizard.

7. In the Select Configuration Directory/Level step of the SAS Deployment Wizard, select the configuration directories that you want to update, and then click **Start**.
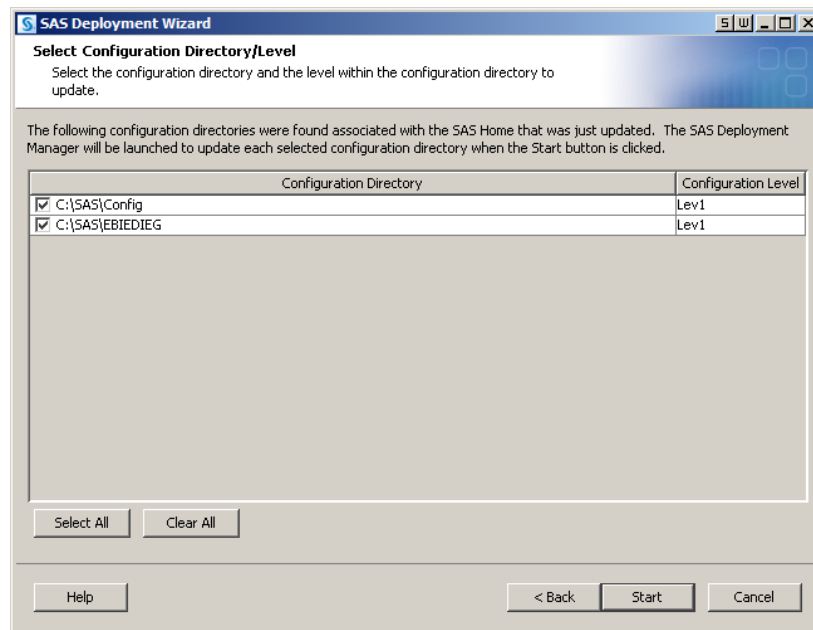
The SAS Deployment Manager opens to guide you through the configuration steps.

Note: If you click **Cancel**, then you will have installed but not configured your software updates. You must configure the updated SAS products before you can run the maintenance release. To complete these configuration steps at a later time, see **"Configure Updated or Upgraded SAS Products"** in the *SAS Intelligence Platform: Installation and Configuration Guide*.

8. In the Specify Connection Information panel of the SAS Deployment Manager, enter the user ID and password of an unrestricted administrative user.

Note: Before performing any configuration updates, the SAS Deployment Manager starts the SAS Metadata Server in Windows environments. If this server is not running, then the following message appears in the SAS Deployment Manager:

`A SAS Metadata Server is not currently running on the Port.`

To continue the configuration steps, restart the SAS Metadata Server manually.If you are running in a UNIX environment, you must manually restart the SAS Metadata Server. At a UNIX prompt, navigate to the directory where the SAS Metadata Server is configured. Type **./MetadataServer.sh start**.

9. Use the SAS Deployment Manager to configure your environment. The panels that appear depend on your deployment. You must complete each panel. When prompted for passwords for database IDs, you must use the same passwords that you used to install SAS 9.2.

During the configuration process, SAS automatically starts your SAS servers, configures your Web application servers, and rebuilds and redeploys your SAS Web applications.

Note: Any time you configure your deployment, you must also configure your Web application server, even if your configuration does not involve the SAS middle tier. If you manually configured your Web application server in your initial deployment, then configure your Web application server again manually. Complete the steps in the UpdateInstructions.html file to correctly apply the third

maintenance release and to redeploy the SAS Web applications. If the SAS Deployment Wizard automatically configured your Web application server, then choose the automatic configuration option.

When the configuration is complete, the Deployment Summary opens. You need this file in step 11. For more information, see "About the Deployment Summary" on page 18.

10. Complete any necessary configuration steps for your Web application server. For more information, see "Additional Configuration Steps for Your Web Application Servers" on page 49.

11. Review the list of products in the Update Summary section of the Deployment Summary. For each product that was updated, determine whether there are any additional configuration steps that you need to complete. For more information, see "Product-Specific Details and Post-Configuration Requirements" on page 63.

12. To validate the changes to your Web application servers and SAS Web applications, review the validation sections in your Instructions.html files. For more information, see "About the Instructions.html and UpdateInstructions.html Files" on page 17.

Adding a New Product after Applying a Maintenance Release

In addition to the third maintenance release, your software order might include products that you are adding to your current deployment. Before you install any new products, you must apply the third maintenance release. After the maintenance release is applied, you restart the SAS Deployment Wizard to add on any new products.

For more information, see **"Adding SAS Products"** in the *SAS Intelligence Platform: Installation and Configuration Guide*.

Installing a Hot Fix

The SAS 9.2 Hot Fix Analysis, Download, and Deployment Tool (SAS92HFADD) analyzes a SAS deployment registry, creates a custom report that lists any hot fixes available for the products installed on that machine, and generates scripts that automate the download and deployment of the hot fixes. For more information, see **http:// ftp.sas.com/techsup/download/hotfix/HF2/SAS92HFADD.html**.

Chapter 10
Additional Configuration Steps for Your Web Application Servers

Overview

If you did not manually configure your Web application servers, then when you apply the third maintenance release for SAS 9.2, SAS automatically configures your Web application servers. However, depending on your site, you might need to manually complete some additional configuration steps.

For example, some SAS applications use Java Messaging Service (JMS) facilities when sending messages. If you want to secure these messages to prevent unauthorized access, then you must complete the steps for setting JMS security. If you do not set JMS security, then these messages can be intercepted by unauthorized applications.

For instructions on these optional steps for your Web application server, see the following topics:

-

-

-

Note: If you manually configured your Web application servers in your initial deployment, then complete the steps in the UpdateInstructions.html file to correctly apply the third maintenance release and to redeploy the SAS Web applications.

Note: You can deploy many of the Web applications in SAS Enterprise BI Server to a Web-application server cluster. To obtain the latest documentation about how to deploy SAS applications to a server cluster, see SAS Note 37310 at **http://support.sas.com/kb/37/310.html** and contact SAS Technical Support.

WebLogic Server

Optional Configuration Steps for Your WebLogic Server

When you apply the third maintenance release for SAS 9.2, SAS automatically configures your WebLogic Server. However, depending on your site, you might need to complete these additional steps:

Note: If you deployed your Web applications across multiple servers, then complete these steps on the server where SAS Shared Services are deployed. Typically, this server is named SASServer1.

1. (Optional) "Set the JMS Security System Property" on page 50.

2. (Optional) "Configure JMS Security" on page 51.

3. (Optional) "Restore Customizations for Web Authentication" on page 52.

Set the JMS Security System Property

When you apply the third maintenance release for SAS 9.2, JMS security is turned off by default. To turn on JMS security, you must set the **-Dsas.jms.authentication.decorator** system property to true in the start-up script of the application server or in the WebLogic Server Administration Console (if you start your servers from this console). Complete the steps that are appropriate for your site. If you turn on JMS security, then you must also complete the steps in "Configure JMS Security" on page 51.

- To turn on JMS security by using the start-up script for your application server, change the value of the **-Dsas.jms.authentication.decorator** system property to **true**.

   If SAS automatically configured your Web application servers when you applied the third maintenance release for SAS 9.2, then use the command line options in setDomainEnv.cmd (for Windows environments) and setDomainEnv.sh (for UNIX environments). The start-up script is located in the **bin** directory of the WebLogic domain.

- To turn on JMS security by using the WebLogic Server Administration Console:

   1. In the **Domain Structure** panel, select **Environment ⇨ Servers**. A list of the available servers appears.

   2. From the **Summary of Servers** page, select a server. A page that lists the current settings for that server opens.

   3. Click the **Server Start** tab.

4. In the **Change Center** panel, click **Lock and Edit**. Now, you can edit the server settings.

5. In the **Arguments** field, change the value of the **-Dsas.jms.authentication.decorator** system property to **true**. Click **Save**.

6. In the **Change Center** panel, click **Activate Changes**.

7. Restart the server for the changes to take effect.

8. Repeat these steps for each server on the Summary of Servers page.

Configure JMS Security

This step is required if you turned on JMS security. For more information, see .

If JMS security is enabled, you must complete these additional steps:

1. Edit the web.xml files for BIDashboard and SharedServices to replace **<res-auth>Container</res-auth>** with **<res-auth>Application</res-auth>**.

    The web.xml files are available from the following locations:

    *   **sas.bidashboard4.2.ear\sas.eventsgenerationframework.war \WEB-INF\web.xml**

    *   **sas.shared9.2.ear\sas.shared.services.war\WEB-INF\web.xml**

    *   **sas.shared9.2.ear\sas.workflow.war\WEB-INF\web.xml**

2. Create a WebLogic user named sasjms.

    a. Open the WebLogic Server Administration Console.

    b. In the **Domain Structure** panel, select **Security Realms**.

    c. On the **Summary of Security Realms** page, select **myrealm**.

    d. On the **Settings for myrealm** page, click the **Users and Groups** tab.

    e. On the **Users and Groups** tab, click **New**.

    f. On the **Create a New User** page, specify the following values:

        *   In the **Name** field, enter **sasjms**.

        *   In the **Description** field, enter **SAS Secure JMS User**.

        *   In the **Password** and **Confirm Password** fields, enter the password that you selected for this user.

        Click **OK**.

3. To secure JMS resources, you should create a root level policy. Complete these steps to restrict all JMS access to the sasjms user.

    a. Open the WebLogic Administration Console.

    b. In the **Domain Structure** panel, select **Security Realms**.

    c. On the **Summary of Security Realms** page, select **myrealm**.

    d. On the **Settings for myrealm** page, click the **Roles and Policies** tab.

e. Click the **Realm Policies** tab, and then expand the **Root Level Policies** row in the table.

f. In the JMS row, select **View Policy Conditions**.

g. On the **Edit Root Level Policies** page, click **Add Conditions**. The Edit Root Level Policies wizard opens.

h. In the **Choose a Predicate** panel, select **User** from the **Predicate List** drop-down list, and then click **Next**.

i. In the **Edit Arguments** panel, enter `sasjms` as the role argument name. Click **Add**, and then click **Finish**. A summary of the root level policies opens.

j. In the **Policy Conditions** area, select the **Group: everyone** check box. Click **Remove**, and then click **Save**.

Restore Customizations for Web Authentication

After you apply a maintenance release, here are the high-level tasks that you must complete to restore any customizations for Web authentication.

1. Modify Logon Manager.

2. Include SAS JAR files in the System Classpath.

3. Set the CLASSPATH for the Remote Services JVM and restart.

4. Start the WebLogic server.

5. Log on to verify the Web authentication configuration.

For more information about each task, see the corresponding topics in *Configuring Oracle WebLogic Server for Web Authentication with SAS 9.2 Web Applications*. This document is available from **http://support.sas.com/resources/thirdpartysupport/v92m3/appservers/ConfiguringWLSWebAuth.pdf**.

WebSphere Application Server

Optional Configuration Steps for Your WebSphere Application Server

When you apply the third maintenance release for SAS 9.2, SAS automatically configures your WebSphere Application Server. However, depending on your site, you might need to complete these additional steps:

1. (Optional) "Set File Security in UNIX Environments" on page 53.

2. (Optional) "Enable WebSphere Admin Security" on page 53.

3. (Optional) "Restore Customizations for Web Authentication" on page 53.

Set File Security in UNIX Environments

To increase security in UNIX environments that were created before installing the third maintenance release for SAS 9.2, type the following commands at a UNIX prompt:

```
cd SAS-configuration-directory/Lev1/Web
chmod go= Common/login.config
```

Enable WebSphere Admin Security

To use Web authentication, you must secure your WebSphere console (if you have not done so already). For more information, see *Configuring IBM WebSphere Application Server 6.1 for Web Authentication*. This document is available from **http:// support.sas.com/resources/thirdpartysupport/v92m3/appservers/ ConfiguringWASWebAuth.pdf**.

Restore Customizations for Web Authentication

After you apply a maintenance release, here are the high-level tasks that you must complete to restore any customizations for Web authentication.

1. Modify Logon Manager.

2. Reinstall the SAS Web Infrastructure Platform applications EAR file.

3. Copy SAS JAR files to the WebSphere installation.

4. Set the CLASSPATH for the Remote Services JVM.

5. Restart Remote Services and the WebSphere Application Server.

6. Log on to verify the Web authentication configuration.

For more information about each task, see the corresponding topics in *Configuring IBM WebSphere Application Server 6.1 for Web Authentication with SAS 9.2 Web Application*. This document is available from **http://support.sas.com/ resources/thirdpartysupport/v92m3/appservers/ ConfiguringWASWebAuth.pdf**.

JBoss Application Server

Optional Configuration Steps for Your JBoss Application Server

When you apply the third maintenance release for SAS 9.2, SAS automatically configures your JBoss Application Server. However, depending on your site, you might need to complete these additional steps:

1. (Optional) "Set File Security in UNIX Environments" on page 54 .

2. (Optional) "Configure JMS Security" on page 54.

3. (Optional) "Restore Restrictive Policy Settings" on page 58.

4. (Optional) "Restore Customizations to Web Authentication" on page 59.

Note: Several of these configuration steps require you to add XML code to existing files. When adding XML code, remember the following:

- Enclose text strings in double quotation marks.

- Make sure the format of the XML code is correct. An incorrect space or line break could cause the code to fail. However, line breaks were inserted in the code to present this information in a PDF format. To view the correct formatting of the code, see the HTML version of this document at **http://support.sas.com/documentation/cdl/en/whatsdiff/63542/HTML/default/a003362556.htm**.

Set File Security in UNIX Environments

To increase security in UNIX environments that were created before installing the third maintenance release for SAS 9.2, type the following commands at a UNIX prompt:

```
cd SAS-configuration-directory/Lev1/Web
chmod go= Common/login.config
```

Configure JMS Security

If JMS security is enabled, you must complete these additional steps.

Note: In a standard deployment, JMS security is not enabled.

1. In the **JBoss-installation-directory\server\SASServer1\conf\login-config.xml** file:

   a. Comment out the default application policy for "jbossmq" and add a new application policy that uses the UserRolesLoginModule and the new users.properties files and roles.properties files. When finished, your code should look similar to the following:

```
<!—
<application-policy name="jbossmq">
  <authentication>
      <login-module code="org.jboss.security.auth.spi.DatabaseServerLoginModule"
          flag="required">
              <module-option name="dsJndiName">java:/DefaultDS</module-option>
              <module-option name="principalsQuery">SELECT PASSWD FROM
                  JMS_USERS WHERE USERID=?</module-option>
              <module-option name="rolesQuery">SELECT ROLEID, 'Roles'
                  FROM JMS_ROLES WHERE USERID=?</module-option>
      </login-module>
    </authentication>
</application-policy>
—>

<application-policy name="jbossmq">
  <authentication>
      <login-module code="org.jboss.security.auth.spi.UsersRolesLoginModule"
          flag="required">
              <module-option name="usersProperties">
                  props/sas-jms-users.properties</module-option>
              <module-option name="rolesProperties">
                  props/sas-jms-roles.properties</module-option>
```

```
            </login-module>
        </authentication>
</application-policy>

<!—
<application-policy name="jbossmq">
  <authentication>
      <login-module
          code="org.jboss.security.auth.spi.DatabaseServerLoginModule"
          flag="required">
            <module-option name="dsJndiName">
                 java:/DefaultDS</module-option>
            <module-option name="principalsQuery">SELECT PASSWD
              FROM JMS_USERS WHERE USERID=?</module-option>
            <module-option name="rolesQuery">SELECT ROLEID,
               'Roles' FROM JMS_ROLES WHERE USERID=?</module-option>
        </login-module>
    </authentication>
</application-policy>
—>

<application-policy name="jbossmq">
  <authentication>
      <login-module code="org.jboss.security.auth.spi.UsersRolesLoginModule"
          flag="required">
            <module-option name="usersProperties">
               props/sas-jms-users.properties</module-option>
            <module-option name="rolesProperties">
               props/sas-jms-roles.properties</module-option>
        </login-module>
    </authentication>
</application-policy>
```

b. In the JmsXARealm security realm, replace guest references with the sasjms user and its credentials. Your code should look similar to the following:

```
<application-policy name="JmsXARealm">
  <authentication>
      <login-module code="org.jboss.resource.security.
          ConfiguredIdentifyLoginModule" flag="required">
            <module-option name="principal">sasjms</module-option>
            <module-option name="userName">sasjms</module-option>
            <module-option name="password">EaSyPasWd71</module-option>
            <module-option name="managedConnectionFactoryName">
                jboss.jca:service=TxCM,name=JmsXA</module-option>
        </login-module>
    </authentication>
</application-policy>

<application-policy name="JmsXARealm">
  <authentication>
      <login-module
          code="org.jboss.resource.security.ConfiguredIdentifyLoginModule"
          flag="required">
            <module-option name="principal">sasjms</module-option>
            <module-option name="userName">sasjms</module-option>
            <module-option name="password">EaSyPasWd71</module-option>
            <module-option name="managedConnectionFactoryName">
```

```
                              jboss.jca:service=TxCM,name=JmsXA</module-option>
            </login-module>
        </authentication>
    </application-policy>
```

2. In the ***JBoss-installation-directory*\server\SASServer1\conf
   \jboss-service.xml** file, replace the guest role with the role that was defined in
   the roles.properties file for ConnectionFactories, AlertQueue, and WorkflowQueue.
   The following code assumes that the JMSUser role is defined in the sas–jms–
   roles.properties file.

```
<mbean code="org.jboss.naming.LinkRefPairService"
               name="jboss.jms:alias=SASTopicConnectionFactory">
    <attribute name="JndiName">sas/jms/TopicConnectionFactory</attribute>
    <attribute name="RemoteJndiName">ConnectionFactory</attribute>
    <attribute name="LocalJndiName">java:/JmsXA</attribute>
    <security>
       <role name="JMSUser" read="true" write="true" />
    </security>
    <depends>jboss:service=Naming</depends>
</mbean>


<mbean code="org.jboss.naming.LinkRefPairService"
   name="jboss.jms:alias=SASQueueConnectionFactory">
     <attribute name="JndiName">sas/jms/QueueConnectionFactory</attribute>
     <attribute name="RemoteJndiName">ConnectionFactory</attribute>
     <attribute name="LocalJndiName">java:/JmsXA</attribute>
     <security>
        <role name="JMSUser" read="true" write="true" />
     </security>
     <depends>jboss:service=Naming</depends>
</mbean>


<mbean code="org.jboss.mq.server.jmx.Queue"
   name="jboss.mq.destination:service=Queue,name=AlertQueue">
     <depends optional-attribute-name="DestinationManager">
         jboss.mq:service=DestinationManager</depends>
     <attribute name="JndiName">sas/jms/AlertQueue</attribute>
     <security>
        <role name="JMSUser" read="true" write="true" />
     </security>
</mbean>


<mbean code="org.jboss.mq.server.jmx.Queue"
   name="jboss.mq.destination:service=Queue,name=WorkflowQueue">
     <depends optional-attribute-name="DestinationManager">
         jboss.mq:service=DestinationManager</depends>
     <attribute name="JndiName">sas/jms/WorkflowQueue</attribute>
     <security>
        <role name="JMSUser" read="true" write="true" />
     </security>
</mbean>

<mbean code="org.jboss.naming.LinkRefPairService"
   name="jboss.jms:alias=SASTopicConnectionFactory">
     <attribute name="JndiName">sas/jms/TopicConnectionFactory</attribute>
     <attribute name="RemoteJndiName">ConnectionFactory</attribute>
```

```
        <attribute name="LocalJndiName">java:/JmsXA</attribute>
        <security>
           <role name="JMSUser" read="true" write="true" />
        </security>
        <depends>jboss:service=Naming</depends>
    </mbean>


    <mbean code="org.jboss.naming.LinkRefPairService"
    name="jboss.jms:alias=SASQueueConnectionFactory">
        <attribute name="JndiName">sas/jms/QueueConnectionFactory</attribute>
        <attribute name="RemoteJndiName">ConnectionFactory</attribute>
        <attribute name="LocalJndiName">java:/JmsXA</attribute>
        <security>
           <role name="JMSUser" read="true" write="true" />
        </security>
        <depends>jboss:service=Naming</depends>
    </mbean>


    <mbean code="org.jboss.mq.server.jmx.Queue"
       name="jboss.mq.destination:service=Queue,name=AlertQueue">
         <depends optional-attribute-name="DestinationManager">
             jboss.mq:service=DestinationManager</depends>
        <attribute name="JndiName">sas/jms/AlertQueue</attribute>
        <security>
           <role name="JMSUser" read="true" write="true" />
        </security>
    </mbean>


    <mbean code="org.jboss.mq.server.jmx.Queue"
       name="jboss.mq.destination:service=Queue,name=WorkflowQueue">
         <depends optional-attribute-name="DestinationManager">
             jboss.mq:service=DestinationManager</depends>
        <attribute name="JndiName">sas/jms/WorkflowQueue</attribute>
        <security>
           <role name="JMSUser" read="true" write="true" />
        </security>
    </mbean>
```

3. In the **JBoss-installation-directory\server\SASServer1\deploy \jms\jbossmq-service.xml** file, replace the guest role with the role that was defined in the roles.properties file for ConnectionFactories, AlertQueue, and WorkflowQueue. The following code assumes that the JMSUser role is defined in the sas–jms–roles.properties file.

```
<mbean code="org.jboss.mq.security.SecurityManager"
   name="jboss.mq:service=SecurityManager">
    <attribute name="DefaultSecurityConfig">
      <security>
          <role name="JMSUser" read="true" write="true" create="true" />
      </security>
    </attribute>
    <attribute name="SecurityDomain">java:/jaas/jbossmq</attribute>
  <depends optional-attribute-name="NextInterceptor">
     jboss.mq:service=DestinationManager</depends>
</mbean>
```

```
<mbean code="org.jboss.mq.security.SecurityManager"
   name="jboss.mq:service=SecurityManager">
      <attribute name="DefaultSecurityConfig">
         <security>
            <role name="JMSUser" read="true" write="true" create="true" />
         </security>
      </attribute>
      <attribute name="SecurityDomain">java:/jaas/jbossmq</attribute>
   <depends optional-attribute-name="NextInterceptor">
         jboss.mq:service=DestinationManager</depends>
</mbean>
```

4. Restart your JBoss Application Server. For more information, see **"Starting or Stopping a JBoss Application Server"** in the *SAS Intelligence Platform: System Administration Guide*.

Restore Restrictive Policy Settings

If you configured your environment to use restrictive policy settings, then you had to disable these policy settings before you applied the third maintenance release for SAS 9.2. How you restore these settings depends on whether SAS automatically reconfigured JBoss and whether you specified to use restricted permissions in your initial deployment. Use the following table to determine the post-configuration steps for your site.

Table 10.1   When Post-Configuration Steps Are Required

Type of Configuration	Post-Configuration Steps

SAS automatically reconfigures the JBoss server and re-creates the restrictive policy file.	If you selected to use restrictive permissions the first time you configured your SAS 9.2 deployment, then SAS specified the following options in the start-up script:
	
	`–Djava.security.manager`
	`–Djava.security.policy=`
	full-path-to-restrictive-policy-file
	
	Therefore, you do not need to specify these options again. When SAS automatically restarts the JBoss server, then the restricted permissions file should be created and copied to the server.

You manually configured the JBoss server, or you manually created the restrictive policies file.	If you manually configured JBoss, or if you created the restrictive policy file the first time you configured your SAS 9.2 deployment, then the restrictive policy file is stored in **SAS-configuration-directory/Lev1/Web/Common/jboss**. After you apply the third maintenance release, you must specify the following options in the start-up script:
	
	`–Djava.security.manager`
	`–Djava.security.policy=`
	full-path-to-restrictive-policy-file

Restore Customizations to Web Authentication

After installing a maintenance release, here are the high-level tasks that you must complete to restore any customizations for Web authentication.

1. Modify Logon Manager.

2. Set the CLASSPATH for Remote Services JVM.

3. Log on to verify the Web authentication configuration.

For more information about each task, see the corresponding topics in *Configuring JBoss Application Server 4.2.0 for Web Authentication with SAS 9.2 Web Applications*. This document is available from **http://support.sas.com/resources/ thirdpartysupport/v92m3/appservers/ConfiguringJBossWebAuth.pdf**.

Chapter 11
Product-Specific Details and Post-Configuration Requirements

Determining the Impact of the Third Maintenance Release for SAS 9.2 on Other SAS Products

The impact of installing the third maintenance release for SAS 9.2 depends on the SAS products that you have licensed at your site. To identify all of the changes in a maintenance release, see the documents and SAS Web sites that are listed in "Resources for New Features and Enhancements" on page 6.

This chapter documents any impact that installing the third maintenance release for SAS 9.2 might have on the following products:

- SAS products (such as SAS/GRAPH) that shipped with SAS 9.2 (TS2M0).

- SAS products (such as SAS OpRisk Monitor) that shipped after SAS 9.2 (TS2M0) but before or at the same time as the third maintenance release for SAS 9.2.

Before you apply the third maintenance release for SAS 9.2, it is recommended that you determine what products will be updated at your site. (For more information, see "Assessing the Effect on Products at Your Site" on page 34.) From that list, you can determine which sections in this chapter are relevant for your site.

Note: A few products recommend that you complete steps before you apply the third maintenance release for SAS 9.2. Therefore, it is important that you review the information for the SAS products at your site before you apply the maintenance release.

After you have installed and configured the maintenance release, review the Update Summary section of the Deployment Summary to confirm what products were updated at your site. In this chapter, complete the corresponding product topic (if one exists). For more information about the Update Summary section, see "About the Deployment Summary" on page 18.

SAS/ACCESS Software

Some configuration steps are required whenever you update your SAS/ACCESS software. For example, if you are running SAS/ACCESS Interface to MySQL software, SAS/ACCESS Interface to Netezza software, SAS/ACCESS Interface to ORACLE software, or SAS/ACCESS Interface to Sybase IQ software in a UNIX environment, then you must set up a symbolic link in order for your SAS software to correctly link to the image.

After you apply the third maintenance release for SAS 9.2, review the "Post-Installation Configuration for SAS/ACCESS Software" chapter in the *Configuration Guide for SAS 9.2 Foundation*. Separate configuration guides exist for each operating environment.

You can access this documentation from the SAS 9.2 Install Center at **http:// support.sas.com/documentation/installcenter/922/index.html**.

SAS Add-In for Microsoft Office

Product Release Number

After you apply the third maintenance release for SAS 9.2, the product release number for the SAS Add-In for Microsoft Office is 4.22.

Note: If you install SAS Enterprise Miner 6.2, you are automatically upgraded to the SAS Add-In 4.3 for Microsoft Office. For more information, see "SAS Enterprise Miner 6.2" on page 159.

Post-Configuration Steps for the SAS Add-In for Microsoft Office

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for the SAS Add-In for Microsoft Office, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.1 When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are installing the SAS Add-In for Microsoft Office for the first time.	If you are installing the SAS Add-In 4.22 for Microsoft Office, then you must apply the latest fixes for this product. To download this hot fix, see **http://ftp.sas.com/ techsup/download/hotfix/ HF2/92_all_hosts.html**. If you are installing the SAS Add-In 4.3 for Microsoft Office for the first time, then no post-configuration steps are required unless you are upgrading from SAS Enterprise Miner 6.1 to SAS Enterprise Miner 6.2. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for the SAS Add-In for Microsoft Office is 4.22.	If you have not yet applied the hot fix for the SAS Add-In 4.22 for Microsoft Office, then you should apply this hot fix after you apply the third maintenance release for SAS 9.2. For more information, see **http:// ftp.sas.com/techsup/download/ hotfix/HF2/92_all_hosts.html**. If you previously applied this hot fix, then you do not need to apply it again.

Update Scenario	Are Post-Configuration Steps Required?
You are upgrading from the SAS Add-In 4.2 for Microsoft Office to the SAS Add-In 4.3 or 4.305 for Microsoft Office.	You do not need to apply the hot fix for the SAS Add-In 4.2 for Microsoft Office before upgrading to the SAS Add-In 4.3 or 4.305 for Microsoft Office. For more information about the new release and the steps for upgrading to this new release, see "SAS Add-In 4.3 for Microsoft Office" on page 151.
You are upgrading from SAS Enterprise Miner 6.1 to SAS Enterprise Miner 6.2.	SAS Enterprise Miner 6.2 includes a new feature called SAS Rapid Predictive Modeler, which must be run from either SAS Enterprise Guide 4.3 or the SAS Add-In 4.3 for Microsoft Office or later. Therefore, an order for SAS Enterprise Miner 6.2 also includes the SAS Add-In 4.3 for Microsoft Office. If you are currently running the SAS Add-In 4.2 for Microsoft Office, then you need to upgrade to the 4.3 release. If you do not have the SAS Add-In for Microsoft Office installed at your site, then you can install it after you upgrade to SAS Enterprise Miner 6.2. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

SAS Analytics Platform Server

Product Release Number

After you apply the third maintenance release for SAS 9.2, the product release number for the SAS Analytics Platform is 1.5_M3. For more information, see "About the Deployment Summary" on page 18.

Why You Must Restart the Server

After you apply a maintenance release, you must complete some post-configuration steps on several SAS products that use this server (such as SAS Enterprise Miner, SAS Forecast Server, and SAS Model Manager). In order for these SAS products to incorporate the changes from the maintenance release, you must restart the Analytics Platform Server.

Note: You must follow the specific instructions for your operating environment. If you do not complete these steps, then the software files are not updated properly.

Restarting in a Windows Environment

To restart the SAS Analytics Platform server in a Window environment, use one of these methods:

- From the **Start** menu, select **Programs** ⇨ **SAS** ⇨ **SAS Configuration** ⇨ **Config-Lev<num>** ⇨ **Analytics Platform Server - Start**.

- At a command prompt, navigate to the ***SAS-configuration-directory* `\Lev1\AnalyticsPlatform`** directory and type **`AnalyticsPlatform.bat start`**.

Note: When you initially installed SAS, you might have selected **Windows options: run as managed scripts or services** in the SAS Deployment Wizard. If you selected this option, then the SAS Analytics Platform is run as a Windows Service. Generally, you can start the service by using the Services window. However, the first time you restart the server after installing a maintenance release, you must use either the **Start** menu or a command prompt. If you restart the server from the Services window, then the SAS Analytics Platform does not incorporate the updates in the maintenance release. After you have restarted the server from either the **Start** menu or at a command prompt once, the next time you restart the server you can again use the Services window.

Restarting in a UNIX Environment

To restart the SAS Analytics Platform server:

1. Verify that your X server is running and is available.

2. At the UNIX prompt, navigate to the directory where the SAS Analytics Platform server is configured. Usually, this directory is ***SAS-configuration-directory*`/Lev1/AnalyticsPlatform`**.

3. If the SAS Analytics Platform server is currently running, type **`./AnalyticsPlatform.sh stop`**.

4. To start the SAS Analytics Platform server, type **`./AnalyticsPlatform.sh start`**.

SAS AppDev Studio

A SAS AppDev Studio project must match the maintenance level of the SAS 9.2 installation on which it runs.

If you apply the third maintenance release for SAS 9.2, you must upgrade SAS AppDev Studio to its second maintenance release (which has a product release number of 3.4_M2). This release of SAS AppDev Studio enables you to create SAS projects for, and upgrade projects to, the third maintenance release of SAS 9.2.

Apply the second maintenance release for SAS AppDev Studio (3.4_M2) only if you will be developing SAS projects for SAS 9.2 installations that have applied the third maintenance release.

SAS BI Dashboard

Product Release Number

After you apply the third maintenance release for SAS 9.2, the product release number for SAS BI Dashboard is 4.2.

Post-Configuration Steps for SAS BI Dashboard

Use the following table to determine what post-configuration steps to complete. To determine the product release number for SAS BI Dashboard, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.2 When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for SAS BI Dashboard is 4.2.	No.
You are upgrading from SAS BI Dashboard 4.2 to SAS BI Dashboard 4.3.	For more information about the new release and the steps for upgrading to this new release, see "SAS BI Dashboard 4.3" on page 152.
You are applying a maintenance release to SAS BI Dashboard 4.3.	For more information, see "SAS BI Dashboard 4.3_M2" on page 123.

SAS BI Portlets

Post-Configuration Steps for SAS BI Portlets

Use the following table to determine what (if any) post-configuration steps you need to complete for the installation and configuration of SAS BI Portlets, which became available between the second and third maintenance releases for SAS 9.2. The post-configuration steps that you need to complete vary depending on whether your site has already deployed these portlets.

Table 11.3 *When Post-Configuration Steps Are Required*

Update Scenario	Are Post-Configuration Steps Required?
SAS BI Portlets are already installed and configured at your site.	SAS BI Portlets will be updated and configured appropriately when you apply the third maintenance release for SAS 9.2.
SAS BI Portlets are not installed and configured at your site.	Yes, if your software order prior to 10w46. After you apply the third maintenance release for SAS 9.2, you need to run the SAS Deployment Wizard to install and configure SAS BI Portlets as new software. For more information, see **"Adding SAS Products"** and **"Configuring SAS Products"** in the *SAS Intelligence Platform: Installation and Configuration Guide.* *Note:* If your software order is from 10w46 or later, then you do not need to perform any post-configuration steps.
You are upgrading from SAS BI Portlets 4.2 to SAS BI Portlets 4.3.	For more information about how to upgrade to this new release, see "SAS BI Portlets 4.3" on page 155.

SAS Data Integration Studio

Product Release Number

The third maintenance release for SAS 9.2 delivers SAS Data Integration Studio 4.21 to customers who did not previously upgrade from version 4.2. After you apply the third maintenance release, the Deployment Summary lists the product release number for SAS Data Integration Studio as 4.21_M2. For more information, see "About the Deployment Summary" on page 18.

Hot fixes A09001 and A16001 have been rolled into the 4.21_M2 release, so you do not need to reapply these hot fixes after you apply the third maintenance release for SAS 9.2. Most of the issues that are addressed by the hot fixes are related to migration and promotion issues for SQL join.

Post-Configuration Steps for SAS Data Integration Studio

When Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Data Integration Studio, see the deployment registry report that you generated before installing the third maintenance release. For more information, see "About the Deployment Summary" on page 18.

Table 11.4 *When Post-Configuration Steps Are Required*

Update Scenario	Are Post-Configuration Steps Required?
You are installing SAS Data Integration Studio for the first time.	No
You are applying the third maintenance release, and the product release number for SAS Data Integration Studio is 4.21_M1.	No The 4.21_M1 product release number indicates that you previously applied the second maintenance release for SAS 9.2 at your site. When you applied the second maintenance release, you already completed the required post-configuration steps. Therefore, you do not need to complete these steps again.
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for SAS Data Integration Studio is 4.2 or 4.21.	Yes These product release numbers indicate that you have not applied the second maintenance release for SAS 9.2. Maintenance releases are cumulative. Therefore, when you apply the third maintenance release, you will also receive the changes that were part of the second maintenance release for SAS 9.2. For these post-configuration steps, see "Adding Resource Templates for Neoview and Netezza Libraries" on page 69 and "Import Updated Generated Transformations" on page 69.

Adding Resource Templates for Neoview and Netezza Libraries

Resource templates have been added for Neoview and Netezza libraries. If you install SAS for the first time using this release, the resource templates are loaded automatically. However, if you install the maintenance release onto an existing SAS 9.2 installation, the resource templates are not added automatically. In that case, if you want to access resource templates for Neoview and Netezza in SAS Data Integration Studio, and you did not manually add these templates, for a previous release, then you must manually add them now. Follow the steps that are described in "Post-Configuration Steps for SAS Management Console" on page 88.

Import Updated Generated Transformations

Due to the changes delivered in the third maintenance release for SAS 9.2, you must delete the generated transformations in SAS Data Integration Studio and use the Import SAS Package wizard to import a package of updated generated transformations.

The following steps summarize how to use the Import SAS Package wizard. For more information about this wizard, see the Help for the wizard. See also **"Using the Export SAS Package and Import SAS Package Wizards: Example Usage Scenario"** in the *SAS Intelligence Platform: System Administration Guide*.

Perform the following steps once per metadata server. Repeat for all metadata servers that SAS Data Integration Studio users access.

Note: In order to find the SAS package file, you must run SAS Management Console on the computer where the SAS Metadata Server is running, or you must otherwise have access to the path specified in Step 5.

1. Open SAS Management Console as an administrator.

2. On the **Folders** tab, expand the following folders: **System ⇨ Applications ⇨ SAS Data Integration Studio ⇨ Common ⇨ Generated Transformations**.

3. Select all generated transformations in the table on the right pane. Right-click the list of generated transformations and select **Delete**. Delete all generated transformations.

4. On the **Folders** tab, right-click the **Generated Transformations** subfolder, and select **Import SAS Package**. The Welcome page of the Import SAS Package wizard is displayed. Under **Select objects to import**, leave the default option selected (**All Objects**).

5. To find the folder that contains the package of generated transformations, click **Browse**. Navigate to the ***SAS-installation-directory*\databuilddata \config\Deployment\Packages** folder on the computer where the metadata server has been installed. For example, the default paths in Windows and UNIX operating environments are as follows:

   - Windows: ***SAS-installation-directory*\SASFoundation\9.2\core \sasmisc\sasconf\databuilddata\config\Deployment\Packages**

   - UNIX: ***SAS-installation-directory*/SASFoundation/9.2/misc/ base/sasconf/databuilddata/config/Deployment/Packages**

6. Select the **PackageTransforms.spk** file and click **Next**.

7. The next set of pages enable you to specify paths, and so on, for the target location that correspond to paths, and so on, from the source location. For more information, see the Help for each page. Click **Next** as appropriate until the Summary page is displayed.

8. Review the information in the Summary page. When you are ready to import, click **Next**.

9. The generated transformations are added to the repository. Click **Finish**. The generated transformations are installed in the **Generated Transformations** subfolder in SAS Management Console.

SAS Data Surveyor for Clickstream Data

Product Release Number

After you apply the third maintenance release, the Deployment Summary lists the product release number for SAS Data Surveyor for Clickstream Data as 2.1_M3. For more information, see "About the Deployment Summary" on page 18.

Preparing for a Maintenance Release

After applying the maintenance release, you must configure the middle tier and plug-ins for SAS Data Surveyor for Clickstream Data. Review the requirements for each configuration before applying the maintenance release.

- When configuring the middle tier, you copy any existing files to a backup directory and a maintenance directory. Before applying the maintenance release, consider how much disk space you need for these additional directories.

- Configuring the SAS Data Surveyor for Clickstream Data plug-in results in the contents of the **/Product/SAS Data Surveyor for Clickstream Data** folder being removed from the metadata data and replaced with new versions of the templates. As a result, any customizations that you made to objects are lost.

  If you changed any object in the **/Product/SAS Data Surveyor for Clickstream Data** folder in a previous release, copy those objects to a backup location before applying the maintenance release.

Post-Configuration Steps for SAS Data Surveyor for Clickstream Data

When Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Data Surveyor for Clickstream Data, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "About the Deployment Summary" on page 18.

Table 11.5   *When Post-Configuration Steps Are Required*

Update Scenario	Are Post-Configuration Steps Required?
You are installing SAS Data Surveyor for Clickstream Data for the first time.	No
You are applying the third maintenance release, and the product release number for SAS Data Surveyor for Clickstream Data is 2.1_M1.	No The 2.1_M1 product release number indicates that you previously applied the maintenance release for SAS Data Surveyor for Clickstream Data that was available in November 2009. When you applied this product-specific maintenance release, you completed the required post-configuration steps. Therefore, you do not need to complete these steps again.
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for SAS Data Surveyor for Clickstream Data is 2.1.	Yes The 2.1 product number indicates that you have not applied the maintenance release for SAS Data Surveyor for Clickstream Data that was available in November 2009. When you apply the third maintenance release, you will also receive the changes that were part of this product-specific maintenance release. For these post-configuration steps, see "Configuring the Middle Tier of SAS Data Surveyor for Clickstream Data" on page 72 and "Configuring the SAS Data Surveyor for Clickstream Data Plug-ins" on page 73.

Configuring the Middle Tier of SAS Data Surveyor for Clickstream Data

Overview of the Configuration Process

After installing the maintenance release, you must manually configure your existing clickstream collection servers in order to apply the maintenance updates.

To manually configure your servers:

1. Back up and copy your existing files.

2. Copy updates.

3. Edit the robots.txt file.

4. Edit the SASSiteConfig.js files.

5. Apply the update.

6. Verify that the server is working.

Note: You should complete these steps in compliance with your organization's standards. In a production environment, it is recommended that you first apply these changes to a test environment. After you have validated the updates in the test environment, copy the updates to the production environment.

Step 1: Back Up and Copy Your Existing Files

1. Create two directories for your existing files:

   • a backup directory, which contains copies of your files from the previous release

   • a maintenance directory, which contains the file updates from the maintenance release

2. Copy the following items from the document root directory of your existing clickstream collection server to the backup directory and the maintenance directory:

   • the robots.txt file

   • the sastag folder

Step 2: Copy the Updates from the Maintenance Release

The files in the `SAS-installation-directory`
`\SASDataSurveyorforClickstreamDataMidTier\2.1\content\css`
directory contain the updates from the maintenance release. You must replace the files in your maintenance directory with these updated files.

Copy the following files from the `SAS-installation-directory`
`\SASDataSurveyorforClickstreamDataMidTier\2.1\content\css`
directory to your maintenance directory:

• `/sastag/SASTag.js`

• `/sastag/SASTagDebug.js`

• `/sastag/SASTagRead.js`

• `/sastag/SASSiteConfig.js.orig`

• `/robots.txt.orig`

Note: When you copy the **/sastag/SASSiteConfig.js.orig**
and **/robots.txt.orig** files to the maintenance directory, rename these files **/
sastag/SASSiteConfig.js** and **/robots.txt**, respectively.

Step 3: Edit the robots.txt File

In a previous release, you might have specified customizations in the robot.txt file.
These customizations are available from the robot.txt in your backup directory. To
restore these customizations, modify robots.txt in your maintenance directory.

Step 4: Edit the SASSiteConfig.js Files

In a previous release, you might have specified customizations in the SASSiteConfig.js
files. These customized files are usually named SASSiteConfig_*name*.js. To determine
whether you customized these files in a previous release, review the files in the backup
directory.

To restore any customizations:

1. Copy any **/sastag/SASSiteConfig.js** files in your maintenance directory.
   Rename the copied files SASSiteConfig_*name*.js. For example, you might
   copy **/sastag/SASSiteConfig.js**
   to **/sastag/SASSiteConfig_MYSITE.js**.

2. Modify the SASSiteConfig_*name*.js file to restore any customizations that you made
   in the previous release.

Step 5: Apply the Updates to Your Root Directory

Copy the files from your maintenance directory to the document root of the collection
server.

Step 6: Verify the Installation

To verify that data is being collected, view the logs from the clickstream collection
server.

Configuring the SAS Data Surveyor for Clickstream Data Plug-ins

Overview of the Configuration Process

After installing the maintenance release, you must configure SAS Data Surveyor for
Clickstream Data. There are three main steps for configuring SAS Data Surveyor for
Clickstream Data:

1. Unconfigure the previous release.

2. Configure SAS Data Surveyor for Clickstream Data to apply the maintenance
   updates.

3. Verify that the maintenance release was applied successfully.

Step 1: Unconfigure the Previous Release

To remove any configuration from the previous installation of SAS Data Surveyor for
Clickstream Data:

1. Run *SAS-installation-directory*\SASDeploymentManager
   \9.2\config.exe. In Windows operating environments, this path is typically **C:
   \Program Files\SAS\SASDeploymentManager\9.2\config.exe**.

After you select the language that you want to use, the SAS Deployment Manager opens.

2. In the Select Configuration Task step, select **Remove Existing Configuration**, and then click **Next**.

3. In the Select Configuration Directory/Level step, select the configuration directory and the level that was used in the previous configuration, and then click **Next**.

4. In the Specify Connection Information step, specify the user ID and password for the metadata server, and then click **Next**.

5. In the Select Product Configurations to Remove step, select **DataSurvey Clickstrm Plugs 2.1** from the list of products to remove, and then click **Next**.

6. In the Summary step, verify that SAS Data Surveyor for Clickstream Data Plug-ins appears under Stage 1: Unconfigure Products, and then click **Start**.

   Check marks indicate that each step in the unconfiguration process was successful. If any warnings or errors were generated during the unconfiguration, then review the log that is located in `<configuration directory>/`
   `<level>/Logs/Configure/datasvyweblog_`
   `unconfigure_yyyy_mm_dd_hh.mm.ss.log`, where *yyyy_mm_dd_hh.mm.ss* is the date and time stamp for the log. Click **Next**.

7. In the Additional Resources step, click **Review Manual Configuration Instructions**. Because no manual steps are required for SAS Data Surveyor for Clickstream Data, you should see this text:

   ```
   The metadata for the SAS Data Surveyor for Clickstream Data has been removed.
   ```

Step 2: Configure to Apply the Maintenance Updates

To configure SAS Data Surveyor for Clickstream Data after applying the maintenance release:

1. From the SAS Software Depot where you installed the maintenance release, run setup.exe. The SAS Deployment Wizard opens.

   Note: You might have more than one order number in your software depot. To specify an order number, run `setup.exe -order nnnn` where *nnnn* is the order number.

2. In the Select Deployment Task step, select **Install SAS Software**, and then click **Next**.

   Note: If the Review Required Updates step appears, then the SAS Deployment Wizard has detected a maintenance release in your SAS Software Depot that has not been applied. If you do not want to install this maintenance update, you must close the SAS Deployment Wizard and restart it by using the `-nosasupdate` option. For example, type `setup.exe -order nnnn -nosasupdate` where *nnnn* is the order number.

3. In the Select Deployment Type step, select **Perform a Planned Deployment**. Verify that the **Install SAS Software** option is deselected and that the **Configure SAS Software** option is selected. Click **Next**.

4. In the Specify Deployment Plan step, select the deployment plan that was used to install the maintenance release. Click **Next**.

5. In the Select Configuration Prompting Level step, select **Typical**, and then click **Next**.

6. In the Specify Configuration Information step, verify the configuration directory and level, and then click **Next**.

   If a message appears stating that the configuration directory and level already exist, click **Yes** to continue with the configuration.

7. Complete the remaining steps in the SAS Deployment Wizard. When you are prompted to select the context for the SAS Application Server, select the correct context for your site.

   Note: By default, the SASMeta context is selected. However, for most sites, the SASMeta context is not the correct value. You need to specify the context for the SAS Application Server at your site.

8. In the Deployment Summary step, click **Start**.

   Check marks indicate that each step in the configuration process was successful. If any warnings or errors were generated during the configuration, then review the log that is located in **<configuration directory>/ <level>/Logs/Configure/datasvyweblog_ unconfigure_yyyy_mm_dd_hh.mm.ss.log**, where *yyyy_mm_dd_hh.mm.ss* is the date and time stamp for the log. Click **Next**.

9. In the Additional Resources step, click **Review Manual Configuration Instructions**. Although no manual steps are required for SAS Data Surveyor for Clickstream Data, review this information carefully.

   Click **Finish**.

Step 3: Verify Your Installation

To verify that the maintenance release was applied successfully, review the contents of the **/Products** folder by using the **Folders** tab in SAS Data Integration Studio or SAS Management Console. If you see **/Products/SAS Data Surveyor for Clickstream Data/2.1/Clickstream Templates/Multiple Log Templates/Customer Integration Template**, then you correctly configured SAS Data Surveyor for Clickstream Data after applying the maintenance release.

SAS Drivers for ODBC

Product Release Number

After you apply the third maintenance release, the Deployment Summary lists the product release number for SAS Drivers for ODBC as 9.23. For more information, see "About the Deployment Summary" on page 18.

Before You Upgrade: Record Your Data Source Names

Before you upgrade to the SAS 9.2 Drivers for ODBC, record the information for each of your Data Source Names (DSN) that use the existing SAS driver. The following instructions describe how to record this information. Recording the information is important because the DSNs are removed when the driver is uninstalled, and also when the driver is installed.

After you record this information, uninstall the older version of the SAS driver and then upgrade to the new release. In the event that the driver is installed without uninstalling

the previous version or that older DSNs are not accessible with the new driver, delete the DSNs, the associated servers, library references, and then re–create them.

Follow these steps:

1. Access the Windows Control Panel by selecting **Start** ⇨ **Settings** ⇨ **Control Panel**.

   Find the ODBC Data Sources or the ODBC Administrator icon. This icon might be located in the Control Panel group, an ODBC group, or in the Administrative Tools group. If you have installed a package of other ODBC drivers, this icon might be in a group that is associated with that package.

2. Double-click the icon to open the ODBC Data Source Administrator dialog box.

3. For each of the DSNs that use the SAS driver, follow these steps:

   a. Select the DSN and click **Configure**.

   b. Select each of the tabs and record the information so that you can use it to configure the DSNs with the new driver.

4. Close the SAS ODBC Configuration dialog box and the ODBC Data Source Administrator dialog box.

5. Use the Windows Add or Remove Programs utility to remove the old SAS ODBC driver.

6. If you have other SAS software products installed on the machine, then run the SAS Deployment Wizard to apply maintenance.

7. Install the SAS 9.2 Drivers for ODBC. The drivers are available in the following methods:

   • As a download from **http://www.sas.com/apps/demosdownloads/setupcat.jsp?cat=ODBC+Drivers**.

   • By running the SAS Deployment Wizard from a depot that includes the SAS Drivers for ODBC. You can run the wizard and choose the **Install Additional Software** option, or you can choose the **Install SAS Foundation and Related Software** option. This second option enables you to choose Clients only on the Select Products to Install page. For customers that are familiar with previous releases of SAS software, this is similar to the Clients CD Volume 1.

8. Use the ODBC Data Source Administrator and the recorded information to recreate the DSNs. For more information about creating DSNs, refer to the *SAS Drivers for ODBC: User's Guide*.

SAS Enterprise Guide

Product Release Number

After you apply the third maintenance release for SAS 9.2, the product release number for SAS Enterprise Guide is 4.22.

Note: SAS Enterprise Guide 4.3 shipped in August 2010. For more information, see

Post-Configuration Steps for SAS Enterprise Guide

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Enterprise Guide, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.6 *When Post-Configuration Steps Are Required*

Update Scenario	Are Post-Configuration Steps Required?
You are installing SAS Enterprise Guide for the first time.	SAS Enterprise Guide 4.22 is not updated in the third maintenance release for SAS 9.2. To get the latest fixes for this product, you must download and apply the current hot fix. To download this hot fix, see `http://ftp.sas.com/techsup/download/hotfix/HF2/92_all_hosts.html`.
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for SAS Enterprise Guide is 4.22.	If you have not yet applied the hot fix for SAS Enterprise Guide 4.22, then you should apply this hot fix after you applied the third maintenance release for SAS 9.2. For more information, see `http://ftp.sas.com/techsup/download/hotfix/HF2/92_all_hosts.html`. If you previously applied this hot fix, then you do not need to apply it again.
You are upgrading from SAS Enterprise Guide 4.2 to SAS Enterprise Guide 4.3 or 4.305.	You do not need to apply the hot fix for SAS Enterprise Guide 4.22 before upgrading to SAS Enterprise Guide 4.3 or 4.305. For more information about the new release and the steps for upgrading to this new release, see "SAS Enterprise Guide 4.3" on page 157.

SAS Enterprise Miner

Product Release Number

After you apply the third maintenance release, the Deployment Summary lists the product release number for SAS Enterprise Miner as 6.1_M3. For more information, see "About the Deployment Summary" on page 18.

Note: SAS Enterprise Miner 6.2 shipped in August 2010. For more information, see "SAS Enterprise Miner 6.2" on page 159.

Post-Configuration Steps for SAS Enterprise Miner

When Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Enterprise Miner, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.7   *When Post-Configuration Steps Are Required*

Update Scenario	Are Post-Configuration Steps Required?
You are upgrading from SAS Enterprise Miner 6.1 to SAS Enterprise Miner 6.2. You might also be running SAS Text Miner at your site.	When you upgrade to SAS Enterprise Miner 6.2, the updates in the third maintenance release for SAS 9.2 are automatically applied (if you have not previously applied this maintenance release). If your site also licenses SAS Text Miner, then the first maintenance release for SAS Text Miner 4.2 is automatically applied when you upgrade to SAS Enterprise Miner 6.2. For more information, see "SAS Text Miner 4.2_M1" on page 126.
	To upgrade to SAS Enterprise Miner 6.2, see "SAS Enterprise Miner 6.2" on page 159. After completing the upgrade instructions for SAS Enterprise Miner 6.2, there are no additional post-configuration steps to complete. If you also license SAS Text Miner, any post-configuration steps that you need to complete are included in the upgrade instructions for SAS Enterprise Miner.
	If your order does not include SAS Enterprise Miner 6.2 and you want to upgrade to this release, contact the SAS installation representative at your site.
Before you apply the third maintenance release for SAS 9.2, the product release number for SAS Enterprise Miner is 6.1, 6.1_M1, or 6.1_M2.	No When you apply the third maintenance release for SAS 9.2, the SAS Deployment Wizard automatically configures your software. No manual post-configuration steps are required for SAS Enterprise Miner.

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release for SAS 9.2, and you have both SAS Enterprise Miner and SAS Text Miner installed at your site.	In December 2009, SAS Text Miner 4.2 was released. When you apply the third maintenance release for SAS 9.2, SAS automatically updates any existing SAS Text Miner installation to the 4.2 release. If you are currently running SAS Text Miner 4.1, then SAS Text Miner needs to be manually configured after you apply the third maintenance release. To manually configure SAS Text Miner 4.2, see "Post-Configuration Steps for SAS Text Miner" on page 102.
	If you have already installed SAS Text Miner 4.2, then no manual configuration steps are required after you apply the third maintenance release for SAS 9.2.
	When you apply the third maintenance release for SAS 9.2, the SAS Deployment Wizard automatically configures your software. No manual post-configuration steps are required for SAS Enterprise Miner.
	Note: If you are upgrading to SAS Enterprise Miner 6.2, then you do not need to apply the third maintenance release for SAS 9.2 before upgrading to SAS Enterprise Miner 6.2. For more information about this new release and how to upgrade at your site, see "SAS Enterprise Miner 6.2" on page 159.
You have applied the third maintenance release for SAS 9.2, and you have upgraded to SAS Enterprise Miner 6.2. You might also be running the first maintenance release for SAS Text Miner 4.2. Now, you are updating other products at your site.	No post-configuration steps are required for SAS Enterprise Miner 6.2 and SAS Text Miner 4.2. However, post-configuration steps could be required for the products that you are updating. Review the "Product-Specific Details and Post-Configuration Requirements" chapter in Parts 3 and 4 of this document. • For post-configuration steps for applying a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3. • For post-configuration steps for upgrading to a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

SAS/ETS

A new release of SAS/ETS is shipping in conjunction with the third maintenance release for SAS 9.2. When you apply the third maintenance release, SAS/ETS is updated to the 9.22 release of this product. For more information, see **http://support.sas.com/documentation/onlinedoc/ets**.

SAS Fair Banking

Before You Upgrade: Create Backup Files

You should back up metadata, SAS data sets, and stored processes before you install the third maintenance release for SAS 9.2 and SAS Fair Banking 4.1.

Post-Configuration Steps for SAS Fair Banking

When Post-Configuration Steps Are Recommended

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for Base SAS, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.8 When Post-Configuration Steps Are Recommended

Update Scenario	Are Post-Configuration Steps Recommended?
You are applying the third maintenance release, and the product release number for Base SAS 9.21_M1.	No The 9.21_M1 product release number indicates that you previously applied the second maintenance release for SAS 9.2 at your site. When you applied the second maintenance release, you completed the required post-configuration steps. Therefore, you do not need to complete these steps again.
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for Base SAS is 9.2.	Yes The 9.2 product release number indicates that you have not applied the second maintenance release for SAS 9.2. Maintenance releases are cumulative. Therefore, when you apply the third maintenance release, you will also receive the changes that were part of the second maintenance release for SAS 9.2. For the recommended post-configuration steps, see "Administrative Updates to OLAP Cubes" on page 80.

Administrative Updates to OLAP Cubes

Because of enhancements to OLAP security, you need to perform administrative updates of the cubes in your SAS Fair Banking solution, and you need to update an associated library that is defined and registered by the solution. Without these updates, your cubes will be locked, and you will be unable to refresh their contents. After the administrative updates, your SAS log will contain a message that the cubes were updated.

To perform these updates:

1. Log on to SAS Management Console using the SAS Fair Banking administrator account.

2. Select the **Folders** tab.

3. Navigate to folder `SAS Fair Banking/Data Source` and then to the folder that contains the registered library L_RPTS. For example, if library L_RPTS is located in the folder `Reporting`, navigate to the folder `SAS Fair Banking/Data Source/Reporting`. Delete L_RPTS.

4. Log on to the SAS server using the SAS Fair Banking administrator account.

5. Restart all SAS services.

6. Run the following code in the SAS Fair Banking SAS environment. (See "Configuring the SAS Environment to Run SAS Fair Banking Programs" in *SAS Fair Banking 4.1: Administrator's Guide* for information about the SAS Fair Banking SAS environment.)

```
%sfb_reporting_job_driver;
```

SAS Financial Management

Use the following table to determine what steps you need to complete to update your release of SAS Financial Management. To determine the product release number for SAS Financial Management, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.9   Steps for Updating SAS Financial Management

Update Scenario	Are Post-Configuration Steps Recommended?
You are applying the third maintenance release, and the product release number for SAS Financial Management is 5.1.	When you apply the third maintenance release for SAS 9.2 to SAS Financial Management 5.1, you will see errors for the configuration steps that start these spawners: • SAS OLAP Data and Compute Server Mid-Tier for Solutions • SAS Financial Management Mid-Tier • SAS Strategy Management Mid-Tier After each error, a dialog box appears. Click **Yes** to continue with any remaining configuration steps. For more information, see SAS Note 38083 at `http://support.sas.com/kb/38/083`.
You are upgrading from SAS Financial Management 5.1 to SAS Financial Management 5.2.	For more information about the new release and the steps for upgrading to this new release, see "SAS Financial Management 5.2" on page 166.

SAS Forecast Server

Product Release Number

After you apply the third maintenance release, the Deployment Summary lists the product release number for SAS Forecast Server as 3.1_M3. For more information, see "About the Deployment Summary" on page 18.

Post-Configuration Steps for SAS Forecast Server

When These Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for Base SAS, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "About the Deployment Summary" on page 18.

Table 11.10   When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are installing SAS Forecast Server 3.1 for the first time.	No
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for SAS Forecast Server is 3.1_M2.	No The 3.1_M2 indicates that you have applied the second maintenance release for SAS Forecast Server. This maintenance release includes localized Help and was available in December 2009. No additional post-configuration steps are required after you apply the third maintenance release for SAS 9.2.
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for SAS Forecast Server is 3.1 or 3.1_M1.	Yes, if you use the Java Web Start application The 3.1 and 3.1_M1 product release numbers indicate that you have not applied the second maintenance release for SAS Forecast Server, which was available in December 2009 and included localized Help. This product-specific maintenance release is included in the third maintenance release for SAS 9.2. For the post-configuration steps, see "How to Use the Java Web Start Application" on page 82.

How to Use the Java Web Start Application

In the third maintenance release for SAS 9.2, additional steps are required to use the Java Web Start application with SAS Forecast Server 3.1. To use the Java Web Start

installation with SAS Forecast Server 3.1, you must complete the following steps after you apply the third maintenance release for SAS 9.2:

1. Copy the **jws_exclude** file from ***SAS-installation-directory*** **\SASForecastServerMidTier\3.1\Config\apps\Forecasting** to the ***SAS-configuration-directory*** **\Lev1\AnalyticsPlatform\apps \Forecasting** directory.

2. Stop and restart the Analytics Platform server by completing the steps in "SAS Analytics Platform Server" on page 65.

SAS/GRAPH

New Functionality: SGDESIGN Procedure

The third maintenance release for SAS 9.2 includes the production release of the SGDESIGN procedure. This procedure renders graphs (SGD files) that have been created using SAS/GRAPH ODS Graphics Designer.

The preproduction version of ODS Graphics Designer was released in March 2009 with SAS 9.2. In the preproduction version, graphs were stored as two separate files: one file for the actual graph (SGD) and a second file (SGN) for the graph's icon. In the production version of ODS Graphics Designer, both files are packaged in an archive file with the SGD extension.

To preserve backward compatibility, the OLDSGD option is included in the third maintenance release. This option enables you to run SGD files that were created using the preproduction version of ODS Graphics Designer.

Post-Configuration Steps for SAS/GRAPH

When These Post-Configuration Steps Are Required
Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS/GRAPH, see the deployment registry report that you generated before you apply the third maintenance release. For more information, see "About the Deployment Summary" on page 18.

Table 11.11   When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are installing SAS/GRAPH for the first time.	No
You are applying the third maintenance release, and the product release number for SAS/GRAPH is 9.21.	Yes, if you created graphs using SAS/GRAPH ODS Graphics Designer. For post-configuration steps, see "How to Render Existing SGD Files" on page 84.

How to Render Existing SGD Files

To render an SGD file that was created with the preproduction version of ODS Graphics Designer, use the OLDSGD option. For more information, see the *SAS/GRAPH: Statistical Graphics Procedures Guide*.

Note: If you do not specify the OLDSGD option, then the SGDESIGN procedure will fail, and you cannot view graphs that were created with the preproduction version of ODS Graphics Designer.

SAS Grid Manager

Post-Configuration Steps for SAS Grid Manager

When These Post-Configuration Steps Are Required

In the second maintenance release for SAS 9.2, the SAS Grid Manager Client Utility was added. If you are going to use this utility, some post-configuration steps might be required. Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Grid Manager, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "About the Deployment Summary" on page 18.

Table 11.12   When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are installing SAS Grid Manager for the first time.	No The SAS Grid Manager Client Utility is in the plan file, so the SAS Grid Manager Client Utility is automatically installed and configured using the SAS Deployment Wizard.
You are not installing the SAS Grid Manager Client Utility.	No
You are installing the SAS Grid Manager Client Utility to an existing SAS 9.2 deployment, and the product release number for SAS Grid Manager is 9.2 or 9.21.	Yes The 9.2 product release number indicates that you have not applied the second maintenance release for SAS 9.2. Maintenance releases are cumulative. Therefore, when you apply the third maintenance release, you will also receive the changes that were part of the second maintenance release for SAS 9.2. For the post-configuration steps, see "Install the SAS Grid Manager Client Utility" on page 85.

Install the SAS Grid Manager Client Utility

If you installed your grid using SAS 9.2 before the third maintenance release and you want to install the SAS Grid Manager Client Utility, you must complete these steps:

1. Verify that the third maintenance release for SAS 9.2 has been installed on all machines in the grid. The installation process updates grid configuration files to be able to work with the SAS Grid Manager Client Utility.

2. Install the SAS Grid Manager Client Utility. Follow the instructions in **"Configure New SAS Products"** in the *SAS Intelligence Platform: Installation and Configuration Guide*. You must obtain a new plan file and include SAS Grid Manager Client Utility 9.2 in the file. Foundation SAS or any other SAS software is not required to be included in this plan file. The machine on which you are installing the utility must have Platform LSF installed on it.

3. If the machine on which you installed the SAS Grid Manager Client Utility uses a different platform from the machines on the grid, you must modify the server definition for the Logical Grid Server.

   a. Use the Server Manager in SAS Management Console to open the server definition for the Logical Grid Server under the SAS Application Server. Using the context menu, open the Properties window for the server definition that is under the Logical Grid Server definition.

   b. In the Properties dialog box, click the **Options** tab.

   c. In the **Additional Options** field, type **reqres="type==any"**.

   d. Close the Properties window.

For more information about the SAS Grid Manager Client Utility, see *Grid Computing in SAS*.

SAS Human Capital Management

Use the following table to determine what steps you need to complete to update your release of SAS Human Capital Management. To determine the product release number for SAS Human Capital Management, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see .

Table 11.13 *Steps for Updating SAS Human Capital Management*

Update Scenario	Are Post-Configuration Steps Recommended?
You are applying the third maintenance release, and the product release number for SAS Human Capital Management is 5.1.	When you apply the third maintenance release for SAS 9.2 to SAS Human Capital Management 5.1, you will see errors for the configuration steps that start these spawners: - SAS OLAP Data and Compute Server Mid-Tier for Solutions - SAS Financial Management Mid-Tier - SAS Strategy Management Mid-Tier After each error, a dialog box appears. Click **Yes** to continue with any remaining configuration steps. For more information, see SAS Note 38083 at **http://support.sas.com/kb/38083**.
You are upgrading from SAS Human Capital Management 5.1 to SAS Human Capital Management 5.2.	For more information about the new release and the steps for upgrading to this new release, see "SAS Human Capital Management 5.2" on page 167.

SAS Information Delivery Portal

Before You Upgrade: Record Changes to web.xml.orig File

If you installed the first maintenance release for the SAS Information Delivery Portal 4.2, then you might have manually updated the ***SAS-installation-directory* \SASInformationDeliveryPortal\4.2\Configurable\wars\sas.portal \WEB-INF\web.xml.orig** file. When you apply the third maintenance release for SAS 9.2, these changes might be lost. Therefore, it is important that you document these changes before you apply the maintenance release.

Post-Configuration Steps for the SAS Information Delivery Portal

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for the SAS Information Delivery Portal, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.14 *When Post-Configuration Steps Are Required*

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release, the product release number for the SAS Information Delivery Portal is 4.2_M1, and you enabled unchallenged access at your site.	Yes After the first maintenance release for the SAS Information Delivery Portal 4.2, you could enable unchallenged access to the content in the Portal. To restore this unchallenged access, you might need to update the **SAS-installation-directory \SASInformationDeliveryPortal \4.2\Configurable\wars \sas.portal\WEB-INF \web.xml.orig** file. If you do, then the sas.portal4.2.ear file must be rebuilt and redeployed. For more information, see *Enabling Unchallenged Access in the SAS Information Delivery Portal* at **http:// support.sas.com/kb/37/281.html**.
After you apply the third maintenance release, you have portlet configurations that you no longer use.	Yes, if you want to remove these portlet configurations. For more information, see **"Removing Portlet Configurations"** in the *SAS Intelligence Platform: Web Application Administration Guide*.
You are upgrading from the SAS Information Delivery Portal 4.2 to the SAS Information Delivery Portal 4.3.	For more information about the new release and the steps for upgrading to this new release, see "SAS Information Delivery Portal 4.3" on page 168.

SAS Management Console

Product Release Number

After you apply the third maintenance release, the Deployment Summary lists the product release number for SAS Management Console as 9.2_M2. For more information, see "About the Deployment Summary" on page 18.

Scheduling Reports

After you have installed the second maintenance release for SAS 9.2, you cannot use SAS Management Console to deploy reports as jobs for scheduling. Schedules for reports must be created within SAS Web Report Studio. After a report has been deployed and scheduled using SAS Web Report Studio, you can use the Schedule Manager plug-in for SAS Management Console to reschedule the report.

New Functionality: Resource Template Changes for Netezza Servers and Libraries

In the second maintenance release for SAS 9.2, resource templates were added for Neoview and Netezza servers and libraries. In the third maintenance release for SAS 9.2, the Netezza resource templates were modified so that Netezza database names are specified on the library definition rather than the server definition. The differences between the server and library definitions for the two releases are as follows:

Table 11.15   Differences between Server and Library Definitions

Maintenance Release	Server Definition	Library Definition
second maintenance release for SAS 9.2	one definition needed for each Netezza database on each Netezza database server	one definition needed for each Netezza database
third maintenance release for SAS 9.2	one definition needed for each Netezza database server	one definition needed for each Netezza database

Post-Configuration Steps for SAS Management Console

When These Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Management Console, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.16 *When Post-Configuration Steps Are Required*

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release, the product release number for SAS Management Console is 9.2 or 9.2_M1, and you are using Netezza servers and libraries.	Yes The 9.2 product release number indicates that you have not applied any maintenance releases for SAS 9.2 at your site. Maintenance releases are cumulative. Therefore, when you apply the third maintenance release, you will also receive the changes that were part of the second maintenance release for SAS 9.2. The 9.2_M1 product release number indicates that you previously applied the second maintenance release for SAS 9.2 at your site. If you created any Netezza server definitions that use the resource templates from the second maintenance release for SAS 9.2, the Netezza database information remains in the definitions. However, the resource template for the third maintenance release for SAS 9.2 does not allow you to view or modify the database information on the server definition. Any existing database information on the Netezza server definitions will overwrite the database information that was specified in the Netezza library definitions. If you created any definitions for Netezza servers or libraries, you must install hot fixes B04002 and C01001. Next, in order for the Netezza database name to be associated with the library definition, rather than the server definition, run the Upgrade Metadata action in SAS Management Console after installing the third maintenance release for the SAS 9.2 release. If you are running SAS Management Console 9.2 or 9.2_M1, you must complete the post-configuration steps. For more information, see "Redefine Netezza Servers and Libraries" on page 89.

Redefine Netezza Servers and Libraries

After the third maintenance release for SAS 9.2 has been installed, you must install two hot fixes, and then upgrade the metadata in order to redefine any existing Netezza server and library definitions. Complete these steps:

1. Install hot fixes B04002 and C01001.

2. In SAS Management Console, open the Metadata Manager node on the **Plug-ins** tab.

3. Select the active SAS Metadata Server.

4. Select **Upgrade Metadata** from the **File** menu or the context menu.

SAS Model Manager

New Functionality

The third maintenance release for SAS 9.2 fixes the following problems that previously affected SAS Model Manager 2.2:

• Before this release, SAS Model Manager 2.2 used random ports when performing tasks such as attaching documents or importing models, which caused problems when you ran SAS Model Manager in a firewall environment. Functionality has been added to allow specific ports to be used for your firewall environment.

• The SAS Model Manager Data Source viewer now supports using libraries and tables created in custom repositories.

Note: When you create the model scoring output table, choose a library that exists in the Foundation repository instead of a custom repository.

Post-Configuration Steps for SAS Model Manager

When These Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for Base SAS, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.17   When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are installing SAS Model Manager for the first time.	No
You are upgrading from SAS Model Manager 2.2 to SAS Model Manager 2.3.	Yes When you upgrade to SAS Model Manager 2.3, the updateInstructions.html file lists any post-configuration steps that you need to complete. For example, you might need to restore any customizations that you made to the app.config and picklist files. You do not need to complete the post-configuration steps that are described in the rest of this section. For more information about the post-configuration steps to complete when upgrading to SAS Model Manager 2.3, see "SAS Model Manager 2.3" on page 170. If your order does not include SAS Model Manager 2.3 and you want to upgrade to this release, contact the SAS installation representative at your site.

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release, and the product release number for Base SAS is 9.21_M1.	Yes The 9.21_M1 product release number indicates that you previously applied the second maintenance release for SAS 9.2 at your site. In the third maintenance release for SAS 9.2, additional steps are required to use the Java Web Start application or a firewall with SAS Model Manager 2.2. For the post-configuration steps, see "How to Use the Java Web Start Application" on page 92 and "How to Configure Your Firewall for Use with SAS Model Manager 2.2" on page 92. These steps are not required if you are running a release before SAS Model Manager 2.2.
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for Base SAS is 9.2 or 9.21.	Yes The 9.2 or 9.21 product release number indicates that you have not applied the second maintenance release for SAS 9.2. Maintenance releases are cumulative. Therefore, when you apply the third maintenance release, you will also receive the changes that were part of the second maintenance release for SAS 9.2. In the third maintenance release for SAS 9.2, additional steps are required to use the Java Web Start application or a firewall with SAS Model Manager 2.2. For the post-configuration steps, see "How to Use the Java Web Start Application" on page 92 and "How to Configure Your Firewall for Use with SAS Model Manager 2.2" on page 92. These steps are not required if you are running a release before SAS Model Manager 2.2.
You have applied the third maintenance release for SAS 9.2, and you have upgraded to SAS Model Manager 2.3. Now, you are updating other products at your site.	No post-configuration steps are required for SAS Model Manager 2.3. However, post-configuration steps could be required for the products that you are updating. Review the "Product-Specific Details and Post-Configuration Requirements" chapter in Parts 3 and 4 of this document. • To complete the post-configuration steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3. • To complete the post-configuration steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

How to Use the Java Web Start Application

To use the Java Web Start application with SAS Model Manager:

1. On the middle tier server where the SAS Analytics Platform server is installed, access the **SAS-configuration-directory\Lev1\AnalyticsPlatform \apps\ModelManager** directory.

2. Rename the file picklist.mds to picklist.mds.bak.

3. Copy the file picklist from the **SAS-installation-directory \SASModelManagerApplicationProgrammingInterface \2.2\Picklists\wars\sas.analytics.mm** directory to the **ModelManager** directory that is specified in Step 1.

4. In the **ModelManager** directory, rename the file picklist to picklist.mds.

5. Stop and restart the SAS Analytics Platform server by completing the steps in "SAS Analytics Platform Server" on page 65.

   Note: The Web application server (such as WebLogic, WebSphere, or JBoss) must be available to connections before you restart the SAS Analytics Platform server. For more information, see "Availability of the Web Application Server" on page 93.

How to Configure Your Firewall for Use with SAS Model Manager 2.2

To configure your firewall for use with SAS Model Manager 2.2:

1. Make a backup copy of the app.config file located in the **SAS-configuration-directory\Lev1\AnalyticsPlatform\apps\ModelManager** directory.

2. Use a text editor to add the following lines to the end of the *app.config* file in the **SAS-configuration-directory\Lev1\AnalyticsPlatform\apps \ModelManager** directory.

```
application.client.port=6931
application.client.port.range=10
```

3. Here is an explanation of how to set the parameters in step 2.

   a. *application.client.port* specifies the port at which the range starts.

   b. *application.client.port.range* specifies the number of open ports. The range of open ports ends at the application.client.port plus the application.client.port.range minus 1.

   Note: If you do not modify the parameters in the *app.config* file, then the default values added in step 2 are used to open the range of ports for the firewall.

4. Stop and restart the SAS Analytics Platform server by completing the steps in "SAS Analytics Platform Server" on page 65.

   Note: The Web application server (such as WebLogic, WebSphere, or JBoss) must be available to connections before you restart the SAS Analytics Platform server. For more information, see "Availability of the Web Application Server" on page 93.

Availability of the Web Application Server

SAS Model Manager has a dependency on the SAS Content Server that provides the interface to WebDAV, which is needed by SAS Model Manager. The SAS Content Server runs as a Web application. Before the SAS Analytics Platform can successfully start SAS Model Manager, your Web application server (WebLogic, WebSphere, or JBoss) must be available for connections. You can verify that the SAS Content Server is available by accessing the URL that is provided in the Instructions.html file (**http:// server-name:port/SASContentServer/dircontents.jsp**) and logging in as the SAS Model Manager administrator.

For more information about configuring environments, creating user accounts, and general SAS Model Manager administration, see the *SAS Model Manager: Administrator's Guide*. This documentation is available at **http:// support.sas.com/documentation/onlinedoc/modelmgr/**.

SAS OLAP Server

Product Release Number

After you apply the third maintenance release for SAS 9.2, you can view the release information in two different locations:

- For SAS OLAP Server: The Technical Support Number (TS2M3) is listed in the SAS OLAP Server log.

- For SAS OLAP Cube Studio: You can see the product number in the About SAS OLAP Cube Studio dialog box. Select **Help** ⇨ **About SAS OLAP Cube Studio**. In the Environment information panel, the version number is 4.2_M2, because this is the second maintenance release for SAS OLAP Cube Studio.

For more information, see "About the Deployment Summary" on page 18.

Post-Configuration Steps for SAS OLAP Server

When These Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the Technical Support Number for SAS OLAP Server, review the SAS OLAP Server log before you apply the third maintenance release. To determine the product release number for SAS OLAP Cube Studio, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.18 *When Post-Configuration Steps Are Required*

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release. The Technical Support Number for SAS OLAP Server is TS2M2, or the product release number for SAS OLAP Cube Studio is 4.2_M1.	No The Technical Support Number (TS2M2) and the product release number (4.2_M1) indicate that you previously applied the second maintenance release for SAS 9.2 at your site. When you applied the second maintenance release, you completed the required post-configuration steps. Therefore, you do not need to complete these steps again.
You are applying the third maintenance release to an existing SAS 9.2 deployment. The Technical Support Number for SAS OLAP Server is TS2M0, and the product release number for SAS OLAP Cube Studio is 4.2.	Yes The Technical Support Number (TS2M0) and the product release number (4.2) indicate that you have not applied the second maintenance release for SAS 9.2. Maintenance releases are cumulative. Therefore, when you apply the third maintenance release, you will also receive the changes that were part of the second maintenance release for SAS 9.2. For the post-configuration steps, see "ExportCubes and ImportCubes Batch Tools" on page 94 and "Drill-through to Metadata Security" on page 95.

ExportCubes and ImportCubes Batch Tools

The ExportCubes and ImportCubes command-line batch tools enable you to move your SAS 9.1.3 SP4 cubes to the third maintenance release for SAS 9.2. These batch tools are available for use on Windows and are executed from a DOS command line. To use the batch tools, you must go to the DOS command line on your operating system. The batch tool can be found in the following directory paths:

- ExportCubes tool: **SAS-Installation-directory \sasmanagementconsole\9.1\commands**

- ImportCubes tool: **SAS-Installation-directory \SASPlatformObjectFramework\9.2**

The ExportCubes batch tool exports the metadata for your cubes into individual XML files that are stored in a designated directory. The ExportCubes batch tool exports all cubes on the metadata server. The ImportCubes batch tool enables you to import SAS 9.1.3 OLAP cube metadata files that have been exported using the ExportCubes batch tool on your SAS 9.1.3 SP4 environment.

With the ImportCubes batch tool you can specify the location of multiple exported SAS 9.1.3 XML files and import them to your SAS 9.2 OLAP environment. The SAS 9.1.3 SP4 cube metadata is imported and added to the SAS 9.2 Metadata Server. After the metadata files are imported, you can then rebuild your SAS 9.1.3 SP4 cubes on your SAS 9.2 system. You can use SAS OLAP Cube Studio to build the physical data for the cubes.

Note: For further information, see **"ExportCubes and ImportCubes Batch Tools"** in the *SAS OLAP Server: User's Guide*.

Drill-through to Metadata Security

When selecting a data table for drill-through, you might need to define user restrictions for certain data in the drill-through table. In the second maintenance release for SAS 9.2, the drill-through to detail functionality enforces metadata security. The SAS Metadata LIBNAME engine is now used to assign the drill-through table library on a per-session basis. This allows client credentials to be used when determining which columns the user can see. Columns that have ReadMetadata permissions denied on the drill-through table will not be visible to the user. If access is denied for a column on the drill-through table, that level must also be denied Read access in the cube. Conversely, if a level is denied Read access in the cube, that column in the drill-through table must have ReadMetadata access denied.

Note: For more information, see **"Security for Drill-through Tables"** in the *SAS OLAP Server: User's Guide*.

SAS OnlineDoc for the Web

Product Release Number

If SAS OnlineDoc for the Web is a product that is included in your deployment, then the URL for the SAS OnlineDoc for the Web is **http://sasbiw2k3x64.demo.sas.com:17101/SASOnlineDoc**. After you apply the third maintenance release for SAS 9.2, the product release number for SAS OnlineDoc for the Web is 9.21_M2. For more information, see "About the Deployment Summary" on page 18.

Post-Configuration Steps for SAS OnlineDoc for the Web

When These Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release numbers for SAS OnlineDoc for the Web, see the deployment registry report that you generated before you apply the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.19   When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release, and the product release number for SAS OnlineDoc for the Web is 9.21_M1.	Yes The 9.21_M1 product release number indicates that you previously applied the second maintenance release for SAS 9.2 at your site. However, you must complete these manual post-configuration steps again after you apply the third maintenance release for SAS 9.2. For the post-configuration steps, see "Manual Deployment of SAS OnlineDoc for the Web" on page 96.

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release to an existing SAS 9.2 deployment. The product release number for SAS OnlineDoc for the Web is 9.21.	Yes The 9.21 product release number indicates that you have not applied the second maintenance release for SAS 9.2. Maintenance releases are cumulative. Therefore, when you apply the third maintenance release, you will also receive the changes that were part of the second maintenance release for SAS 9.2. For the post-configuration steps, see "Manual Deployment of SAS OnlineDoc for the Web" on page 96.

Manual Deployment of SAS OnlineDoc for the Web

The EAR file for the SAS OnlineDoc for the Web contains several updates in the second maintenance release for SAS 9.2. If you deployed the SAS OnlineDoc for the Web when you initially installed SAS 9.2, then you must manually redeploy this EAR file after installing the maintenance release. The EAR file for the SAS OnlineDoc for the Web is available from **SAS-installation-directory\Documentation \9.2\onlinedocweb\sas.onlinedocweb9.2.ear**. For more information, see **"Deploying SAS OnlineDoc Manually for the Web"** in the *SAS Intelligence Platform: Web Application Administration Guide*.

SAS OpRisk VaR

Before You Upgrade: Apply Product-Specific Maintenance Release

Before you apply the third maintenance release for SAS 9.2, it is recommended that you perform the following tasks:

- Apply the second maintenance release for SAS OpRisk VaR 4.1. For more information about the maintenance release for SAS OpRisk VaR, contact your SAS account representative.

- Back up metadata, SAS data sets, and stored processes.

Post-Configuration Steps

After you apply the third maintenance release for SAS 9.2, no additional steps are required to configure SAS OpRisk VaR 4.1_M1.

SAS/OR

A new release of SAS/OR is shipping in conjunction with the third maintenance release for SAS 9.2. When you apply the third maintenance release, SAS/OR is updated to the

9.22 release of this product. For more information, see **http://support.sas.com/documentation/onlinedoc/or**.

SAS Profitability Management

The second maintenance release for SAS 9.2 included the following updates for SAS Profitability Management:

- Allows users to save model descriptions and report hierarchy descriptions that contain more than 127 DBCS characters.

- For customers using the localized Spanish version of SAS Profitability Management, corrects a problem that generated scripting errors when a new model was created.

If you applied the second maintenance release for SAS 9.2 at your site, then your software has already incorporated these changes, and no additional changes are applied in the third maintenance release for SAS 9.2.

If you are applying a SAS maintenance release for the first time, then these updates are made to SAS Profitability Management, and after applying the third maintenance release for SAS 9.2, no additional steps are required to configure SAS Profitability Management.

SAS Real-Time Decision Manager

Before You Upgrade: Stop the SAS Object Spawner and Create Backups

Before you apply the third maintenance release for SAS 9.2 and install SAS Real-Time Decision Manager 5.3, back up your metadata, SAS Real-Time Server configuration files, SAS Real-Time Decision Manager repositories, system resources, flows, events, and activities.

If you have configured a production environment with multiple configurations of SAS Real-Time Decision Server, then you must complete these steps:

1. On each SAS application server where a SAS Real-Time Decision Manager Server is configured, stop the SAS Object Spawner that has been configured for SAS Real-Time Decision Manager.

2. On the client machines where the SAS Real-Time Decision Manager Plug-in for SAS Management Console is installed, complete these steps:

   a. In SAS Management Console, click the **Folders** tab.

   b. Navigate to the **System/Application/SAS Real-Time Decision Manager/Real-Time Decision Manager** folder.

   c. Right-click a repository folder and select **Export SAS Package**. The Export SAS Package dialog box appears.

   d. Follow the steps in the Export SAS Package dialog box to export your SAS Real-Time activities, resources, events, global variables, and flows.

   e. Repeat steps c and d for each repository folder.

    f.   Close SAS Management Console.

3. On the middle tier where SAS Real-Time Decision Manager Engine Server and SAS Real-Time Manager Design Server are installed, complete these steps:

    a.   Open the *SAS-installation-directory*`\Lev1\Web\Staging` directory.

    b.   Create backups of the `sas.rtdm.designserver5.3.ear` and `sas.rtdm.engineserver.websphere5.3.ear` files.

New Functionality: Performance Improvements to the SAS Real-Time Decision Server

SAS Real-Time Decision Manager 5.3 provides a significant improvement in real-time scoring throughput performance.

Post-Configuration Steps for SAS Real-Time Manager

When Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Real-Time Decision Manager, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see .

Table 11.20   When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are installing SAS Real-Time Decision Manager for the first time.	No
You are applying the third maintenance release, and the product release number for SAS Real-Time Decision Manager is 5.3.	Yes If you configured multiple SAS application servers in a production environment, then you must complete the post-configuration steps. For more information, see or .

When SAS Real-Time Decision Server Is Configured by the SAS Deployment Wizard

On each SAS application server tier where the SAS Real-Time Decision Engine server was installed and configured using the SAS Deployment Wizard, complete these steps:

1. Restart the Queue Manager that was configured for SAS Real-Time Decision Manager.

    Note: If the Multiple DATA Step activity uses %LET statements to assign output variables, then you must add a %GLOBAL statement before the %LET

statement. For example, if your current code is `%let outputvariable=xyz;`, then the modified code would be as follows:

```
%global outputvariable;
%let outputvariable=xyz;
```

2. Restart the SAS Object Spawner that was configured for SAS Real-Time Decision Manager.

When SAS Real-Time Decision Server Is Manually Configured

On each SAS application server tier where the SAS Real-Time Decision Server was installed, complete these steps:

1. In the `SAS-configuration-directory\Lev1\Applications \SASRealTimeServerConfig5.3\Data\ModelMetadata` directory, back up the model metadata.

2. In the `SAS-configuration-directory\Lev1\Applications \SASRealTimeServerConfig5.3\SASActivityCode` directory, back up the activity code.

3. From the `SAS-configuration-directory\Lev1\Applications \SASRealTimeServerConfig5.3` directory, copy the updated ModelUpdate.sas and SCSingleData.sas files to each SAS application server where the SAS Real-Time Decision Server was manually configured.

4. Delete the contents of the `SAS-configuration-directory \Lev1\Applications\SASRealTimeServerConfig5.3\Data \ModelMetadata` directory.

5. From the `SAS-configuration-directory\Lev1\Applications \SASRealTimeServerConfig5.3\SASActivityCode` directory, copy the mm_allmodels.sas file to each SAS application server where the SAS Real-Time Decision Server was manually configured.

6. From the `SAS-configuration-directory\Lev1\Applications \SASRealTimeServerConfig5.3\SASCode` directory, copy all of the .sas files in this directory to each SAS application server where the SAS Real-Time Decision Server was manually configured.

7. From the `SAS-configuration-directory\Lev1\Applications \SASRealTimeServerConfig5.3` directory, copy the MultipleDataStepStart.sas and AuditLogStart.sas files to each SAS application server where the SAS Real-Time Decision Server was manually configured.

8. If you created SAS Activity Code for multiple DATA steps, you must run the upgrade utility to upgrade your code in the SAS Activity Code directory for this maintenance release. A backup directory called `SAS-configuration-directory\Lev1\Applications \SASRealTimeServerConfig5.3\SASActivityCode\migrationBackup` is created. A backup copy of each updated SAS Activity Code file for multiple DATA steps is copied into this directory. No SAS Activity XML updates are required.

   From the `SAS-installation-directory \SASRealTimeDecisionManagerServerConfiguration-installation-directory` directory, run the command for your operating environment:

Windows environment
```
UpgradeMDSActivity.exe SAS-configuration-directory
\Lev1\Applications
\SASRealTimeServerConfig5.3\SASActivityCode
```

UNIX environment
```
UpgradeMDSActivity SAS-configuration-directory/Lev1/
Applications/SASRealTimeServerConfig5.3/SASActivityCode
```

Note: If the Multiple DATA Step activity uses %LET statements to assign output variables, then you must add a %GLOBAL statement before the %LET statement. For example, if your current code is `%let outputvariable=xyz;`, then the modified code would be as follows:

```
%global outputvariable;
%let outputvariable=xyz;
```

9. Restart the SAS Object Spawner that was configured for SAS Real-Time Decision Manager.

10. After all the SAS application servers have been updated, open the WebSphere Administrative Console on the middle-tier server. Restart the application server where the SAS Real-Time Decision Manager Design Server and the SAS Real-Time Decision Manager Engine Server are deployed.

    Note: If the SAS Real-Time Decision Manager Engine Server is deployed in a cluster, then you must complete one of these steps:

    • Restart the cluster.

    • Open the WebSphere Administrative Console and restart the WebSphere application servers where the SAS Real-Time Decision Design Server and the SAS Real-Time Manager Engine Server are deployed.

SAS Risk Dimensions

The third maintenance release for SAS 9.2 has no impact on SAS Risk Dimensions 5.2. However, it is recommended that metadata, SAS data sets, and stored processes are backed up before installing the maintenance release.

After applying the third maintenance release for SAS 9.2, no additional steps are required to configure SAS Risk Dimensions.

SAS Strategy Management

Use the following table to determine what steps you need to complete to update your release of SAS Strategy Management. To determine the product release number for SAS Strategy Management, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.21 *Steps for Updating SAS Strategy Management*

Update Scenario	Are Post-Configuration Steps Recommended?
You are applying the third maintenance release, and the product release number for SAS Strategy Management is 5.1.	When you apply the third maintenance release for SAS 9.2 to SAS Strategy Management 5.1, you will see errors for the configuration steps that start these spawners: • SAS OLAP Data and Compute Server Mid-Tier for Solutions • SAS Financial Management Mid-Tier • SAS Strategy Management Mid-Tier After each error, a dialog box appears. Click **Yes** to continue with any remaining configuration steps. For more information, see SAS Note 38083 at `http://support.sas.com/kb/38083`.
You are upgrading from SAS Strategy Management 5.1 to SAS Strategy Management 5.2.	For more information about the new release and the steps for upgrading to this new release, see "SAS Strategy Management 5.2" on page 174.

SAS/STAT

A new release of SAS/STAT is shipping in conjunction with the third maintenance release for SAS 9.2. When you apply the third maintenance release, SAS/STAT is updated to the 9.22 release of this product. For more information, see `http://support.sas.com/documentation/onlinedoc/stat`.

SAS Text Miner

Product Release Number

In December 2009, SAS Text Miner 4.2 was released. When you apply the third maintenance release for SAS 9.2, SAS automatically updates any existing SAS Text Miner installation to the 4.2 release. For more information, see "About the Deployment Summary" on page 18.

For more information about this release, see "What's New in SAS Text Miner 4.2" at `http://support.sas.com/documentation/onlinedoc/txtminer`.

Post-Configuration Steps for SAS Text Miner

When Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Text Miner, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.22   When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are upgrading to SAS Enterprise Miner 6.2, and you are currently running SAS Text Miner at your site.	Yes When you upgrade to SAS Enterprise Miner 6.2, the first maintenance release for SAS Text Miner 4.2 is automatically applied. For more information, see "SAS Text Miner 4.2_M1" on page 126. In addition, if you have not applied the third maintenance release for SAS 9.2, these updates are also applied when you upgrade to SAS Enterprise Miner 6.2. To upgrade to SAS Enterprise Miner 6.2, see "SAS Enterprise Miner 6.2" on page 159. After you have completed the upgrade process, you need to reconfigure SAS Text Miner. For more information, see "How to Reconfigure SAS Text Miner" on page 103. If your order does not include SAS Enterprise Miner 6.2 and you want to upgrade to this release, contact the SAS installation representative at your site.
You are applying the third maintenance release for SAS 9.2, and the product release number for SAS Text Miner is 4.1.	Yes When you apply the third maintenance release for SAS 9.2, SAS Text Miner 4.2 is installed. If you were previously running SAS Text Miner 4.1, then you must manually complete the post-configuration steps for SAS Text Miner. For more information, see "How to Reconfigure SAS Text Miner" on page 103. SAS Enterprise Miner is automatically configured when you apply the third maintenance release, so no manual configuration steps are required for SAS Enterprise Miner.

| Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release for SAS 9.2, and the product release number for SAS Text Miner is 4.2.	Yes A product release number of 4.2 indicates that you upgraded to SAS Text Miner 4.2, which was released in December 2009. During that update, if you reconfigured on the SAS Analytics Platform Server and on any client machines, then you do not need to complete any post-configuration steps to reconfigure SAS Text Miner after installing the third maintenance release for SAS 9.2. SAS Enterprise Miner is automatically configured when you apply the third maintenance release, so no manual configuration steps are required for SAS Enterprise Miner. However, if you did not reconfigure your client machines when you upgraded to SAS Text Miner 4.2, then SAS Text Miner Java Client is listed under "Products to Install" in the Deployment Summary. In this case, you must reconfigure SAS Text Miner and SAS Enterprise Miner. For more information, see "How to Reconfigure SAS Text Miner" on page 103.
You have applied the third maintenance release for SAS 9.2, and you have upgraded to SAS Enterprise Miner 6.2 and the first maintenance release for SAS Text Miner 4.2. Now, you are updating other products at your site.	No post-configuration steps are required for SAS Enterprise Miner 6.2 and SAS Text Miner 4.2. However, post-configuration steps could be required for the products that you are updating. Review the "Product-Specific Details and Post-Configuration Requirements" chapter in Parts 3 and 4. • To complete the post-configuration steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3. • To complete the post-configuration steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

How to Reconfigure SAS Text Miner

To reconfigure SAS Text Miner:

1. Terminate all active SAS sessions, daemons, spawners, and servers. It is important to stop the SAS servers in the inverse order that they were started. For more information, see **"Overview of Server Operation"** in the *SAS Intelligence Platform: System Administration Guide*.

2. Start the SAS Deployment Wizard from the highest-level directory in your SAS Software Depot.

    Note: In a multi-tier deployment, SAS Text Miner needs to be reconfigured on the server where the SAS Analytics Platform is installed and on any client machines.

3. In the Select Deployment Task step, select **Install SAS software**, and then click **Next**.

4. In the Select SAS Software Order step, select the SAS Software Order for your deployment, and then click **Next**. Verify that the directory for SAS Home (also called the SAS installation directory) is the directory that you selected in your initial deployment.

5. In the Select Deployment Type step, select **Configure SAS software**, and then click **Next**.

6. In the Specify Deployment Plan step, select the plan that was used for the original configuration of SAS Text Miner, and then click **Next**.
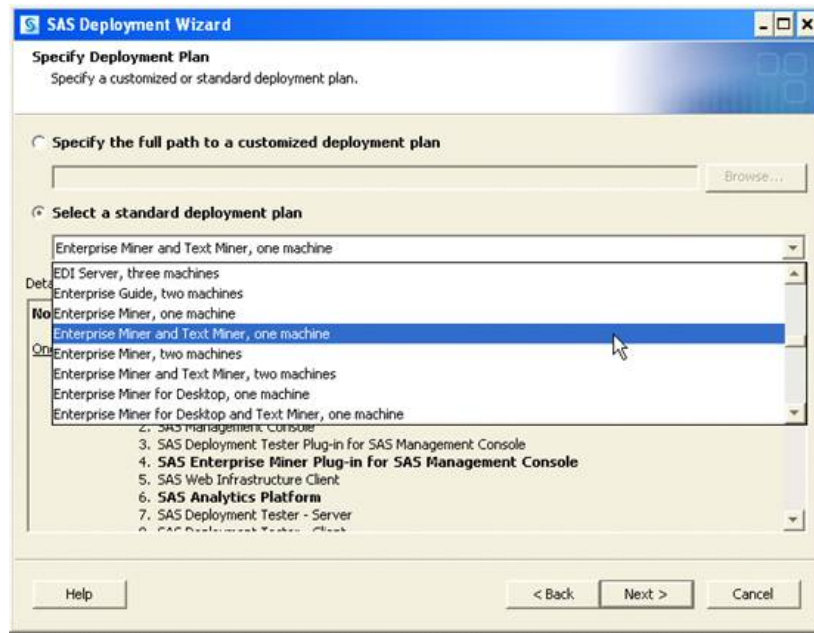
7. In the Select Machine to Configure step, select a machine from your deployment plan.

8. If you selected **Enterprise Miner and Text Miner, two machines** as your deployment plan, then in the Select Configuration Prompting Level step specify when to display the configuration dialog boxes. The recommended prompting level is **Typical**.

   Note: If you did not accept the default repository name of Foundation in your original deployment, then select **Custom** so you are prompted for the repository name during the reconfiguration process.

9. In the Specify Configuration Information step, select your existing configuration directory, and then click **Next**.

   When you are prompted to confirm your selection, click **Yes**.

10. In the Select Products to Configure step, select **SAS Enterprise Miner Client Configuration** and **SAS Text Miner Java Client**. Click **Next**.

    Note: If you are using a Web application server at your site, then you must stop the managed servers and reconfigure the Web application server as well. It is important to reconfigure your Web application server in the same manner that it was configured initially. If you manually configured the Web application server when you deployed SAS 9.2, then reconfigure it manually. If the SAS Deployment Wizard automatically configured your Web application server, then choose the automation configuration option.
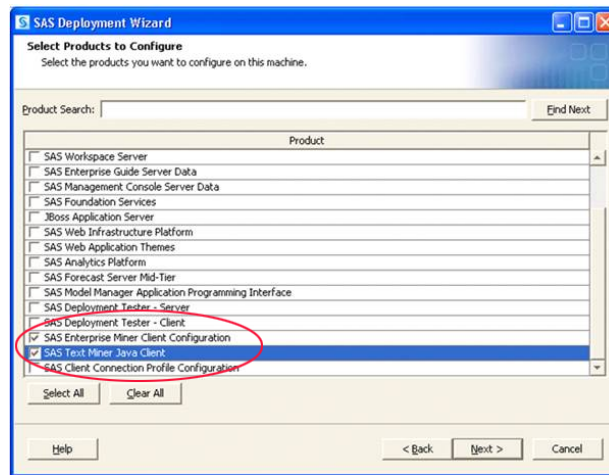
11. Enter the appropriate values for the remaining steps in the SAS Deployment Wizard. In the Deployment Summary step, click **Start**.

12. When the deployment is complete, review the Deployment Complete step to determine whether the deployment completed successfully.

13. In the Additional Resources step, review the information that is presented. If manual configuration steps are required, open the Instructions.html file to complete those steps. For more information, see "About the Instructions.html and UpdateInstructions.html Files" on page 17.

    When you have finished any manual configuration steps, click **Finish**.

14. If you have not done so already, restart the SAS Analytics Platform by completing the steps in "SAS Analytics Platform Server" on page 65.

    Note: You might need to restart additional SAS servers. For more information, see **"Overview of Server Operation"** in the *SAS Intelligence Platform: System Administration Guide*.

15. If your Web application server is on a different machine from the one that you just configured, stop the managed servers and reconfigure the Web application server on that machine.

Validate Your Installation

To validate your installation, open SAS Enterprise Miner and select **Help** ⇨ **About**.

Note: The products that are listed in the About Enterprise Miner dialog box depend on the products you have licensed at your site.

If your site has applied only the third maintenance release, here are the contents of the About box:
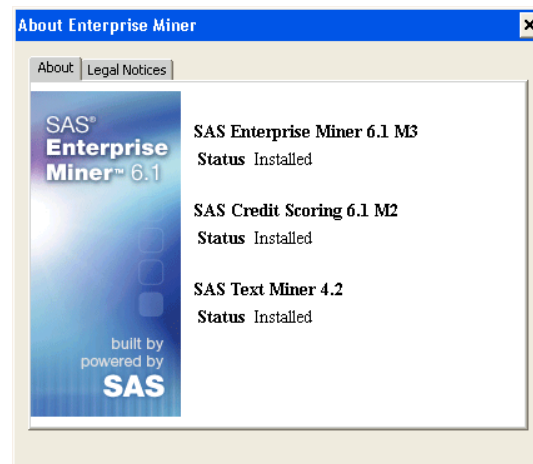
If your site has upgraded to SAS Enterprise Miner 6.2, here are the contents of the About box:
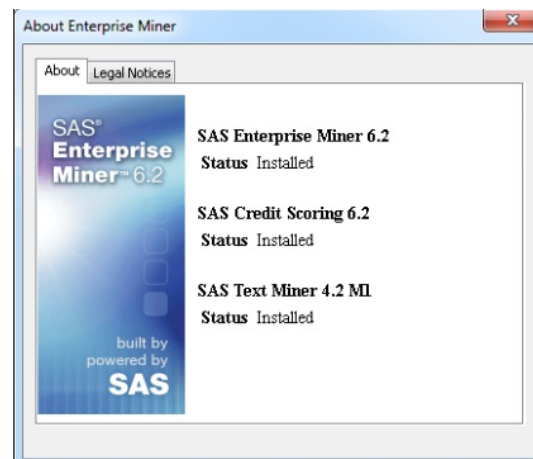
For more information about upgrading to SAS Enterprise Miner 6.2, see "SAS Enterprise Miner 6.2" on page 159.

Beginning with SAS Text Miner 4.2, the Text Mining functionality is available from a **Text Mining** tab, which has four nodes. (The Text Miner node has been removed from the **Explore** tab.)
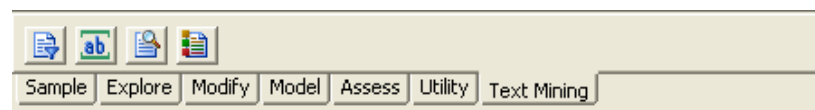
SAS Web Report Studio

Product Release Number

After you apply the third maintenance release for SAS 9.2, the product release number for SAS Web Report Studio is 4.2_M2. For more information, see "About the Deployment Summary" on page 18.

New Functionality: LSF Services Group

In the second maintenance release for SAS 9.2, the LSF Services group was added. This user group enables SAS Web Report Studio to schedule jobs by using the Platform Suite for SAS. The group uses the login and password of the user ID that schedules reports in SAS Web Report Studio (typically, lsfuser). The SAS Deployment Wizard for the third maintenance release for SAS 9.2 automatically creates this group for new installations of SAS Web Report Studio that use scheduling with the Platform Suite for SAS. The password for the user ID lsfuser is managed by the SAS Deployment Manager.

Post-Configuration Steps for SAS Web Report Studio

When These Post-Configuration Steps Are Required

Use the following table to determine what (if any) post-configuration steps you need to complete. To determine the product release number for SAS Web Report Studio, see the deployment registry report that you generated before you applied the third maintenance release. For more information, see "Determining the Product Release Numbers for Products at Your Site" on page 11.

Table 11.23   When Post-Configuration Steps Are Required

Update Scenario	Are Post-Configuration Steps Required?
You are using the SAS Deployment Wizard for the third maintenance release for SAS 9.2 to install and configure a new installation of SAS Web Report Studio.	No The LSF Services Group is created automatically.
You are applying the third maintenance release, and the product release number for SAS Web Report Studio is 4.2_M1.	No The 4.2_M1 product release number indicates that you previously applied the second maintenance release for SAS 9.2 at your site. When you applied the second maintenance release, you completed the required post-configuration steps. Therefore, you do not need to complete these steps again.
You are upgrading from SAS Web Report Studio 4.2 to SAS Web Report Studio 4.3.	For more information about the new release and the steps for upgrading to this new release, see "SAS Web Report Studio 4.3" on page 176.
You have enabled scheduling that uses the Platform Suite for SAS in the SAS Web Report Studio configuration.	No The LSF Services Group is created automatically.
The Platform Suite for SAS is included in the plan file for the second maintenance release for SAS 9.2.	No The LSF Services Group is created automatically.

Update Scenario	Are Post-Configuration Steps Required?
You are applying the third maintenance release to an existing SAS 9.2 deployment, and the product release number for SAS Web Report Studio is 4.2.	Yes The 4.2 product release number indicates that you have not applied the second maintenance release for SAS 9.2. Maintenance releases are cumulative. Therefore, when you apply the third maintenance release, you will also receive the changes that were part of the second maintenance release for SAS 9.2. For the post-configuration steps, see "Create the LSF Services Group" on page 108.

Create the LSF Services Group

If you installed and configured SAS Web Report Studio by using the SAS Deployment Wizard for any release before the second maintenance release for SAS 9.2, and you did not apply the second maintenance release for SAS 9.2, then you must manually create the LSF Services Group. To create the group:

1. Use the User Manager plug-in in SAS Management Console to create a new authentication domain. Select **Actions ⇨ Authentication Domains**. The domain must be named LSFServicesAuthWRS.

2. Use the User Manager plug-in in SAS Management Console to create a new group. The group must be named LSFServices.

3. In the Properties dialog box for the LSFServices group, click the **Accounts** tab and add the user ID that schedules reports in SAS Web Report Studio (typically, lsfuser).

   In Windows systems, you must preface the user ID with a domain (for example, *domain*\lsfuser).

   Select the LSFServicesAuthWRS authorization domain for the user.

   Provide the password for the user ID.

4. On the **Members** tab, add the user ID for the trusted user (SAS Trusted User) to the LSFServices group.

Changing the Location of the Temporary Workspace

About Changing the Location of the Temporary Workspace

In SAS Web Report Studio 4.2, the wrs.io.tmpdir property has been added. This property ensures that you can change the location of the temporary workspace for SAS Web Report Studio and the SAS Web Report Viewer. To determine the directory path for the temporary workspace, see **SAS-configuration-directory\Lev1\Web\Logs \SASWebReportStudio4.3.log**.

To change the location of the temporary workspace, you can perform the following tasks in either SAS Web Report Studio or SAS Web Report Viewer:

• Change the properties by using the Configuration Manager plug-in in SAS Management Console.

- Modify the LocalProperties.xml file. For information about the LocalProperties.xml file, see **"Configuring SAS Web Report Studio"** in the *SAS Intelligence Platform: Web Application Administration Guide*.

SAS Web Report Studio

To change the location of the temporary workspace by using the Configuration Manager:

1. In SAS Management Console, expand the **Plug-ins** ⇨ **Application Management** ⇨ **Configuration Manager** folder. Right-click the **Web Report Studio 4.2** folder and select **Properties**. The Web Report Studio 4.2 Properties window appears.

2. Click the **Advanced** tab.

3. Enter the **sas.webreportstudio.cleanup.temp.directory** property.

4. Change the value of the property to the value of the location that you want to use for the temporary workspace (for example, **C:\Temp\WRSTEMP**).

5. Enter the **wrs.io.tmpdir** property.

6. Change the value of the property to the value of the location that you want to use for the temporary workspace (for example, **C:\Temp\WRSTEMP**).

7. Click **OK** to exit the Properties window.

To change the location of the temporary workspace by modifying the LocalProperties.xml file:

1. Locate the LocalProperties.xml file for SAS Web Report Studio. The file is located in **SAS-configuration-directory\Lev1\Web\Applications \SASWebReportStudio4.2\customer**. If the file does not exist, copy and rename the LocalProperties.xml.sample file to LocalProperties.xml.

2. Add the following lines to the LocalProperties.xml file for SAS Web Report Studio. This example uses a new location of **C:\Temp\WRSTEMP**.

```
 <sas.webreportstudio.file.cleanup.temp.directory>
       C:\Temp\WRSTEMP\sas.wrs.tmpfiles
</sas.webreportstudio.file.cleanup.temp.directory>
<wrs.io.tmpdir>
   C:\Temp\WRSTEMP\sas.wrs.tmpfile
</wrs.io.tmpdir>
```

SAS Web Report Viewer

Note: If SAS Web Report Studio is not deployed at your site, the SAS Web Report Viewer application is deployed. SAS Web Report Viewer contains a subset of the functionality that is available in SAS Web Report Studio. The property names for SAS Web Report Viewer are the same as the property names for SAS Web Report Studio. For more information, see **"About SAS Web Report Viewer"** in the *SAS Intelligence Platform: Web Application Administration Guide*.

To change the location of the temporary workspace by using the Configuration Manager:

1. In SAS Management Console, expand the **Plug-ins** ⇨ **Application Management** ⇨ **Configuration Manager** folder. Right-click the **Web Report Viewer 4.2** folder and select **Properties**. The Web Report Viewer 4.2 Properties window appears.

2. Click the **Advanced** tab.

3. Enter the **sas.webreportstudio.cleanup.temp.directory** property.

4. Change the value of the property to the value of the location that you want to use for the temporary workspace (for example, **C:\Temp\WRSTEMP**).

5. Enter the **wrs.io.tmpdir** property.

6. Change the value of the property to the value of the location that you want to use for the temporary workspace (for example, **C:\Temp\WRSTEMP**).

7. Click **OK** to exit the Properties window.

To change the location of the temporary workspace by modifying the LocalProperties.xml file:

1. Locate the LocalProperties.xml file for SAS Web Report Viewer. The file is located in ***SAS-configuration-directory*\Lev1\Web\Applications \SASWebReportViewer4.2\customer**. If the file does not exist, copy and rename the LocalProperties.xml.sample file to LocalProperties.xml.

2. Add the following lines to the LocalProperties.xml file for SAS Web Report Viewer. This example uses a new location of **C:\Temp\WRSTEMP**.

```
 <sas.webreportstudio.file.cleanup.temp.directory>
       C:\Temp\WRSTEMP\sas.wrs.tmpfiles
</sas.webreportstudio.file.cleanup.temp.directory>
<wrs.io.tmpdir>
   C:\Temp\WRSTEMP\sas.wrs.tmpfile
</wrs.io.tmpdir>
```

Chapter 12
Frequently Asked Questions

How Much Time Should I Allow for Applying a Maintenance Release?

The outage time that is required for applying a maintenance release varies from site to site. Installing product updates is only a small part of applying a maintenance release. When estimating the outage time for your site, you must also include time for configuring your Web application servers, restoring customizations, and completing any post-configuration steps for products at your site. To estimate how long it will take to apply a maintenance release, identify the steps in the "Additional Configuration Steps for Your Web Application Servers" on page 49 and "Product-Specific Details and Post-Configuration Requirements" on page 63 chapters that must be completed at your site.

How Can I Optimize the Download of a Maintenance Release?

If you created a SAS Software Depot for SAS 9.2, it is recommended that you download the maintenance release for SAS 9.2 to this depot. When you download a maintenance

release for SAS 9.2 to an existing SAS 9.2 Software Depot, then only the files that were updated in the maintenance release will be downloaded. If you download the maintenance release to a new SAS Software Depot, then all files in the SAS 9.2 release must be downloaded.

Does the Date-and-Time Stamp of My Files Affect the Installation of the Maintenance Release?

The installation process for a maintenance release uses the date-and-time stamps for some non-versioned files to determine whether a file needs to be updated. The date-and-time stamp for an installation of SAS 9.2 (TS2M2) is February 20, 2009. If you copied installations or modified these date-and-time stamps in any way, then the maintenance release might not install properly. To modify the date-and-time stamps in UNIX operating environments, see "Modifying the Date-and-Time Stamps for Non-Versioned Files" on page 41.

Can I Add New Products While Applying a Maintenance Release?

In addition to the third maintenance release, your software order might include products that you are adding to your current deployment. Before you install any new products, you must apply the third maintenance release. After the maintenance release is applied, you restart the SAS Deployment Wizard to add any new products.

How Do I Know If the Maintenance Release Installed Successfully?

To confirm that the maintenance release installed successfully, review the Installation section in the Deployment Summary, which automatically opens after the installation process completes. For more information, see "About the Deployment Summary" on page 18.

To troubleshoot a product that failed to install, use the product's audit files. The audit files list each file that was added, deleted, or replaced for that product. For more information, see "About the Audit Files" on page 20.

What Can I Do If a Product Update Fails?

When you review the Installation section in the Deployment Summary, you might see that a product installation failed. For more information, see "About the Deployment Summary" on page 18.

If the update of a product failed during the installation process, you might need to force a reinstallation of the maintenance release. For example, your installation failed while installing the English update of Base SAS. However, the Deployment Summary shows

that the update for Base SAS was applied, and you cannot reinstall Base SAS from the SAS Deployment Wizard.

To force the SAS Deployment Wizard into update mode, specify the **-forcemaint** option when you specify the start-up command for your operating environment. (For more start-up commands, see **"Install and Configure SAS Interactively"** in the *SAS Intelligence Platform: Installation and Configuration Guide*.) When forced into update mode, SAS examines each file and determines whether any updates need to be applied.

Why Is My Configuration Failing for SAS Shared Services?

The maintenance process might fail when you start configuring SAS Shared Services. The process is failing because SAS is trying to start the spawner for SAS Shared Services, but the SAS Table Server is not running.

To work around this problem:

1. When a message appears stating the SAS Shared Services failed, leave this dialog box open and go to the machine that has the SAS server tier.

2. Apply the third maintenance release to the SAS server tier.

3. On the machine that contains the SAS Metadata Server and the middle tier, click **Retry** in the message about SAS Shared Services.

How Do I Validate a Deployment?

SAS provides several tools that you can use to validate your deployment. For more information about these tools and the validation process, see SAS Note 35787 at **http://support.sas.com/kb/35/787.html**.

How Can I Determine Whether a Maintenance Release Has Already Been Applied?

To determine whether your site is running the latest version of your SAS products, run the SAS Deployment Wizard. If a machine does not require any product updates, then the SAS Deployment Wizard will not go into update mode, and the installation on that machine is complete.

Can I Uninstall a Maintenance Release?

Because of the dependencies between SAS products, you cannot uninstall a maintenance. However, when applying a maintenance release, SAS automatically backs

up any files that are modified in the SAS installation directory. It does not back up any changes that you made to the SAS configuration directory.

Therefore, before installing a maintenance release, it is recommended that you back up all of the files in your SAS deployment. If you need to restore a previous deployment of SAS, it is recommended that you use these backup copies.

For more information, see "Creating and Removing Backup Files" on page 34.

Part 3

Product-Specific Maintenance Releases

Chapter 13
Checklists for Applying a Product-Specific Maintenance Release

Audience for a Product-Specific Maintenance Release

Individual products can ship their own maintenance releases. For more information, see "Product-Specific Maintenance Releases and the Third Maintenance Release for SAS 9.2" on page 121.

Review this document to determine the following information:

- whether a product at your site has shipped a maintenance release

- how the changes in the maintenance release will affect your site

- how the product-specific maintenance release relates to the third maintenance release for SAS 9.2

- the specific installation and configuration steps that you need to perform at your site

Applying a Product-Specific Maintenance Release

Resources to Review before You Request a Product-Specific Maintenance Release

Before you request a product-specific maintenance release, you might want to know what new functionality is available and how installing this maintenance release could affect your site. The following table lists the information that you want to gather before ordering a product-specific maintenance release.

Table 13.1 Resources for Determining How a Maintenance Release Will Affect Your Site

Question	Resources to Review
What SAS products are currently installed at my site?	"Determining the Product Release Numbers for Products at Your Site" (p. 11)
Is there a maintenance release for any of the products at my site?	To determine whether your SAS products shipped a maintenance release, see "What Is a Product-Specific Maintenance Release?" on page 121.
What new features and enhancements are available in the product-specific maintenance release?	To determine the new features and enhancements for your product, use the following resources: • *What's New in SAS 9.2* describes new features and enhancements to products that are available in SAS 9.2. The What's New documentation is cumulative and is updated whenever there is an update of a SAS product. Review the What's New topics for your products whenever you receive a product update. • product-specific documents, such as a product's Help or user's guide, provide detailed information about how to use the new features and enhancements. • contact your SAS account representative.

Creating a Pre-Installation Checklist for a Product-Specific Maintenance Release

Before you install a product-specific maintenance release, determine what specific steps need to be completed at your site. Most product releases depend on the third maintenance release for SAS 9.2. If you have not applied the third maintenance release for SAS 9.2, then SAS automatically installs this maintenance release. If you have applied the third maintenance release, then you will not need to apply it again. During this process, you create a custom checklist for your site. Some tasks must be performed by all sites, but other tasks are required only if you license that particular SAS product. The following table lists the sections that you need to review in order to create this custom checklist.

Table 13.2 Resources for Creating a Pre-Installation Checklist

Question	Resources to Review
Do I need to back up my current SAS files?	"Creating and Removing Backup Files" (p. 34)
What SAS products will be updated?	"Assessing the Effect on Products at Your Site" (p. 34)

Question	Resources to Review
Do any of my SAS products require pre-installation steps?	"Product-Specific Details and Post-Configuration" chapter in Parts 2, 3, and 4

* To complete any pre-installation steps for the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2.

* To complete any pre-installation steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3.

* To complete any pre-installation steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

Creating an Installation and Post-Configuration Checklist for a Product-Specific Maintenance Release

During this process, you will create a custom checklist for your site. Some tasks must be performed by all sites, but other tasks are required only if you license that SAS product. The following table lists the sections that you need to review in order to create this custom checklist.

Table 13.3   *Resources for Creating an Installation and Post-Configuration Checklist*

Question	Resources to Review
How do I install the product-specific maintenance release?	In Part 3, review the instructions for your SAS product. If no instructions are available, you follow the same installation and post-configuration steps as if you were applying the third maintenance release for SAS 9.2. For more information, see "How to Install and Configure the Third Maintenance Release for SAS 9.2" on page 45.

Question	Resources to Review
What post-configuration steps are required for each product at my site?	"Product-Specific Details and Post-Configuration" chapter in Parts 2, 3, and 4
	• To complete the post-configuration steps for the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2.
	• To complete the post-configuration steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3.
	• To complete the post-configuration steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.
How can I install a new product?	"Adding a New Product after Applying a Maintenance Release" (p. 48)

Chapter 14
Understanding Product-Specific Maintenance Releases

What Is a Product-Specific Maintenance Release?

SAS 9.2 has had three maintenance releases. The first maintenance release for SAS 9.2 was a localization-only release and shipped in June 2009. The second maintenance release for SAS 9.2 shipped in September 2009, and the third maintenance release for SAS 9.2 shipped in May 2010. For more information, see "Understanding the Maintenance Releases for SAS 9.2" on page 29.

However, some SAS products might need to release a product update that is outside of the SAS 9.2 schedule. These product updates are called product-specific maintenance releases. The scope of product-specific maintenance releases varies. The maintenance release could contain bug fixes or new features. Some product-specific maintenance releases deliver a localized version of the product.

A maintenance release is available for the following products:

- "SAS BI Dashboard 4.3_M2" on page 123
- "SAS Merchandise Intelligence 4.2_M1" on page 124
- "SAS Offer Optimization for Communcations 5.2_M1" on page 124
- "SAS OpRisk VaR 4.1_M2" on page 125
- "SAS Text Miner 4.2_M1" on page 126

Product-Specific Maintenance Releases and the Third Maintenance Release for SAS 9.2

The third maintenance release for SAS 9.2 is included in any product-specific maintenance release. When you start the SAS Deployment Wizard, SAS automatically identifies any files in your SAS Software Depot that are older than what is in your order. Therefore, when you apply a product-specific maintenance release, any files that were part of the third maintenance release for SAS 9.2 are also updated.

Before applying any maintenance release, it is important to determine what products will be updated at your site. From this list of products, you can determine what specific steps need to be completed at your site. To determine these steps, review the "Product-Specific Details and Post-Configuration Requirements" chapter in Parts 2, 3, and 4.

- For post-configuration steps for applying the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2.

- For post-configuration steps for applying a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3.

- For post-configuration steps for upgrading to a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

Chapter 15
Product-Specific Details and Post-Configuration Requirements

Determining the Impact of a Product-Specific Maintenance Release

In addition to the maintenance releases for SAS 9.2, individual SAS products can have maintenance releases. Customers who are running on SAS 9.2 are encouraged to apply these maintenance releases. Before you apply a product-specific maintenance release, review the topic for your SAS products. This product documentation explains how to prepare your site for a maintenance release, how to install the maintenance release, and how to reconfigure your SAS product.

SAS BI Dashboard 4.3_M2

In June 2011, SAS shipped SAS BI Dashboard 4.3_M2, which includes performance enhancements. It is recommended that SAS BI Dashboard 4.3 customers apply the second maintenance release for SAS BI Dashboard.

For more information about this maintenance release, contact your SAS account representative. For the product documentation, see **http://support.sas.com/documentation/onlinedoc/bidashboard**.

Note: The first maintenance release for SAS BI Dashboard 4.3 was a localization-only release.

SAS Fraud Management 3.2_M1

In August 2011, SAS shipped the first maintenance release for SAS Fraud Management 3.2. For more information about how to request this maintenance release and the features that are available, contact your SAS account representative.

For more information about the product documentation, see **http://support.sas.com/documentation/onlinedoc/securedoc/index_fraudmmgt.html**

Note: The product documentation is available only to customers who license SAS Fraud Management.

SAS Merchandise Intelligence 4.2_M1

In February 2011, SAS shipped SAS Merchandise Intelligence 4.2_M1, which includes maintenance releases of these products:

- SAS Revenue Optimization 4.2_M1
  - SAS Regular Price Optimization 4.2_M1
  - SAS Promotion Optimizaton 4.2_M1
  - SAS Markdown Optimization 4.2_M1
- SAS Size Optimization 2.2_M1
  - SAS Pack Optimization 2.2_M1
  - SAS Size Profiling 2.2_M1

For more information about how to request this maintenance release and the features that are available, contact your SAS account representative.

For instructions on how to install the maintenance release, see the product documentation at **http://support.sas.com/documentation/onlinedoc/merchandise**.

Note: The product documentation is available only to customers who license a SAS Merchandise Intelligence solution.

SAS Offer Optimization for Communcations 5.2_M1

In Februrary 2011, SAS shipped the first maintenance release for SAS Offer Optimization for Communications 5.2. For more information about how to request this maintenance release and the features that are available, contact your SAS account representative.

For more information about the product documentation, see **http://support.sas.com/documentation/onlinedoc/securedoc/index_offeropt.html**.

Note: The product documentation is available only to customers who license SAS Offer Optimization for Communications.

SAS OpRisk VaR 4.1_M2

It is recommended that SAS OpRisk VaR customers who are running SAS 9.2 apply the second maintenance release for SAS OpRisk VaR, which applies important changes to both the server and client.

For more information about the maintenance release for SAS OpRisk VaR, contact your SAS account representative.

SAS Retail Space Management 6.2_M1

In February 2011, SAS shipped the first maintenance release for SAS Retail Space Management 6.2. For more information about how to request this maintenance release and the features that are available, contact your SAS account representative.

For the product documentation, see **http://support.sas.com/documentation/onlinedoc/merchandiseplan**.

Note: The product documentation is available only to customers who license SAS Retail Space Management.

SAS Risk Dimensions 5.3_M1

In April 2011, SAS shipped the first maintenance release for SAS Risk Dimensions 5.3. For more information about how to request this maintenance release and the features that are available, contact your SAS account representative.

For the product documentation, see **http://support.sas.com/documentation/onlinedoc/riskdimen**.

Note: The product documentation is available only to customers who license SAS Risk Dimensions.

SAS Risk Management for Insurance 2.1_M1

In September 2011, SAS shipped the first maintenance release for SAS Risk Management for Insurance 2.1. For more information about how to request this release, see SAS Note 44234 at **http://support.sas.com/kb/44/234.html** and contact your SAS account representative.

For the product documentation, see **http://support.sas.com/documentation/ onlinedoc/rmi**.

Note: The product documentation is available only to customers who license SAS Risk Management for Insurance.

SAS Text Miner 4.2_M1

In August 2010, SAS shipped the first maintenance release for SAS Text Miner 4.2. When you upgrade your site to SAS Enterprise Miner 6.2, your version of SAS Text Miner is automatically updated. After you install this maintenance release, the product release number for SAS Text Miner is 4.2_M1.

For more information about how to apply the first maintenance release for SAS Text Miner 4.2, see "Upgrading to SAS Enterprise Miner 6.2" on page 160, which includes instructions on how to reconfigure SAS Text Miner after you upgrade to SAS Enterprise Miner 6.2.

Part 4

New Product Releases

Chapter 16
Checklists for Upgrading to a New Product Release

Audience for Upgrading to a New Product Release

Many new releases of existing SAS products depend on the third maintenance release for SAS 9.2. When you run the SAS Deployment Wizard to upgrade to the new product release, SAS automatically detects any files on your system that are older than the files in your order. If you have not applied the third maintenance release for SAS 9.2, then this maintenance release is automatically applied. If you have already applied the third maintenance release for SAS 9.2, the SAS Deployment Wizard still identifies any files that need to be updated. Therefore, because you are applying the maintenance release as well as upgrading a product, you need to complete all of the installation and configuration steps for the third maintenance release that are described in this document.

Even if you have installed the third maintenance release for SAS 9.2, review this document to determine the following information:

- what products will be upgraded at your site. For more information, see "Assessing the Effect on Products at Your Site" on page 34.

- the specific installation and configuration steps that you need to perform at your site.

Upgrading to a New Product Release

Resources to Review before You Request a New Product Release

Before you request a new product release, you might want to know what new functionality is available and how the new product release could affect your site. The

following table lists the information that you want to gather before ordering a new product release.

Table 16.1   *Resources for Determining How a New Product Release Will Affect Your Site*

Question	Resources to Review
What SAS products are currently installed at my site?	"Determining the Product Release Numbers for Products at Your Site" (p. 11)
What new features and enhancements are available in the new product release?	To determine the new features and enhancements for your product, use the following resources: • In Part 4, review the key features for your SAS products. • *What's New in SAS 9.2* describes new features and enhancements to products that are available in SAS 9.2. The What's New documentation is cumulative and is updated whenever there is an update of a SAS product. Review the What's New topics for your products whenever you receive a product update. • SAS 9.2 product-specific documents, such as a product's Help or user's guide, provide detailed information about how to use the new features and enhancements. • contact your SAS account representative.

Creating a Pre-Installation Checklist for a New Product Release

Before you install a new product release, determine what specific steps need to be completed at your site. Most new product releases depend on the third maintenance release for SAS 9.2. If you have not applied the third maintenance release for SAS 9.2, then SAS automatically installs this maintenance release. If you have applied the third maintenance release, then you will not need to apply it again. During this process, you will create a custom checklist for your site. Some tasks must be performed by all sites, but other tasks are required only if you license that particular SAS product. The following table lists the sections that you need to review in order to create this custom checklist.

Table 16.2   *Resources for Creating a Pre-Installation Checklist*

Question	Resources to Review
Do I need to back up my current SAS files?	"Creating and Removing Backup Files" (p. 34)
What SAS products will be updated?	"Assessing the Effect on Products at Your Site" (p. 34)

Question	Resources to Review
Do any of my SAS products require pre-installation steps?	"Product-Specific Details and Post-Configuration" chapter in Parts 2, 3, and 4 • To complete any pre-installation steps for the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2. • To complete any pre-installation steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3. • To complete any pre-installation steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

Creating an Installation and Post-Configuration Checklist for a New Product Release

During this process, you will create a custom checklist for your site. Some tasks must be performed by all sites, but other tasks are required only if you license that particular SAS product. The following table lists the sections that you need to review in order to create this custom checklist.

Table 16.3 *Resources for Creating an Installation and Post-Configuration Checklist*

Question	Resources to Review
What steps do I need to take if my deployment includes a Web application server?	"Undeploying SAS Web Applications and Stopping the Web Application Servers" (p. 38)
How do I install the third maintenance release for SAS 9.2?	"How to Install and Configure the Third Maintenance Release for SAS 9.2" (p. 45)

Question	Resources to Review
What post-configuration steps are required for each product at my site?	"Product-Specific Details and Post-Configuration" chapter in Parts 2, 3, and 4 • To complete the post-configuration steps for the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2. • To complete the post-configuration steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3. • To complete the post-configuration steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.
How can I install a new product?	"Adding a New Product after Applying a Maintenance Release" (p. 48)

Chapter 17

Understanding New Product Releases

What SAS Products Have a New Release?

The following products have shipped a new release since the third maintenance release for SAS 9.2 shipped. For more information about each new product release, see the following topics:

- "SAS Add-In 4.3 for Microsoft Office" on page 151

- "SAS BI Dashboard 4.3" on page 152

- "SAS Clinical Data Integration 2.2" on page 155

- "SAS Enterprise Case Management 2.3" on page 159

- "SAS Enterprise Guide 4.3" on page 157

- "SAS Enterprise GRC 4.2 and 4.3" on page 159

- "SAS Enterprise Miner 6.2" on page 159

- "SAS Financial Management 5.2" on page 166

- "SAS High-Performance Markdown Optimization 4.3" on page 167

- "SAS Human Capital Management 5.2" on page 167

- "SAS Information Delivery Portal 4.3" on page 168

- "SAS IT Resource Management 3.2" on page 169

- "SAS Model Manager 2.3" on page 170

- "SAS Retail Space Management 6.2" on page 172

Note: To determine the release of each SAS product that you currently have installed at your site, generate a deployment registry report. For more information, see SAS Note 35968 at `http://support.sas.com/kb/35/968.html`.

Deprecated Functionality

Review the list of deprecated SAS products and other SAS functionality to determine additional updates that might affect your site.

- • In the November 2010 release of SAS 9.2, SAS Web OLAP Viewer for Java is discontinued. If you have a Favorites link in Internet Explorer to SAS Web OLAP Viewer, this link will no longer work if you are applying software updates from a software order that is dated August 2010 or later.

  For more information about how to prepare your site, see "Converting Data Explorations to Reports" on page 140.

  Note: SAS Visual Data Explorer will be deprecated in SAS 9.3.

- • The Replication Wizard in SAS Management Console has been deprecated. For more information, see SAS Note 40834 at `http://support.sas.com/kb/40/834.html` or contact SAS Technical Support.

New SAS Products

About Adding New Products

After installing a maintenance release or upgrading the products at your site, you must restart the SAS Deployment Wizard a second time to install any new products. You must also update your plan (either standard or custom) to include the new products.

For more information, see **"Adding SAS Products"** in the *SAS Intelligence Platform: Installation and Configuration Guide*.

SAS BI Lineage Plug-In for SAS Management Console

The BI Lineage plug-in for SAS Management Console scans the BI objects in a selected subset of the SAS Folders tree and determines the connections between the BI objects. The scan examines reports and information maps that are stored in the selected folders and identifies other objects (regardless of their location) that connect to those reports and information maps. You can choose any object in the scan and view the lineage or the reverse lineage for the object. A lineage consists of other objects that contribute to the selected BI object. These objects could cause a change in the selected object if any of the objects change. A reverse lineage consists of other objects within the scope of the scan that use information from the selected BI object. These objects could be affected if the

selected object changes. You can view a lineage or reverse lineage as a tree view or in a process flow diagram.

Because the lineage information is not generated in real time, it is important to keep the scan information updated. To make this task easier, the plug-in can generate jobs for running, exporting, or deleting BI Lineage scans. After the jobs are generated, you can use the Schedule Manager plug-in to schedule the jobs. Scheduling the job ensures that the scan information remains updated.

For more information about the BI Lineage plug-in, see the Help for SAS Management Console.

SAS Web Parts for Microsoft SharePoint

SAS Web Parts for Microsoft SharePoint is a new product for SAS 9.2. Using SAS Web Parts, you can add dynamic SAS dashboards and stored processes directly to your SharePoint site. As a result, your SharePoint site visitors can easily access the power of SAS analytics. For more information, contact your SAS account representative.

For information about how to install SAS Web Parts for Microsoft SharePoint, see **"Installing SAS Web Parts for Microsoft SharePoint"** in the *SAS Intelligence Platform: Installation and Configuration Guide*.

Additional Support for Operating Systems

SAS now supports these operating systems:

Table 17.1   *Operating Systems That Are Now Supported*

Operating System	Notes
Windows 7	Windows 7 requires JRE 1.6.0_14 or later. By default, the SAS Deployment Wizard prompts you for an earlier JRE. If you are deploying in a Windows 7 operating environment, verify that your machine has JRE 1.6.0_14 or later installed. In the SAS Deployment Wizard, specify the directory path for JRE 1.6.0_14.
Windows Server 2008 R2	See *Configuration and Tuning Guidelines for SAS® 9 in the Microsoft Windows Server 2008 Operating Environment* at **http://support.sas.com/resources/papers/WindowsServer2008Configurationand Tuning.pdf**.

For more information, see **http://support.sas.com/resources/sysreq/hosts/**.

Additional Support for Third-Party Software

SAS now supports this third-party software:

- WebSphere 7

- JBoss EAP 4.3 or JBoss AS 4.2.1

For more information, see **http://support.sas.com/resources/ thirdpartysupport/v92m3**.

Additional Support for Web Browsers

SAS now supports Internet Explorer 8. For more information, see **http:// support.sas.com/resources/thirdpartysupport/v92/browsers.html**.

Chapter 18

Preparing Your Site for a New Product Release

Assessing the Effect on Products at Your Site

Updates for the Third Maintenance Release for SAS 9.2

Starting with the new product releases that shipped in August 2010, SAS products require the third maintenance release for SAS 9.2. If you have not applied the third maintenance release at your site, then SAS detects any SAS software products in your order that are more recent than what you have deployed on your machine and automatically includes these updates in your upgrade to the new product release.

Step 1: Review the List of Products to Be Updated

Before you upgrade to a new product release, you should review the list of products that will be updated on a machine. From the SAS Deployment Wizard, you can generate a Deployment Summary. For more information, see "About the Deployment Summary" on page 18. The list of product updates could vary for each machine at your site. Therefore, you need to generate a Deployment Summary on every machine that runs SAS 9.2.

Note: If no product updates are required for a machine, then you will not see a Deployment Summary, and your installation of the maintenance release is complete on that machine.

To view SAS products that will be updated on a machine:

1. Run the SAS Deployment Wizard from the software depot that contains your order. You must use the same user ID that you used to install SAS 9.2.

Note: If you are running in a Windows environment, you must be an administrator to run the SAS Deployment Wizard, but you do not have to use the same user ID that you used to install SAS 9.2. If you are running in a UNIX environment, you must use the same user ID that you used to install SAS 9.2. For both operating environments, the SDW.log file indicates whether your user ID is different from the one that you used to install SAS 9.2.

Table 18.1 *How to Start the SAS Deployment Wizard*

Operating System	How to Start the SAS Deployment Wizard
Windows	Double-click **setup.exe** in the highest-level directory of your SAS Software Depot.
UNIX	Execute **setup.sh** from the highest-level directory of your SAS Software Depot.
OpenVMS on HP Integrity	Type the following command: **run setup_vms.exe**.
z/OS	Run **setup.rexx** from the highest-level directory of your SAS Software Depot. To use a temporary directory other than **/tmp**, specify **– templocation***new-temp-dir*.

2. In the Review Required Updates step, click **Print** to print the Deployment Summary for your site. For more information, see .

Alternatively, you can copy and paste this content into another document, such as an e-mail or a spreadsheet. In a spreadsheet, you can sort the data alphabetically by product name.

Note: If no product updates are required, then the Deployment Summary does not appear, and you can exit the SAS Deployment Wizard.

3. Because you are not installing any software at this time, click **Cancel** to exit the SAS Deployment Wizard.

    After reviewing the contents of the Deployment Summary and assessing the effect on products at your site, you can install these product updates by restarting the SAS Deployment Wizard.

    Note: When you exit the SAS Deployment Wizard, a copy of the Deployment Summary is not saved to the **SAS-installation-directory/ InstallMisc/InstallLogs/**. A Deployment Summary is not saved to this directory until you install the software update.

Step 2: Review Post-Configuration Requirements for Each Product

After obtaining this list of products, review the "Product-Specific Details and Post-Configuration" chapter in Parts 2, 3, and 4.

*   To review the post-configuration steps for the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2.

*   To review the post-configuration steps for a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3.

*   To review the post-configuration steps for a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

Reviewing these product topics now will enable you to do the following tasks:

*   prepare for any feature changes that will affect your site

*   customize the process for upgrading to a new product release at your site

*   plan for additional time to complete any post-configuration steps for each updated product

If no topic is listed for a product, then no post-configurations steps are required for that product.

Creating Backup Files

Before you upgrade to a new product release, you must stop all your SAS servers. It is recommended that you back up all the files in your SAS installation and configuration directories. Create backups of the installation and configuration directories for SAS for each machine in your deployment, and use these backups if you need to restore your previous SAS deployment. For more information, see **"Best Practices for Backing Up and Restoring Your System"** in the *SAS Intelligence Platform: System Administration Guide*.

Converting Data Explorations to Reports

Understanding the Conversion Process

In the November 2010 release of SAS 9.2, SAS Web OLAP Viewer is discontinued, and data explorations are now maintained as reports. When you upgrade your existing SAS 9.2 deployment, the SAS deployment tools automatically convert each bookmark in the data exploration to a report that you can view and edit using SAS Web Report Studio.

Note: If the automatic conversion fails, a warning appears in the Instructions.html file. To convert these data explorations manually, see **"Manually Convert Data Explorations to Reports"** in the *SAS Intelligence Platform: Migration Guide*.

Before You Convert

If a data exploration was created from an OLAP cube or SAS Information Map that is saved to a restricted directory (such as My Folder), then the converted report will not be available to other users at your site. Before converting a data exploration to a report, re-create this data exploration by using a SAS Information Map. Users of the final report must have permission to the directory where the information map is saved.

Note: If you have not applied the second or third maintenance release for SAS 9.2, then you cannot use the SAS Visual Data Explorer to save data explorations as reports. If you want to save your data explorations as reports before upgrading your SAS 9.2 deployment, use SAS Web OLAP Viewer 4.2 for Java. For more information, see SAS Note 34876 at **http://support.sas.com/kb/34/876.html**.

Differences between Data Explorations and Reports

Some reports might appear slightly different from the data exploration. Here are some examples of how the report and data exploration differ:

- The colors in the report and data exploration are different.

- Conditional images are removed from the reports.

- The Percent of Total columns and rows are removed from the reports.

- A color-mapped table is removed or replaced by a noncolor-mapped table.

  - If a data exploration contains a color-mapped table and a table, then the color-mapped table is removed.

  - If a data exploration contains only a color-mapped table, then the color-mapped table is replaced with a table.

- If a data exploration contains a bar-line chart, then this chart might not display as expected. To work around this problem, open the report in SAS Web Report Studio. Right-click on the chart and select **Assign Data**. Then save the report.

- To view the drill-to-detail data of a report, the associated information map must have the **Drill-to-Detail** option selected in SAS Information Map Studio.

- If a data exploration displays data values in a graph, these data values are not automatically displayed in the graph in the converted report. To display these values in the graph in the report, open the graph properties and select the option for displaying data values.

Chapter 19
Upgrading SAS Products

Understanding Product Upgrades and Product Installs

Many new releases of existing SAS products depend on the third maintenance release for SAS 9.2. When you run the SAS Deployment Wizard to upgrade to the new product release, SAS automatically detects any files on your system that are older than the files in your order, and the SAS Deployment Wizard goes into update mode. If you have not applied the third maintenance release for SAS 9.2, then this maintenance release is automatically applied. If you have already applied the third maintenance release for SAS 9.2, the SAS Deployment Wizard still identifies any files that need to be updated. When you are upgrading SAS products by using the SAS Deployment Wizard, SAS updates the products that you currently have installed at your site. If you are installing a product and the SAS Deployment Wizard is in update mode, then SAS installs the new or upgraded product beside the currently installed version of the product. After the upgraded product is configured, you can use only the new version of the product.

How to Install and Configure a New Product Release

When upgrading a SAS product in a multiple machine deployment, you must upgrade SAS in a specific order. For more information, see **"Installation Order Rules for Multiple Machine Deployments"** in the *SAS Intelligence Platform: Installation and Configuration Guide*.

To upgrade to a new product release:

1. Verify that all machines where you are installing the maintenance release have SAS 9.2 software installed.

   Note: When installing a maintenance release, you must use the same operating system accounts that you used to install SAS 9.2.

2. Create backups of your SAS 9.2 installation and configuration directories by using your site-approved method.

   • Your SAS installation directories are all the child directories in the **SAS-installation-directory** (also referred to as SAS Home). You specified this path during the initial SAS 9.2 deployment in the Specify SAS Home step in the SAS Deployment Wizard.

   • Your SAS configuration directories are all the child directories in the **SAS-configuration-directory**. You specified this path during the initial SAS 9.2 deployment in the Specify Configuration Information step in the SAS Deployment Wizard.

3. If you have not already done so, back up your metadata repository and repository manager on the SAS Metadata Server machine.

   For more information, see **"Best Practices for Backing Up and Restoring Your System"** in the *SAS Intelligence Platform: System Administration Guide*.

4. If your deployment includes a Web application server, undeploy all of your SAS Web applications. For more information, see "Undeploying SAS Web Applications and Stopping the Web Application Servers" on page 38.

5. If you have not already done so, terminate all active SAS sessions, daemons, spawners, and servers. It is important to stop the SAS servers in the inverse order that they were started. For more information, see **"Overview of Server Operation"** in the *SAS Intelligence Platform: System Administration Guide*.

6. For each machine in your deployment, start the SAS Deployment Wizard from the highest-level directory in your SAS Software Depot.

   Table 19.1   How to Start the SAS Deployment Wizard

Operating System	How to Start the SAS Deployment Wizard
Windows	Double-click **setup.exe** in the highest-level directory of your SAS Software Depot.
UNIX	Execute **setup.sh** from the highest-level directory of your SAS Software Depot.
OpenVMS on HP Integrity	Type the following command: **run setup_vms.exe**.

7. If any product updates are required, then the SAS Deployment Wizard goes into update mode. In the Select Deployment Step, select **Install SAS Software** to install those product updates on that machine.

   Updates that are installed in a maintenance release apply only to software that is already installed at your site. No new software is installed during a maintenance installation. If your software order includes new products for your site, see "Adding a New Product after Applying a Maintenance Release" on page 48.

Note: If a machine does not require any product updates, then the SAS Deployment Wizard will not go into update mode, and the installation of the maintenance release on that machine is complete. Click **Cancel** to exit the SAS Deployment Wizard.

8. After the deployment is complete, click **Next** in the SAS Deployment Wizard.
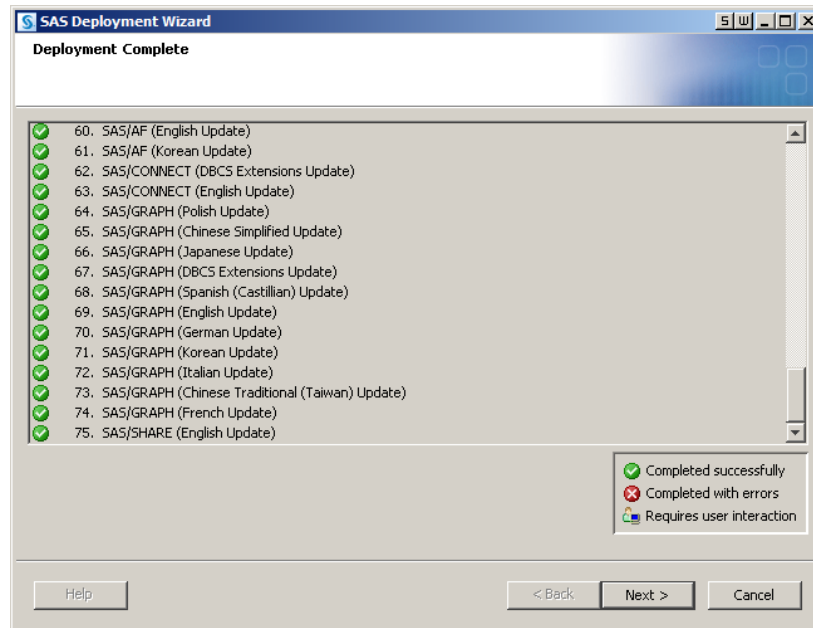
9. In the Select Configuration Directory/Level step of the SAS Deployment Wizard, select the configuration directories that you want to update, and then click **Start**.
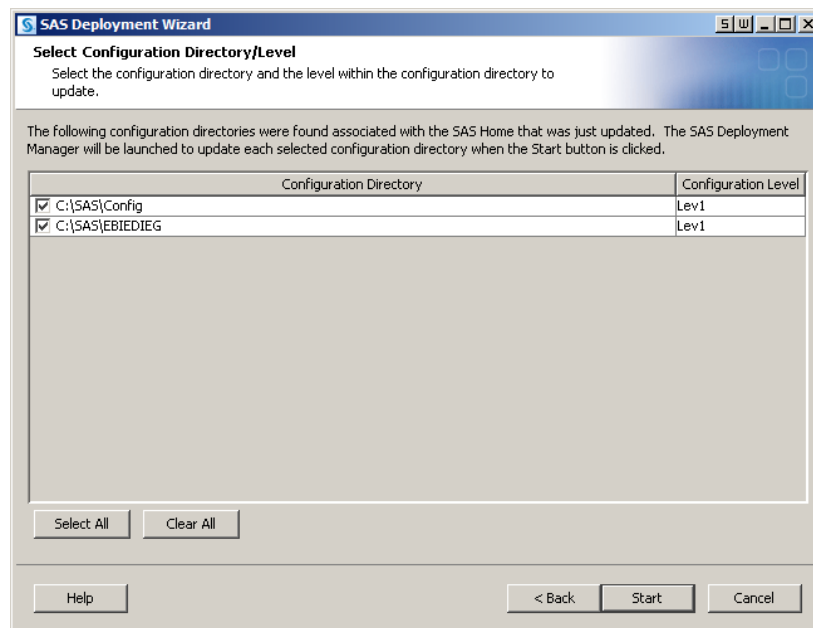
The SAS Deployment Manager opens to guide you through the configuration steps.

Note: If you click **Cancel**, you will have installed but not configured your software updates. You must configure the updated SAS products before you can run these products. To complete these configuration steps at a later time, see **"Configure**

Updated or Upgraded SAS Products" in the *SAS Intelligence Platform: Installation and Configuration Guide*.

10. In the Specify Connection Information panel of the SAS Deployment Manager, enter the user ID and password of an unrestricted administrative user.

    Note: Before performing any configuration updates, the SAS Deployment Manager starts the SAS Metadata Server in Windows environments. If this server is not running, then the following message appears in the SAS Deployment Manager:

    `A SAS Metadata Server is not currently running on the Port.`

    To continue the configuration steps, restart the SAS Metadata Server manually. If you are running in a UNIX environment, you must manually restart the SAS Metadata Server. At a UNIX prompt, navigate to the directory where the SAS Metadata Server is configured. Type **./MetadataServer.sh start**.

11. Use the SAS Deployment Manager to configure your environment. The panels that appear depend on your deployment. You must complete each panel. When prompted for passwords for database IDs, you must use the same passwords that you used to install SAS 9.2.

    During the configuration process, SAS automatically starts your SAS servers, configures your Web application servers, and rebuilds and redeploys your SAS Web applications.

    Note: Any time you configure your deployment, you must also configure your Web application server, even if your configuration does not involve the SAS middle tier. If you manually configured your Web application server in your initial deployment, then configure your Web application server again manually. Complete the steps in the UpdateInstructions.html file to correctly apply the third maintenance release and to redeploy the SAS Web applications. If the SAS Deployment Wizard automatically configured your Web application server, then choose the automatic configuration option.

    When the configuration is complete, the Deployment Summary opens. You need this file in step 12. For more information, see "About the Deployment Summary" on page 18.

12. Complete any necessary configuration steps for your Web application server. For more information, see "Additional Configuration Steps for Your Web Application Servers" on page 49.

13. Review the list of products in the Update Summary section of the Deployment Summary. For each product that was updated, determine whether there are any additional configuration steps that you need to complete. Review the "Product-Specific Details and Post-Configuration Requirements" chapter in Parts 2, 3, and 4 to determine the post-configuration steps for your site.

    • For post-configuration steps for applying the third maintenance release for SAS 9.2, see "Product-Specific Details and Post-Configuration Requirements" on page 63 in Part 2.

    • For post-configuration steps for applying a product-specific maintenance release, see "Product-Specific Details and Post-Configuration Requirements" on page 123 in Part 3.

    • For post-configuration steps for upgrading to a new product release, see "Product-Specific Details and Post-Configuration Requirements" on page 150 in Part 4.

14. To validate the changes to your Web application servers and SAS Web applications, review the validation sections in your Instructions.html files. For more information, see "About the Instructions.html and UpdateInstructions.html Files" on page 17.

Uninstalling a Previous Product Release

About Uninstalling a SAS Product

After you validate your upgrade, you can uninstall the previous versions of the upgraded SAS products. For more information about how to install SAS products, see the appropriate topic for your operating environment.

If you previously installed SAS BI Dashboard 4.2, the SAS Information Delivery Portal 4.2, or SAS Web Report Studio 4.2, you must manually remove the EAR files for the 4.2 release from the **SAS-configuration-directory/Lev1/Web/Staging/ Backup** directory.

Windows Environments

To uninstall a SAS product from a Windows machine:

1. Verify that you are logged on as the SAS Installer user (the user account that was used to install the SAS software) or as the Administrator (or a user in the Administrators group).

2. Open the Control Panel by selecting **Start ⇨ Settings ⇨ Control Panel**.

3. Open the Add or Remove Programs window.

4. Remove the previous version of the SAS products, and close the Add or Remove Programs window and the Control Panel.

5. Remove the installation directory for the previous releases of the upgraded SAS products.

   For example, if you have SAS Web Report Studio 4.2 and SAS Web Report Studio 4.3 on your machine, the directory for the 4.2 release can be removed. An example of a 4.2 directory is **C:\Program Files\SAS\SASWebReportStudio\4.2**.

   CAUTION:
   > **Do not remove the 4.3 directory or the SAS installation directory. Otherwise, your deployment will become invalid.** An example of a 4.3 directory is **C: \Program Files\SAS\SASWebReportStudio\4.3**

UNIX Environments

To uninstall a SAS product from a UNIX machine:

1. Verify that you have permission to delete files from the SAS installation directory (also called the SAS Home directory).

2. Verify that you are logged on as the SAS Installer user (the user account that was used to install the SAS software).

3. Remove the installation directory for the previous releases of the upgraded SAS products. At a UNIX prompt, execute the `rm -rf` command at the top level of the installation directory for the previous release. Do not `cd` to this directory before executing the command.

   For example, if you have SAS Web Report Studio 4.2 and SAS Web Report Studio 4.3 on your machine, the directory for the 4.2 release can be removed with the `rm -rf` command.

   CAUTION:
   > **Do not remove the 4.3 directory or the SAS installation directory. Otherwise, your deployment will become invalid.**

Installing a Hot Fix

The SAS 9.2 Hot Fix Analysis, Download, and Deployment Tool (SAS92HFADD) analyzes a SAS deployment registry, creates a custom report that lists any hot fixes available for the products installed on that machine, and generates scripts that automate the download and deployment of the hot fixes. For more information, see `http://ftp.sas.com/techsup/download/hotfix/HF2/SAS92HFADD.html`.

Chapter 20
Product-Specific Details and Post-Configuration Requirements

Determining the Impact of a New Product Release

In addition to the maintenance releases for SAS 9.2 and product-specific maintenance releases, SAS often ships new product releases. If you are running SAS 9.2, review the topic for your SAS products before upgrading to a new product release. This product documentation explains how to prepare your site for the new product release.

SAS Add-In 4.3 for Microsoft Office

New Features in the SAS Add-In 4.3 for Microsoft Office

Here are some of the new features in the SAS Add-In 4.3 for Microsoft Office:

- integration with Microsoft Outlook

- a more robust automation interface

- a new OLAP Viewer for working with OLAP cubes in Microsoft Excel

- the ability to replicate SAS content

- the ability to edit data sets that are saved on a SAS server. You can open these data sets in Microsoft Excel. While you have the data set in edit mode, the data set is locked and cannot be opened by other users at your site. When you commit your changes to the SAS server, you overwrite the existing data set, so your changes can be accessed by others at your site.

- several new and enhanced tasks that you can use to analyze your data.

For more information about the new features and enhancements, see the "What's New in the SAS Add-In 4.3 for Microsoft Office" topic at **http://support.sas.com/ documentation/onlinedoc/addin**.

Differences between the SAS Add-In 4.2 and 4.3 for Microsoft Office

Before upgrading to the SAS Add-In 4.3 for Microsoft Office, review the following differences between the 4.2 release and the 4.3 release:

- If you have a Microsoft Office document that contains SAS content that was generated using the 2.1 or the 4.2 release of the SAS add-in, then you can open this document by using the SAS Add-In 4.3 for Microsoft Office.

  If you need to migrate multiple files or you need to remap references to metadata objects (such as servers, libraries, information maps, and stored processes), then you can use the Migration Wizard.

- When you refresh an item in the document, the SAS content from the 2.1 release is automatically converted to the 4.3 format. After the content is refreshed using the SAS Add-In 4.3 for Microsoft Office, you cannot refresh the content by using the 2.1 release of the SAS add-in.

- Content that was generated in the 2.1 release must be refreshed before you can use the new restore content functionality in the 4.3 release.

- In the SAS Add-In 4.3 for Microsoft Office, you can open reports that were generated by SAS Web Report Studio. You must be running SAS Web Report Studio 4.3 to open prompted reports in the SAS Add-In 4.3 for Microsoft Office. For more information, see **http://support.sas.com/kb/40/386.html**.

Upgrading to the SAS Add-In 4.3 for Microsoft Office

To upgrade to the SAS Add-In 4.3 for Microsoft Office, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your

order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Enterprise Guide, SAS Web Report Studio, and the SAS Add-In for Microsoft Office, then all of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to the SAS Add-In 4.3 for Microsoft Office, see "Upgrading SAS Products" on page 143.

Note: A limited license for the SAS Add-In 4.3 for Microsoft Office is included with SAS Enterprise Miner 6.2. If you are upgrading to SAS Enterprise Miner 6.2, then you might be adding the SAS Add-In for Microsoft Office to your deployment. In this case, you are not upgrading to the SAS Add-In 4.3 for Microsoft Office. Instead, you are adding the SAS add-in to your current deployment. For more information about how to add the SAS add-in to your deployment, see "SAS Enterprise Miner 6.2" on page 159.

Uninstalling the SAS Add-In 4.2 for Microsoft Office

The SAS Deployment Wizard installs the SAS Add-In 4.3 for Microsoft Office, and the 4.3 release becomes the active version of the SAS add-in on your machine. However, the SAS Deployment Wizard does not remove the SAS Add-In 4.2 for Microsoft Office, if you previously installed that version of the SAS add-in. You can use the SAS Add-In for Microsoft Office Utility to specify which version of the SAS add-in you want to use and the Microsoft Office applications where the SAS add-in should be enabled. For more information about this utility, see the Help for the SAS Add-In for Microsoft Office.

To remove the SAS Add-In 4.2 for Microsoft Office, use the Uninstall facility in Windows operating environments.

To remove the metadata for a release of the SAS Add-In for Microsoft Office, unconfigure the Add-In for Office Server Data component on the metadata tier. You will remove this software component and any capabilities for that release of the SAS add-in. These capabilities are also removed from any roles that use these capabilities. Roles are not removed because the roles might contain capabilities from the new release of the SAS add-in. Adding new capabilities to existing roles occurs when you install the server data for the new release of the SAS add-in.

SAS BI Dashboard 4.3

New Features in SAS BI Dashboard 4.3

Here are some of the new features in SAS BI Dashboard 4.3:

- configuration information is now saved in the metadata, which simplifies the ability to deploy the SAS BI Dashboard in a clustered middle-tier environment.

- more integration with other SAS products, such as the SAS Add-In for Microsoft Office.

- a new dashboard builder that enables you to create a dashboard by using a drag-and-drop operation.

- optimization of screen space so you can view the entire dashboard at once. You also have the ability to zoom in on each indicator.

- the ability to filter all dashboard indicators at once.

- bookmarks to quickly access your favorite indicators.

- the ability to create and view comments on dashboards and indicators.

For more information about the new features and enhancements in SAS BI Dashboard 4.3, see the following resources:

- the "What's New in SAS BI Dashboard 4.3" topic at **http://support.sas.com/documentation/onlinedoc/bidashboard**

- In the *SAS Intelligence Platform: Web Application Administration Guide*, review the following topics:

  - "SAS BI Dashboard Administration" in the **What's New** topic

  - **"Key Features in the Administration of SAS BI Dashboard"**

  - **"SAS BI Dashboard Folders"**

  - **"Caching in SAS BI Dashboard 4.3"**

Differences between SAS BI Dashboard 4.2 and 4.3

Changes in the Appearance of the Dashboard

Here are the changes that you might see when viewing a dashboard in SAS BI Dashboard 4.3:

- In bar charts, solid colored bars are used. In SAS BI Dashboard 4.2, the bars were gray. Using solid colors enables you to more easily identify the individual bars.

- The values of the column that is assigned to the **Column group by** role appear at the top of the graph. In 4.2, these values appeared at the bottom of the graph and were labeled with the name of the column that was assigned to the **Column group by** role.

- Some labels on the X axis might be repeated.

- The bars on the right side of the graph might be wider than the bars on the left side of the graph.

- If you used HTML to change the color of a label in SAS BI Dashboard 4.2, then this HTML code is displayed as part of the label in SAS BI Dashboard 4.3. Use the new labeling functionality that is available in SAS BI Dashboard 4.3 to customize your labels.

- SAS BI Dashboard 4.3 automatically aggregates the data for you, so you will not see bar charts stacked on top of each other or pie charts with numerous slices. Tooltips are not available for any summarized graph. To display tooltips on a summarized graph, optimize the query so that the query (rather than the graph) aggregates the data.

- HTML is not supported in SAS BI Dashboard 4.3. For example, if an indicator includes HTML output from a SAS Stored Process, then these indicators are blank or display an error message in SAS BI Dashboard 4.3.

- If an indicator from a previous release of SAS BI Dashboard contains images, then the images might not be displayed when these indicators are migrated. To view the images in these indicators, select **Use proxy** on the General Properties pane.

As a result of these changes, your output in SAS BI Dashboard 4.3 could be different from your output in SAS BI Dashboard 4.2. In SAS BI Dashboard 4.3, you can edit the objects in the dashboard (such as change the size of an indicator or modify a label) to meet your needs.

Location of Dashboards and Indicators

After you upgrade to SAS BI Dashboard 4.3, dashboards and any objects in the dashboard (such as indicators, models, and ranges) are metadata objects and are saved in SAS Folders, so any dashboards that you created prior to SAS BI Dashboard 4.3 are saved as metadata objects. The default location for these metadata objects is the `Products\BIDashboard 4.3` directory. This directory contains the `DashboardConfigs`, `IndicatorDefinitions`, `ModelConfigs`, and `RangeDefinitions` subdirectories.

Documentation Enhancements

Instead of the traditional Help delivery system, SAS BI Dashboard 4.3 now includes more embedded user assistance, so you can get help when you need it. Additional documentation is available from the *SAS BI Dashboard: User's Guide* at `http://support.sas.com/documentation/onlinedoc/bidashboard`.

Review SAS Notes for SAS BI Dashboard 4.3

Before you upgrade to SAS BI Dashboard 4.3, review SAS Note 40474: SAS BI Dashboard is completely new software at `http://support.sas.com/kb/40/474.html`. From this SAS Note, you can view other SAS Notes for SAS BI Dashboard 4.3.

Upgrading to SAS BI Dashboard 4.3

To upgrade to SAS BI Dashboard 4.3, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of the SAS Add-In for Microsoft Office, SAS Web Report Studio, and SAS BI Dashboard, then all of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS BI Dashboard 4.3, see "Upgrading SAS Products" on page 143.

Note: You can configure SAS BI Dashboard 4.3 to use a server cluster. To obtain the latest information about how to deploy SAS applications to a server cluster, see SAS Note 37310 at `http://support.sas.com/kb/37/310.html` and contact SAS Technical Support.

Preserving the Folder Structure after an Upgrade

When you upgrade to SAS BI Dashboard 4.3, the dashboard objects are placed in the `SAS Folders\Products\BI Dashboard 4.3` directory.

CAUTION:
Do not move the contents of these folders. If the contents of these folders are moved to different folders, these objects cannot be used with their dashboards.

Updating Favorites in Your Web Browser

After the deployment of this new release, you must change 4.2 to 4.3 in the resolved URL that you use to open the product. The updated URL is `http://server:port/SASLogon/index.jsp?_sasapp=BI+Dashboard+4.3&`.

If you saved the URL for the 4.2 release as a Favorites link in a Web browser, then this link is broken when you upgrade to the 4.3 release. You must re-create this favorite for the 4.3 release. You can also access SAS BI Dashboard 4.3 by using this unresolved link: `http://server:port/SASPortal`.

Uninstalling SAS BI Dashboard 4.2

After you validate your upgrade, you can uninstall the previous release of SAS BI Dashboard. If you previously installed SAS BI Dashboard 4.2, remove the EAR files for the 4.2 release from the `SAS-configuration-directory/Lev1/Web/Staging/Backup` directory.

SAS BI Portlets 4.3

To upgrade to SAS BI Portlets 4.3, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of the SAS Add-In for Microsoft Office, SAS Web Report Studio, and SAS BI Portlets, then all of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS BI Portlets 4.3, see .

SAS Clinical Data Integration 2.2

New Features in SAS Clinical Data Integration 2.2

Here are some of the new features in SAS Clinical Data Integration 2.2:

- adds the new SAS Clinical Standards Toolkit standards (SDTM 3.1.2, updated SDTM 3.1.1 adherence checks, and updated controlled terminology).

- ability to save the data from the CDISC-SDTM to CRT-DDS transformation. You can edit the CRT-DDS tables to add information that is not represented in CDI metadata.

- supports both Windows 32-bit and Solaris on x64: Version 10 for the server tiers and continuation of support for Windows 32-bit for the client tier.

- enhanced reporting capabilities:

  - a new reports feature in SAS Data Integration Studio to generate SAS Clinical Data Integration reports.

    Study administrators can generate reports to show the following information:

    - basic study information that is defined in the metadata

    - basic submission information that is defined in the metadata

    - standards that are defined in the metadata

    - controlled terminology packages

  - a report about a single domain's or multiple domains' compliance against the CDISC-SDTM data standard.

  - a report that provides summary and detail information about a CDISC-SDTM to CRT-DDS transformation.

  - a report that provides summary and detail information about the validity of a CRT-DDS file.

For more information, see **http://support.sas.com/documentation/ onlinedoc/clinicaldi**.

Upgrading SAS Clinical Data Integration 2.2

To upgrade an existing SAS Clinical Data Integration 2.1 installation to SAS Clinical Data Integration 2.2, you must run the SAS Deployment Wizard twice. First, run the SAS Deployment Wizard to update all of the existing components to those required for SAS Clinical Data Integration 2.2. Next, to add the new SAS Clinical Standards Toolkit Components (SDTM 3.1.2 and CDISC Controlled Terminology 201003), run the SAS Deployment Wizard and select a planned deployment for the SAS Clinical Data Integration server tier. Alternatively, you can manually install the SAS Clinical Standards Toolkit Components.

SAS Data Surveyor for Clickstream 2.2

The installation of SAS Data Surveyor for Clickstream Data Mid-Tier 2.2 requires a connection to the metadata server. When you upgrade to the 2.2 release of SAS Data Surveyor for Clickstream Data Mid-Tier, the PLATFMLTYES are installed at the same time if this product was not already on this machine.

If you are upgrading several SAS products (such as SAS Data Surveyor for Clickstream 2.2 and another SAS product), then the SAS Data Surveyor for Clickstream Data Mid-Tier should be configured automatically.

However, if SAS Data Surveyor for Clickstream Data Mid-Tier is the only SAS product that is being upgraded on a machine, then complete the following steps:

1. Start the SAS Deployment Wizard by double-clicking on setup.exe in the highest-level directory of your SAS Software Depot.

   By completing the steps in the SAS Deployment Wizard will upgrade the machine to the 2.2 release of the SAS Data Surveyor for Clickstream Data Mid-Tier. However, you need to run the SAS Deployment Wizard a second time to configure your machine.

2. Run the SAS Deployment Wizard a second time by double-clicking on setup.exe in the highest-level directory of your SAS Software Depot.

3. In the Select Deployment Task step, select **Install SAS software**.

4. In the Select Deployment Type step, select **Perform a Planned Deployment**, deselect **Install SAS software**, and select **Configure SAS software**.

5. Select a valid plan and machine.

6. In the Select Products to Configure step, verify that **Data Surveyor for Clickstream Data Mid-Tier** is selected.

7. Complete the remaining steps in the SAS Deployment Wizard as usual.

   When you are finished, SAS Data Surveyor for Clicksteam Data Mid-Tier is configured on that machine.

SAS Enterprise Guide 4.3

New Features in SAS Enterprise Guide 4.3

Here are some of the new features in SAS Enterprise Guide 4.3:

- a new program editor with autocompletion for hundreds of SAS statements, procedures, and options. The program editor also provides parenthesis matching, built-in syntax and function help, and automatic code formatting.

- new views and charts for the OLAP Analyzer. You can now view scatter plots, bubble plots, and tile charts from the OLAP Analyzer. Also, when you open an OLAP cube, the OLAP Analyzer can automatically create the best graph based on the data.

- code analysis to quickly identify the different parts of the program and convert the program to a process flow. You can also use code analysis to take advantage of grid computing.

- explicit pass-through mode for queries that use data from an external database.

- the ability to open reports that were created with SAS Web Report Studio.

- several new and enhanced tasks that you can use to analyze your data.

For more information about the new features and enhancements, see the "What's New in SAS Enterprise Guide 4.3" topic at **http://support.sas.com/documentation/ onlinedoc/guide**.

Differences between SAS Enterprise Guide 4.2 and 4.3

Before upgrading to SAS Enterprise Guide 4.3, review the following differences between the 4.2 release and the 4.3 release:

- SAS Enterprise Guide 4.3 no longer includes the SAS syntax help files. However, there is now built-in syntax and function help that is available in the program editor. The full SAS syntax help is also available from **http://support.sas.com**.

- The new Map Chart task creates a two-dimensional (choropleth) or three-dimensional (block and prism) color map that shows the variation in the value of a response variable for different geographical areas, such as counties, states, and countries.

  The Create Map Chart task no longer requires specially prepared data ("feature tables") in order to create useful maps. Now, it is easier to create map charts using only a map data set and your response values.

  The Create Map Feature Table task, provided with earlier versions of SAS Enterprise Guide, is no longer needed and is marked as deprecated. Your existing projects that use this task will still run. However, you will not be able to create new steps that use the Create Map Feature Table task.

- In previous versions of SAS Enterprise Guide, the project file stored external file references as absolute paths. In SAS Enterprise Guide 4.3, these external file references are stored as relative paths, which makes it easier for you to move the project file, data, and programs to a different folder or a different machine. In SAS Enterprise Guide 4.3, it is recommended that you use pathnames that are relative to the current location of the project file instead of using a full path.

- In the Import Data task, there are two new performance options that enable you to specify the level of data cleansing to perform on the imported data. To perform data cleansing, SAS Enterprise Guide downloads data from the server to the client. You can specify how much data is downloaded to optimize performance.

- In SAS Enterprise Guide 4.3, you can open reports that were generated by SAS Web Report Studio. You must be running SAS Web Report Studio 4.3 to open prompted reports in SAS Enterprise Guide 4.3. For more information, see **http://support.sas.com/kb/40/386.html**.

- If the input data source for a task is from a DBMS engine, then SAS uses the sort functionality on the database to sort the data before running the task. Using the database functionality rather than the SORT procedure, which is used for files that are not saved to a database, optimizes the performance of the SAS task.

Upgrading to SAS Enterprise Guide 4.3

To upgrade to SAS Enterprise Guide 4.3, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Enterprise Guide and SAS Enterprise Miner, then both products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS Enterprise Guide 4.3, see "Upgrading SAS Products" on page 143.

Uninstalling SAS Enterprise Guide 4.2

The SAS Deployment Wizard installs SAS Enterprise Guide 4.3, but it does not uninstall SAS Enterprise Guide 4.2 from your machine.

To uninstall SAS Enterprise Guide 4.2, use the Uninstall facility in Windows operating environments.

To remove the metadata for a release of SAS Enterprise Guide, unconfigure the EG Server Data component on the metadata tier. You will remove this software component and any capabilities for that release of SAS Enterprise Guide. These capabilities are also removed from any roles that use these capabilities. Roles are not removed because the roles might contain capabilities from the new release of SAS Enterprise Guide. Adding new capabilities to existing roles occurs when you install the server data for the new release of SAS Enterprise Guide.

SAS Enterprise Case Management 2.3

In December 2010, SAS shipped SAS Enterprise Case Management 2.3.

For more information about how to request this new release and the features that are available, contact your SAS account representative.

SAS Enterprise GRC 4.2 and 4.3

In December 2010, SAS shipped SAS Enterprise GRC 4.3. SAS Enterprise GRC 4.2 (formerly called SAS OpRisk Monitor) shipped in July 2010.

For more information about how to request this new release and the features that are available, contact your SAS account representative.

For instructions on how to upgrade to this new release, see the *SAS Enterprise GRC: Administrator's Guide* at `http://support.sas.com/documentation/onlinedoc/securedoc/index_egrc.html`.

SAS Enterprise Miner 6.2

New Features in SAS Enterprise Miner 6.2

Here are some of the new features in SAS Enterprise Miner 6.2:

- SAS Analytics Accelerator 1.3 for Teradata. The third maintenance release for SAS 9.2 enables in-database processing for a set of core functions. This in-database processing reduces data movement between SAS and the database. It also enables you to take advantage of database processing power. SAS Enterprise Miner 6.2 includes in-database processing capabilities for sampling, variable selection, and

logistic and linear regression modeling that are part of the SAS Analytics Accelerator for Teradata product.

- integration with the SAS Add-In for Microsoft Office 4.3. Your license for SAS Enterprise Miner includes a limited license for the SAS Add-In for Microsoft Office in Microsoft Excel. You must have Microsoft Office installed on your machine to install the SAS Add-In for Microsoft Office.

- the new SAS Rapid Predictive Modeler task that enables you to run prebuilt SAS Enterprise Miner models in SAS Enterprise Guide 4.3 and the SAS Add-In 4.3 for Microsoft Office. For more information, see "SAS Rapid Predictive Modeler" on page 160.

- updates to the Interactive Grouping and Scorecard nodes for SAS Credit Scoring.

- updates to the Input Data, Transform Variables, Reporter, Filter, and Score nodes in SAS Enterprise Miner.

For more information about the new features and enhancements, see the "What's New in SAS Enterprise Miner 6.2" topic at **http://support.sas.com/documentation/ onlinedoc/miner**.

SAS Rapid Predictive Modeler

SAS Rapid Predictive Modeler is a new feature for users who need to rapidly predict models for common business problems such as promotion response and customer churn. These models can be integrated into standard reporting and production scoring processes on many platforms and databases. The modeling techniques have been designed to produce robust and accurate models in a large number of scenarios.

SAS Rapid Predictive Modeler is highly automated. You must choose one dependent target variable, but all other selections are automated. All data transformations and modeling techniques have been parameterized. Output and reports have been predefined. The model can be registered in the SAS Metadata Server for integration by other products such as SAS Model Manager, SAS Data Integration Studio, SAS Enterprise Guide, the SAS Add-In for Microsoft Office, SAS Enterprise Miner, and many other SAS products.

SAS Rapid Predictive Modeler appears as a custom task in SAS Enterprise Guide 4.3 or in Microsoft Excel by using the SAS Add-In 4.3 for Microsoft Office. You can find complete usage documentation in those products.

Note: Your license for SAS Enterprise Miner includes SAS Rapid Predictive Modeler and a limited license for the SAS Add-In for Microsoft Office in Microsoft Excel.

Models that you create using SAS Rapid Predictive Modeler can also be opened, modified, and run in SAS Enterprise Miner 6.2.

Upgrading to SAS Enterprise Miner 6.2

About the Installation and Configuration Process

To upgrade an existing SAS Enterprise Miner 6.1 installation to SAS Enterprise Miner 6.2, you must have administrator privileges for your operating environment and for installing SAS.

To install SAS Enterprise Miner 6.2, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Model Manager and SAS Enterprise Miner, then both

products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard for each product.

SAS Enterprise Miner 6.2 includes a new feature called SAS Rapid Predictive Modeler, which must be run from either SAS Enterprise Guide or the SAS Add-In for Microsoft Office. Therefore, your order also includes the SAS Add-In for Microsoft Office. Neither SAS Rapid Predictive Modeler or the SAS Add-In for Microsoft Office are automatically installed with SAS Enterprise Miner 6.2. After upgrading to SAS Enterprise Miner 6.2, you must rerun the SAS Deployment Wizard to install SAS Rapid Predictive Modeler and the SAS Add-In for Microsoft Office.

The steps for upgrading to SAS Enterprise Miner 6.2 depend on whether you have multiple machines or a single machine at your site. For more information, see the following topics:

Note: If your site also licenses SAS Text Miner, the first maintenance release for SAS Text Miner 4.2 is automatically applied when you upgrade to SAS Enterprise Miner 6.2. After these software updates are applied, you must reconfigure SAS Text Miner on the client machines. The instructions for reconfiguring SAS Text Miner are included in the upgrade and configuration instructions for SAS Enterprise Miner 6.2.

Install and Reconfigure in a Multi-Machine Deployment

1. To upgrade to SAS Enterprise Miner 6.2, see .

2. On all client machines, reconfigure the SAS Enterprise Miner Thin Client (and the SAS Text Miner Java Client, if licensed at your site) and install SAS Rapid Predictive Modeler and the SAS Add-In for Microsoft Office.

   a. For each client machine in your deployment, start the SAS Deployment Wizard by double-clicking `setup.exe` in the highest level of your SAS Software Depot.

   b. In the Select Deployment Task step, select **Install SAS Software**, and then click **Next**.

   c. In the Select Deployment Type step, select **Perform a Planned Deployment**. Then select the **Install SAS Software** and the **Configure SAS Software** check boxes. Click **Next**.
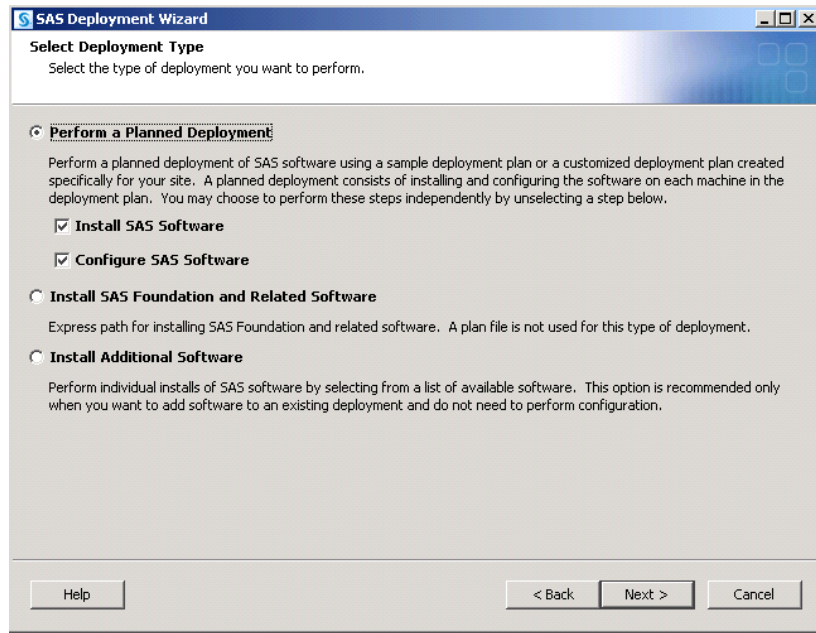
d. In the Specify Deployment Plan step, select the new plan for your deployment. You cannot use your original plan file because that plan does not include SAS Rapid Predictive Modeler and the SAS Add-In for Microsoft Office. If you used a custom plan to originally install SAS Enterprise Miner, then you need to update this plan to include the new products, or you can select a sample plan (such as **Enterprise Miner, two machines)** to reconfigure and add these new components.

> *Note:* If your deployment includes SAS Text Miner, specify a plan file that includes both SAS Enterprise Miner and SAS Text Miner. A sample plan file is **Enterprise Miner and Text Miner, two machines**.

After you have selected your new plan, click **Next**.

e. In the Select Products to Install step, select **Clients** from the **Machine** drop-down list. Then select only the check boxes for the SAS Add-In for Microsoft Office and SAS Rapid Predictive Modeler.

Click **Next**.

> *Note:* You must have Microsoft Office installed in order to install the SAS Add-In for Microsoft Office. If you do not have Microsoft Office installed, then do not select the check box for the SAS Add-In for Microsoft Office.
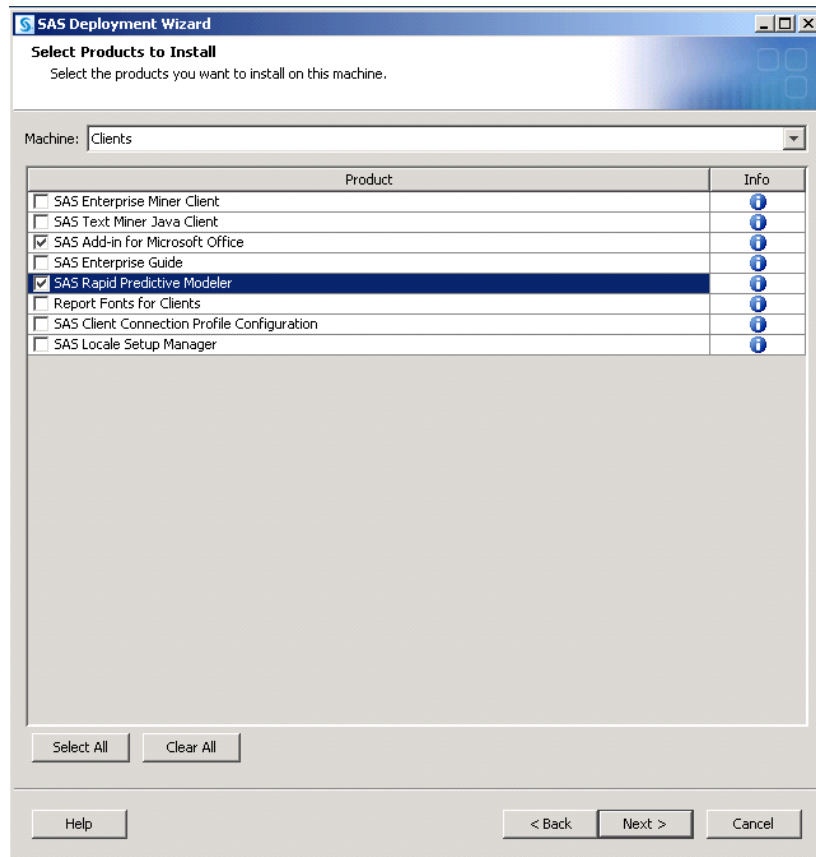
f. Depending on what SAS products you license, you are prompted to select the
    Microsoft Office applications where you want to run the SAS Add-In for
    Microsoft Office. In order to use SAS Rapid Predictive Modeler, you must at
    least select the check box for Microsoft Excel. If your site uses the SAS Add-In
    for Microsoft Office in other Microsoft applications, select those check boxes as
    well.

    Click **Next**.

g. In the Specify Configuration Information step, verify that the path to the
    configuration directory is the path that was created during the initial installation.
    When a message appears that the configuration directory and level contain
    existing files, click **Yes** to proceed.

h. In the Select Products to Configure step, select **SAS Enterprise Miner Thin
    Client Configuration** (and **SAS Text Miner Java Client**, if SAS Text Miner is
    licensed at your site), and then click **Next**.

    i.   In the Deployment Summary step, review the products that will be installed and configured, and then click **Start**.

After the deployment completes, you should be able to run SAS Enterprise Miner 6.2 on your client machines.

Install and Reconfigure in a Single Machine Deployment

Follow these steps to install and configure SAS Enterprise Miner 6.2 in a single machine deployment. Examples of this type of deployment include the SAS Enterprise Miner Personal Workstation, the SAS Enterprise Miner Desktop, and DataMining for the Classroom.

1. To upgrade to SAS Enterprise Miner 6.2, see "Upgrading SAS Products" on page 143.

2. Install SAS Rapid Predictive Modeler and the SAS Add-In for Microsoft Office.

    a.   Terminate all active SAS sessions, daemons, spawners, and servers. It is important to stop the SAS servers in the inverse order that they were started. For more information, see **"Overview of Server Operation"** in the *SAS Intelligence Platform: System Administration Guide*.

    b.   Start the SAS Deployment Wizard by double-clicking **setup.exe** in the highest level of your SAS Software Depot.

    c.   In the Select Deployment Task step, select **Install SAS Software**, and then click **Next**.

    d.   In the Select Deployment Type step, select **Install Additional Software**, and then click **Next**.

e. In the Select Products to Install step, select the check boxes for the SAS Add-In for Microsoft Office and SAS Rapid Predictive Modeler.

Click **Next**.

Note: You must have Microsoft Office installed in order to install the SAS Add-In for Microsoft Office. If you do not have Microsoft Office installed, then do not select the check box for the SAS Add-In for Microsoft Office.
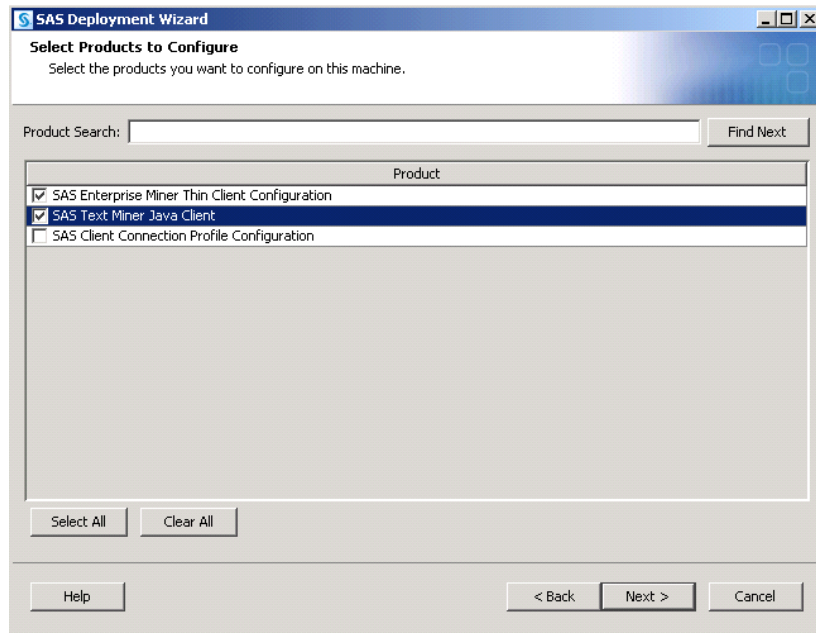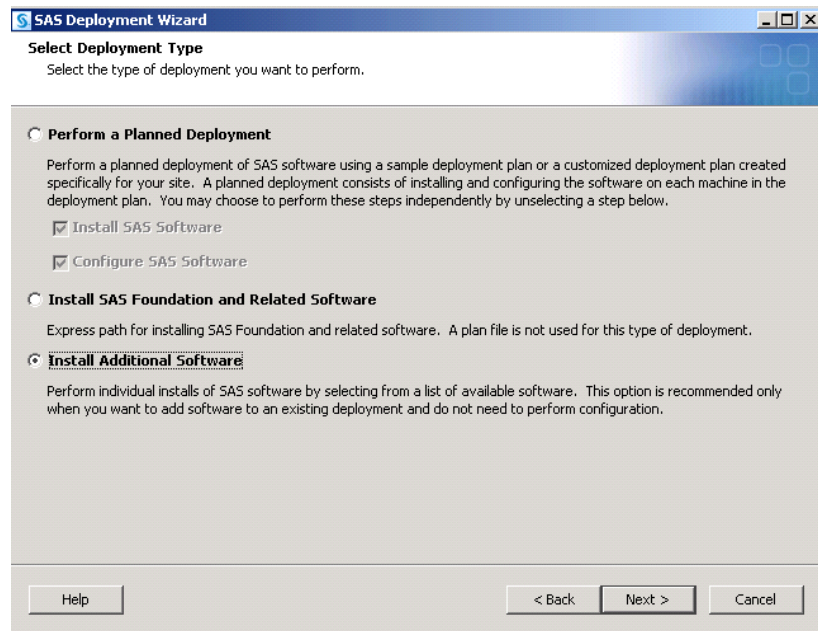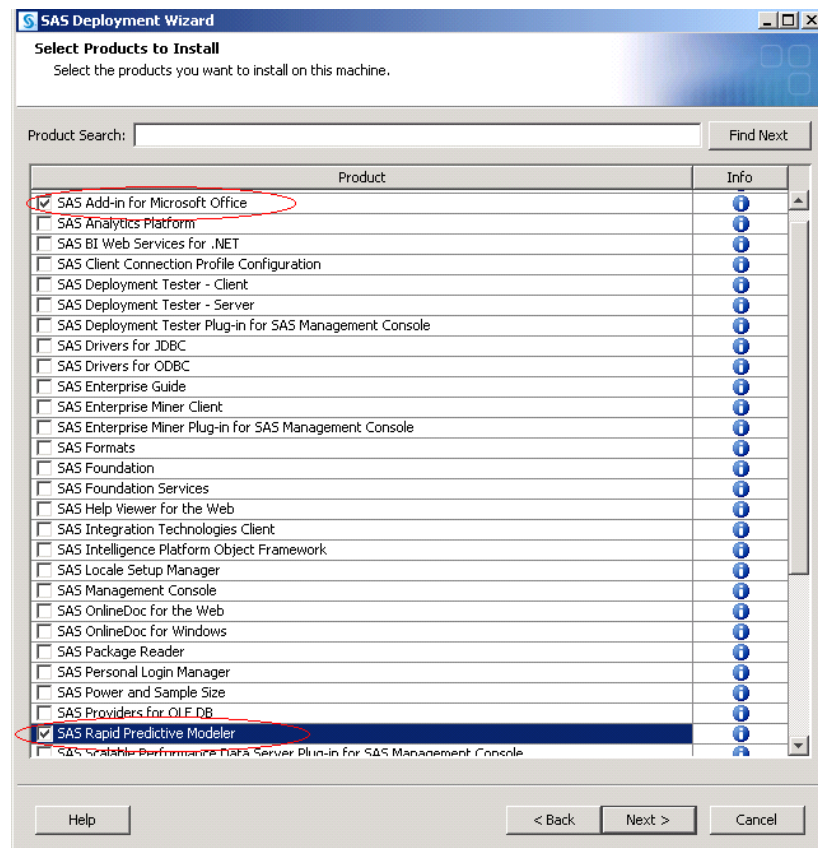
     f.   In the Deployment Summary step, review the products that will be installed, and then click **Start**.

After the deployment completes, you must restart your SAS servers. You must restart these servers in the correct order. For more information, see **"Overview of Server Operation"** in the *SAS Intelligence Platform: System Administration Guide*.

Now that the servers are restarted, you can run SAS Enterprise Miner 6.2 on your client machine.

Note: If your site also licenses SAS Text Miner, then you also need to reconfigure SAS Text Miner. For more information, see "How to Reconfigure SAS Text Miner" on page 103.

Validate Your Installation

To validate your installation, open SAS Enterprise Miner and select **Help** ⇨ **About**.
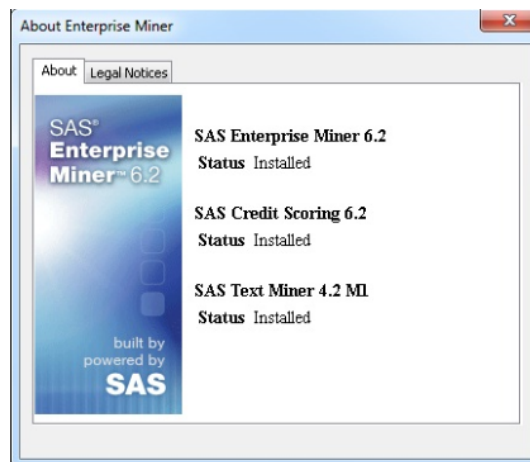
Note: The products that are listed in the About Enterprise Miner dialog box depend on what you have licensed at your site.

SAS Financial Management 5.2

About This Release

In October 2010, SAS shipped SAS Financial Management 5.2. For more information about how to request this new release and the features that are available, contact your SAS account representative.

Upgrading to SAS Financial Management 5.2

To upgrade to SAS Financial Management 5.2, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Solutions Services, SAS Financial Management, and SAS Strategy Management, then all of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance

release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS Financial Management 5.2, see "Upgrading SAS Products" on page 143.

After the upgrade is complete, review the UpdateInstructions.html file. For SAS Financial Management 5.2, you should see the following statement:

```
Product Upgrade The product has been upgraded from Version 5.1 to Version 5.2.
```

Updating Favorites in Your Web Browser

After the deployment of this new release, you must change 5.1 to 5.2 in the resolved URL that you use to open the product. The updated URL is `http://server:port/SASLogon/index.jsp?_sasapp=Financial+Mgmt+5.2&`.

If you saved the URL for the 5.1 release as a Favorites link in a Web browser, then this link is broken when you upgrade to the 5.2 release. You must re-create this favorite for the 5.2 release. You can also access SAS Financial Management 5.2 by using this unresolved link: `http://server:port/SASPortal`.

SAS High-Performance Markdown Optimization 4.3

In December 2010, SAS shipped SAS High-Performance Markdown Optimization 4.3.

For more information about how to request this new release and the features that are available, contact your SAS account representative.

SAS Human Capital Management 5.2

About This Release

In October 2010, SAS shipped SAS Human Capital Management 5.2. For more information about how to request this new release and the features that are available, contact your SAS account representative.

Upgrading to SAS Human Capital Management 5.2

To upgrade to SAS Human Capital Management 5.2, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Solutions Services, SAS Human Capital Management, and SAS Strategy Management, then all of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment,

you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS Human Capital Management 5.2, see "Upgrading SAS Products" on page 143. For additional information, see the product documentation at **http://support.sas.com/documentation/onlinedoc/ hcm**.

After the upgrade is complete, review the UpdateInstructions.html file. For SAS Human Capital Management, you should see the following statement:

```
Product Upgrade The product has been upgraded from Version 5.1 to Version 5.2.
```

Updating Favorites in Your Web Browser

After the deployment of this new release, you must change 5.1 to 5.2 in the resolved URL that you use to open the product. The updated URL is **http:// server:port/SASLogon/index.jsp?_sasapp=Human+Cap+Mgmt+5.2&**.

If you saved the URL for the 5.1 release as a Favorites link in a Web browser, then this link is broken when you upgrade to the 5.2 release. You must re-create this favorite for the 5.2 release. You can also access SAS Human Capital Management 5.2 by using this unresolved link: **http://server:port/SASPortal**.

SAS Information Delivery Portal 4.3

New Features in the SAS Information Delivery Portal 4.3

Here are some of the new features in the SAS Information Delivery Portal 4.3:

- a new report portlet that uses SAS Web Report Studio or the SAS Web Report Viewer to display SAS Information Maps.

- the ability to restrict the options on the title bar.

- a new **Customize** menu and a redesigned **Options** menu.

- if you also have SAS BI Portlets 4.3 installed at your site, then the new Dashboard Portlet and Diagnostic Portlet are available.

For more information about the new features and enhancements, see the following topics:

- "What's New in the SAS Information Delivery Portal 4.3" at **http:// support.sas.com/documentation/onlinedoc/portal**

- In the *SAS Intelligence Platform: Web Application Administration Guide*, review the following topics:

  - "SAS Information Delivery Portal Administration" in the **What's New** topic

  - **"Understanding the Components of SAS Information Delivery Portal 4.3"**

Upgrading to the SAS Information Delivery Portal 4.3

To upgrade to the SAS Information Delivery Portal 4.3, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Web Report Studio and the SAS Information Delivery Portal, then both of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to the SAS Information Delivery Portal 4.3, see "Upgrading SAS Products" on page 143.

Updating Favorites in Your Web Browser

After the deployment of this new release, you must change 4.2 to 4.3 in the resolved URL that you use to open the product. The updated URL is `http://`
`server:port/SASLogon/index.jsp?_`
`sasapp=Info+Delivery+Portal+4.3&`.

If you saved the URL for the 4.2 release as a Favorites link in a Web browser, then this link is broken when you upgrade to the 4.3 release. You must re-create this favorite for the 4.3 release. You can also access the SAS Information Delivery Portal 4.3 by using this unresolved link: `http://server:port/SASPortal`.

Uninstalling the SAS Information Delivery Portal 4.2

After you validate your upgrade, you can uninstall the previous release of the SAS Information Delivery Portal. If you previously installed the SAS Information Delivery Portal 4.2, remove the EAR files for the 4.2 release from the `SAS-configuration-`
`directory/Lev1/Web/Staging/Backup` directory.

SAS IT Resource Management 3.2

In September 2010, SAS shipped SAS IT Resource Management 3.2.

For more information about how to request this new release and the features that are available, contact your SAS account representative.

For instructions on how to upgrade to this new release, see the *SAS IT Resource Management: Migration Documentation* at `http://support.sas.com/itrm`.

SAS Marketing Automation 5.4

In January 2011, SAS shipped SAS Marketing Automation 5.4.

For more information about how to request this new release and the featurs that are available, contact your SAS account representative.

For the product documentation, see **http://support.sas.com/documentation/ onlinedoc/ci**.

Note: The product documentation is available only to customers who license SAS Customer Intelligence.

SAS Model Manager 2.3

New Features in SAS Model Manager 2.3

Here are some of the new features in SAS Model Manager 2.3:

* additional support for publishing scoring functions.

* dashboard reports for a project.

* the ability to modify project input and output table properties.

* the ability to import models that were created by the SAS Rapid Predictive Modeler task. For more information, see "SAS Rapid Predictive Modeler" on page 160.

For more information about the new features and enhancements in SAS Model Manager 2.3, contact your SAS account representative.

Upgrading to SAS Model Manager 2.3

To upgrade an existing SAS Model Manager 2.2 installation to SAS Model Manager 2.3, you must have administrator privileges for your operating environment and for installing SAS.

To install SAS Model Manager 2.3, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Model Manager and SAS Enterprise Miner, then both products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard for each product.

For instructions on how to upgrade to SAS Model Manager 2.3, see "Upgrading SAS Products" on page 143.

At the end of the installation process, you will see the UpdateInstructions.html file. Follow the instructions in this file to complete your upgrade to SAS Model Manager 2.3.

Here is an example of the instructions that you might find in the UpdateInstructions.html file:

```
SAS Model Manager Application Programming Interface Product Upgrade
The product has been upgraded from Version 2.2_M2 to Version 2.3.

A backup copy of the previous app.config and picklist files from the
ModelManager directory under the Analytics Platform has been created.
If you had changed the contents of any of these files, then you will need
to make the same modifications to the new files that were laid down in their
place. You can use the backup copy of these files, found in the backup
directory Backup_x.x as a reference to the existing values.
```

Uninstalling SAS Model Manager 2.2

The SAS Deployment Wizard installs SAS Model Manager 2.3, but it does not uninstall SAS Model Manager 2.2 from your machine. To uninstall SAS Model Manager 2.2, use the Uninstall facility in Windows operating environments.

SAS Real-Time Decision Manager 5.4

New Features in SAS Real-Time Decision Manager 5.4

New features in SAS Real-Time Decision Manager 5.4 include the following:

- offer arbitration which helps determine the customer's next best action by evaluating and prioritizing a large number of treatments.

- the ability to process data grids.

- integration with SAS Data Surveyor for Clickstream Data so responses can be captured for presented treatments.

- the ability to reference calculated values that are defined in upstream nodes.

- the ability to deploy campaigns and decision diagrams from SAS Management Console.

- the ability to run tests for campaigns and diagrams from a command line.

- the ability to concurrently execute activity and sub-flow nodes in the main flow. An optional Boolean concurrent attribute has been added to indicate whether the nodes should be executed concurrently.

- support for BI Web Services. Now users can expose input and output parameterized stored processes as Web services that can be invoked by using SOAP requests.

- support for handling user-defined functions.

- new PRINT function.

- the ability to call async Web services.

- database support for Teradata and Microsoft SQL Server.

- a diagnostics page for the engine.

- support for LAX.

Upgrading to SAS Real-Time Decision Manager 5.4

All user-defined repositories are automatically imported into your 5.4 repositories. Before upgrading to the 5.4 release, back up any user-defined repositories that were created in SAS Real-Time Decision Manager 5.3.

To create these backups with SAS Real-Time Decision Manager 5.3 installed:

1. Open SAS Management Console. Select the metadata profile of a user who has permissions for the design and production repositories.

2. From the **Folders** tab, navigate to each user-defined repository folder by selecting **System ⇨ Applications ⇨ SAS Real-Time Decision Manager ⇨ SAS Real-Time Decision Manager 5.3**.

3. Right-click on the repository folder and select **Export Package**.

4. Select to export a package for each repository folder and click **OK**.

To upgrade to SAS Real-Time Decision Manager 5.4, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Marketing Automation and SAS Real-Time Decision Manager, then both of these products are upgraded when you run the SAS Deployment Wizard. Do not run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS Real-Time Decision Manager 5.4, see "Upgrading SAS Products" on page 143.

After the upgrade is complete, review the UpdateInstructions.html file for additional instructions. For instructions on modifying activities, see the migration information in the *SAS Real-Time Decision Manager: Administrator's Guide*.

Uninstalling SAS Real-Time Decision Manager 5.3

After you validate your upgrade, you can uninstall the previous release of SAS Real-Time Decision Manager. If you previously installed the SAS Real-Time Decision Manager 5.3, remove the EAR files for the 5.3 release from the ***SAS-configuration-directory*`/Lev1/Web/Staging/Backup`** directory.

If you have not already done so, stop and uninstall the SAS Real-Time Design Server 5.3 and the SAS Real-Time Engine Server 5.3 applications from the application server.

SAS Retail Space Management 6.2

In October 2010, SAS shipped SAS Retail Space Management 6.2. For more information about how to request this new release and the features that are available, contact your SAS account representative.

For instructions on how to upgrade to this new release, see the product documentation at `http://support.sas.com/documentation/onlinedoc/merchandiseplan`.

SAS Risk Dimensions 5.3

In December 2010, SAS shipped SAS Risk Dimensions 5.3.

For more information about how to request this new release and the features that are available, contact your SAS account representative.

For the product documentation, see `http://support.sas.com/documentation/onlinedoc/riskdimen`.

Note: The product documentation is available only to customers who license SAS Risk Dimensions.

SAS Risk Management for Banking 3.1

In April 2011, SAS shipped SAS Risk Management for Banking 3.1.

For more information about how to request this new release and the featurs that are available, contact your SAS account representative.

For the product documentation, see **http://support.sas.com/documentation/ onlinedoc/rmb**.

Note: The product documentation is available only to customers who license SAS Risk Management for Banking.

SAS Risk Management for Insurance 2.1

In April 2011, SAS shipped SAS Risk Management for Insurance 2.1.

For more information about how to request this new release and the features that are available, contact your SAS account representative.

For the product documentation, see **http://support.sas.com/documentation/ onlinedoc/rmi**.

Note: The product documentation is available only to customers who license SAS Risk Management for Insurance.

SAS Solutions Services 5.2

About This Release

In October 2010, SAS shipped SAS Solutions Services 5.2. For more information about how to request this new release and the features that are available, contact your SAS account representative.

Upgrading to SAS Solutions Services 5.2

To upgrade to SAS Solutions Services 5.2, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Solutions Services, SAS Financial Management, and SAS Strategy Management, then all of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains

any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS Solutions Services 5.2, see "Upgrading SAS Products" on page 143.

After the upgrade is complete, review the UpdateInstructions.html file. For SAS Solutions Services 5.2, you should see the following statement:

`Product Upgrade The product has been upgraded from Version 5.1 to Version 5.2.`

Updating Favorites in Your Web Browser

After the deployment of this new release, you must change 5.1 to 5.2 in the resolved URL that you use to open the product. The updated URL is `http://server:port/SASLogon/index.jsp?_sasapp=Solutions+Svc+5.2&`.

If you saved the URL for the 5.1 release as a Favorites link in a Web browser, then this link is broken when you upgrade to the 5.2 release. You must re-create this favorite for the 5.2 release. You can also access SAS Solutions Services 5.2 by using this unresolved link: `http://server:port/SASPortal`.

SAS Strategy Management 5.2

About This Release

In October 2010, SAS shipped SAS Strategy Management 5.2. For more information about how to request this new release and the features that are available, contact your SAS account representative.

Upgrading to SAS Strategy Management 5.2

To upgrade to SAS Strategy Management 5.2, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of SAS Solutions Services, SAS Financial Management, and SAS Strategy Management, then all of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS Strategy Management 5.2, see "Upgrading SAS Products" on page 143.

After the upgrade is complete, review the UpdateInstructions.html file. For SAS Strategy Management 5.2, you should see the following statement:

`Product Upgrade The product has been upgraded from Version 5.1 to Version 5.2.`

Updating Favorites in Your Web Browser

After the deployment of this new release, you must change 5.1 to 5.2 in the resolved URL that you use to open the product. The updated URL is **http://** ***server:port*/SASLogon/index.jsp?_sasapp=Strategy+Mgmt+5.2&**.

If you saved the URL for the 5.1 release as a Favorites link in a Web browser, then this link is broken when you upgrade to the 5.2 release. You must re-create this favorite for the 5.2 release. You can also access SAS Strategy Management 5.2 by using this unresolved link: **http://*server:port*/SASPortal**.

SAS Web Analytics 5.4

Upgrading to SAS Web Analytics 5.4

Before You Upgrade

1. Save any SAS Web Report Studio reports and SAS information maps that have been customized in SAS Web Analytics. It is recommended that you move the customized reports from the **/Programs/SAS Web Analytics** folder.

2. Check the permissions for the directory of the WEBA library. The user name for the operating system must be able to read and write to this directory and have read and write permissions for all *.sas7bvew files in the directory.

   To determine the location of this directory:

   a. Open SAS Management Console.

   b. Click the **Plug-ins** tab.

   c. Double-click **Data Library Manager**, and select **Libraries**.

   d. Right-click **WEBA**, and from the pop-up menu, select **Properties**. The Properties dialog box appears.

   e. Click the **Options** tab.

      The directory for the WEBA library is listed under **Path Specifications**.

How to Upgrade to SAS Web Analytics 5.4

After you save any customized reports and check the permissions for the WEBA library, you can upgrade to SAS Web Analytics 5.4.

1. Install SAS Web Analytics 5.4. To verify that the installation is complete:

   a. Open the directory for the WEBA library and verify that it now contains five *.sas7bvew files.

   b. Review the **/config/Lev1/Logs/Configure/create_views.log** file to verify that there were no issues when creating the views.

2. Add users and groups in SAS Management Console. For more information, see the *SAS Web Analytics: Administrator's Guide*.

3. Migrate SAS Web Analytics 5.3x Web marts to SAS Web Analytics 5.4. For more information, see the *SAS Web Analytics: Administrator's Guide*.

Installing SAS Web Analytics

The term "upgrading" assumes that you have a previous version of SAS Web Analytics installed at your site. If you are installing SAS Web Analytics for the first time, then complete these steps to install SAS Web Analytics 5.4:

1. Install SAS Web Analytics 5.4. To verify that the installation is complete:

   a. Open the directory for the WEBA library and verify that it contains five *.sas7bvew files.

   To determine the location of this directory, open SAS Management Console and click the **Plug-ins** tab. Double-click **Data Library Manager**, and select **Libraries**. Right-click **WEBA**, and from the pop-up menu, select **Properties**. The Properties dialog box appears. Click the **Options** tab.The directory for the WEBA library is listed under **Path Specifications**.

   b. Review the **/config/Lev1/Logs/Configure/create_views.log** file to verify that there were no issues when creating the views.

2. Install these hot fixes from **http://ftp.sas.com/techsup/download/ hotfix/HF2/92_whats_new.html**:

   • SAS Middle Tier 9.2_M2 hot fix: C80002. After installing this hot fix, follow the instructions for an installation update of the SAS Infrastructure Platform and Shared Services.

   • SAS Management Console 9.2_M2 hot fix: B04005

   • SAS Data Integration Studio 4.21_M2 hot fix: B51002 and C63001

   • SAS Web Analytics 5.4 hot fix: D77001

3. Add users to the Web Analytics user groups in SAS Management Console. For more information, see the *SAS Web Analytics: Administrator's Guide*.

SAS Web Report Studio 4.3

New Features in SAS Web Report Studio 4.3

Here are some of the new features in SAS Web Report Studio 4.3:

• improved layout for report headers and footers.

• enhanced graph features. Skins are available for graphs, so you can change the appearance. A bubble plot has also been added.

• the ability to view and print comments with the report output.

• the ability to copy sections of reports.

• the ability to select multiple publication channels when you schedule a report and the ability for multiple users to make multiple schedules for a single report.

- three new UDP ports for IP scheduling: 7570, 7571, and 7572. For more information, see the **"Pre-installation Checklists for Ports for SAS"** topic in the *SAS Intelligence Platform: Installation and Configuration Guide*.

For more information about the new features and enhancements in SAS Web Report Studio 4.3, see the following resources:

- the "What's New in SAS Web Report Studio 4.3" topic that is available at **http://support.sas.com/documentation/onlinedoc/wrs**

- In the *SAS Intelligence Platform: Web Application Administration Guide*, see the following topics:

    - "SAS Web Report Studio Administration" in the **What's New** topic

    - **"New Features in the Administration of SAS Web Report Studio 4.3"**

Upgrading to SAS Web Report Studio 4.3

To upgrade to SAS Web Report Studio 4.3, run the SAS Deployment Wizard. This wizard automatically detects if there are SAS software products in your order that are more recent than the products you have deployed on your machine. For example, if your order includes a new release of the SAS Information Delivery Portal and SAS Web Report Studio, then both of these products are upgraded when you run the SAS Deployment Wizard. You do not need to run the SAS Deployment Wizard separately for each product upgrade. Also, if you have not applied the third maintenance release for SAS 9.2, then these updates are installed as well. If your SAS order contains any new products that were not in your current deployment, you must rerun the SAS Deployment Wizard to add the new products to your deployment.

For instructions on how to upgrade to SAS Web Report Studio 4.3, see "Upgrading SAS Products" on page 143.

Updating Favorites in Your Web Browser

After the deployment of this new release, you must change 4.2 to 4.3 in the resolved URL that you use to open the product. The updated URL is **http://server:port/SASLogon/index.jsp?_sasapp=Web+Report+Studio+4.3&**.

If you saved the URL for the 4.2 release as a Favorites link in a Web browser, then this link is broken when you upgrade to the 4.3 release. You must re-create this favorite for the 4.3 release. You can also access SAS Web Report Studio 4.3 by using this unresolved link: **http://server:port/SASWebReportStudio**.

Uninstalling SAS Web Report Studio 4.2

After you validate the product upgrade, you can uninstall SAS Web Report Studio 4.2.

If you specified a custom report style in SAS Web Report Studio, then complete either of the following steps before removing the configuration directories for SAS Web Report Studio 4.2:

- Open the **SAS-configuration-directory\Lev1\Web\SASWebReportStudio4.3\customer\LocalProperties.xml** file. In the path for the CSS file that contains the custom style definition, change all references of **SASWebReportStudio4.2** to **SASWebReportStudio4.3**.

- In SAS Management Console, you might have used the Configuration Manager to specify the `sas.wrs.style.css` property. Modify the path of the `sas.wrs.style.css` property to change all references of `SASWebReportStudio4.2` to `SASWebReportStudio4.3`.

After you uninstall SAS Web Report Studio 4.2, remove the EAR files for the 4.2 release from the *SAS-configuration-directory*`/Lev1/Web/Staging/Backup` directory.

Glossary

hot fix

a software update that is based on customer-reported defects and that have a status of alert or high-priority, or that might affect a large number of customers. Hot fixes are coordinated by Technical Support and made available to customers on the hot fix download site.

object spawner

a program that instantiates object servers that are using an IOM bridge connection. The object spawner listens for incoming client requests for IOM services. When the spawner receives a request from a new client, it launches an instance of an IOM server to fulfill the request. Depending on which incoming TCP/IP port the request was made on, the spawner either invokes the administrator interface or processes a request for a UUID (Universal Unique Identifier).

planned deployment

a method of installing and configuring a SAS business intelligence system. This method requires a deployment plan that contains information about the different hosts that are included in the system and the software and SAS servers that are to be deployed on each host. The deployment plan then serves as input to an installation and configuration tool called the SAS Deployment Wizard.

SAS configuration directory

the location where configuration information for a SAS deployment is stored. The configuration directory contains configuration files, logs, scripts, repository files, and other items for the SAS software that is installed on the machine.

SAS Deployment Manager

a cross-platform utility that manages SAS deployments. The SAS Deployment Manager supports functions such as updating passwords for your SAS deployment, rebuilding SAS Web applications, and removing configurations.

SAS Deployment Wizard

a cross-platform utility that installs and initially configures many SAS products. Using a SAS installation data file and, when appropriate, a deployment plan for its initial input, the wizard is designed to prompt the customer for all the remaining input at the start of the session so that the customer does not have to monitor an entire deployment.

SAS installation directory
the location where your SAS software is installed. This location is the parent directory to the installation directories of all SAS products. The SAS installation directory is also referred to as SAS Home in the SAS Deployment Wizard.

SAS Management Console
a Java application that provides a single user interface for performing SAS administrative tasks

SAS Metadata Server
a multi-user server that enables users to read metadata from or write metadata to one or more SAS Metadata Repositories. The SAS Metadata Server uses the Integrated Object Model (IOM), which is provided with SAS Integration Technologies, to communicate with clients and with other servers.

update mode
an operating state of the SAS Deployment Wizard in which users are required to install software updates before they can perform any other deployment tasks. The SAS Deployment Wizard automatically goes into update mode when it determines that the current SAS order contains new versions or maintenance updates to the deployed products in a given SAS installation directory.