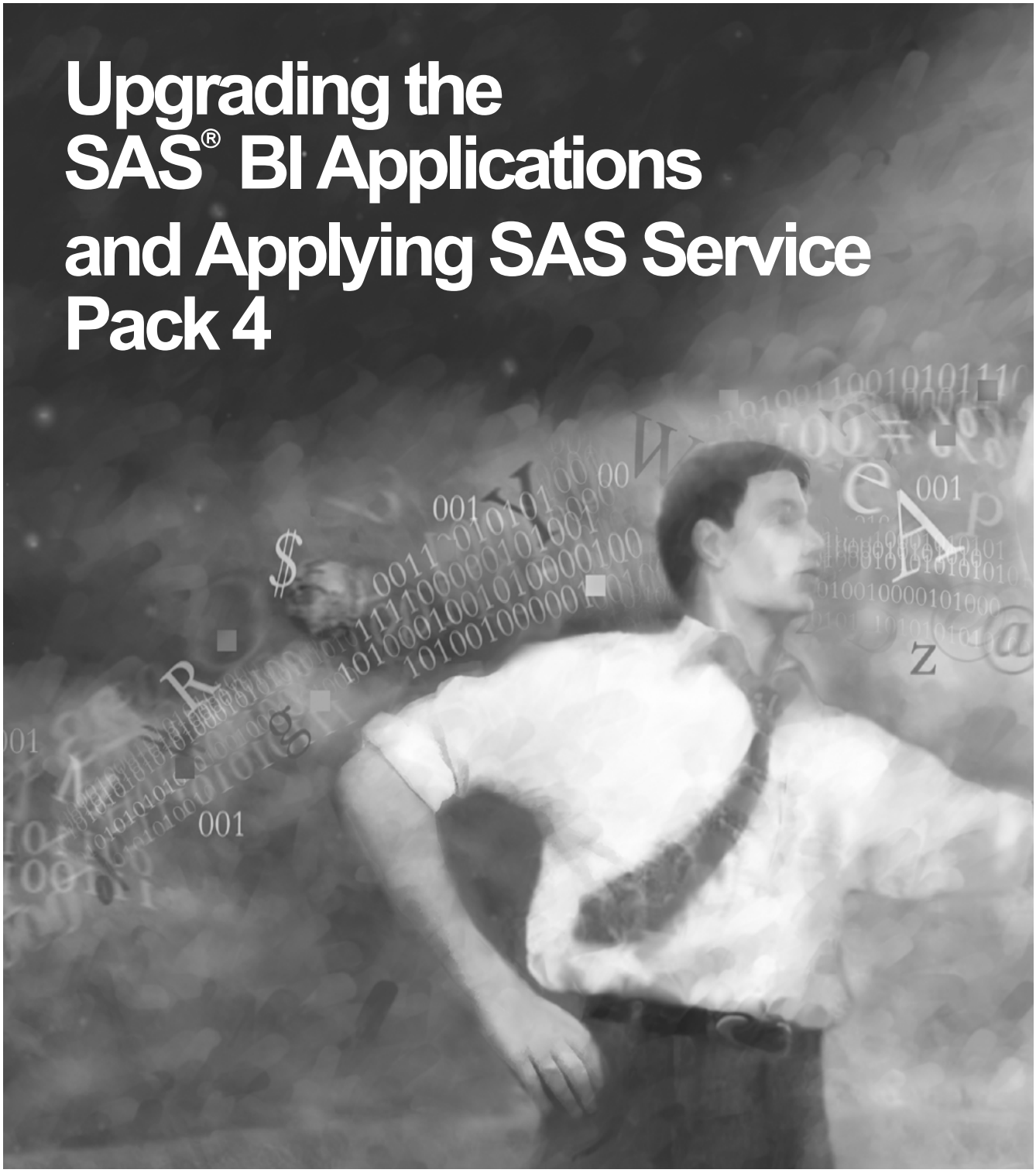
Upgrading the SAS® BI Applications and Applying SAS Service Pack 4



The Power to Know.

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Chapter 1 — Overview

Note: *This document may be revised after it is released. To ensure you have the very latest version of the doc, please visit* http://support.sas.com/biupgrade*.*

In the spring of 2006, SAS released new versions of several BI applications, including SAS Web Report Studio. This document provides information to assist you with upgrading existing installations of these products to take advantage of their latest versions. This document addresses only a basic installation of these products—it does not address using a planning installation in which applicable products are automatically configured via the SAS Configuration Wizard. SAS recommends using a basic installation and configuring these products manually.

This document assumes that you are using the 2.1 version of the BI applications. To determine what release of the BI applications you are currently using, start SAS Web Report Studio and select **Help→About**. If the About screen lists a release earlier than 2.1, you cannot use these instructions without first upgrading your BI applications to the necessary level. Contact SAS Technical Support for information about how to upgrade your BI applications to the 2.1 suite.

Products to be Upgraded

The following is a list of the upgraded BI applications, as well as a short description of the upgrade options for them. **Your package may not contain all the products from this list, depending on the original order that you are upgrading.**

SAS Information Map Studio: You have the option of performing a production install which replaces your existing 2.1 version with version 3.1, or you can perform a staged install and temporarily maintain separate applications of both versions. Both versions may be on the same client tier or on separate client tiers. See page 5 for more information.

SAS Query & Reporting Services: For the client tier, you must perform a production install which replaces your existing 2.1 version with version 3.1. For the server tier, depending on whether or not you currently use report scheduling, you have the option of performing a production install which replaces your existing 2.1 version with version 3.1, or you can perform a staged install and temporarily maintain separate applications of both versions. Both versions may be on the same server or on separate servers. See page 9 for more information.

SAS Web OLAP Viewer for Java: You have the option of performing a production install which replaces your existing 2.1 version with version 3.1, or you can perform a staged install and temporarily maintain separate applications of both versions. If you choose to maintain separate applications, you can do so in a separate mid-tier or in the same mid-tier. SAS recommends using a staged install approach on separate mid-tier servers for sites wishing to test and verify the 3.1 version prior to replacing their production version. See page 17 for more information.

SAS Web Report Studio: You have the option of performing a production install which replaces your existing 2.1 version with version 3.1, or you can perform a staged install and temporarily maintain separate applications of both versions. If you choose to maintain separate applications, you can do so in a separate mid-tier or in the same mid-tier. SAS recommends using a staged install approach on separate mid-tier servers for sites wishing to test and verify the 3.1 version prior to replacing their production version. See page 27 for more information.

SAS Web Report Viewer: Since SAS Web Report Studio also provides the ability to view reports, SAS recommends that you perform a production install and that you wait to do so until you have installed SAS Web Report Studio 3.1 in the production environment. See page 39 for more information.

SAS Add-in for Microsoft Office: Since SAS Add-in for Microsoft Office is running as part of Microsoft Excel, you cannot run two versions of the application on the same machine. SAS recommends performing a production install, overwriting the older deployment and migrating Microsoft Office documents as they are opened. See page 47 for more information.

SAS Web OLAP Viewer for .NET: You have the option of performing a production install which replaces your existing 1.2 version with version 1.3, or you can perform a staged install and temporarily maintain separate applications of both versions. If you choose to maintain separate applications, you can do so in a separate mid-tier or in the same mid-tier. SAS recommends using a staged install approach on separate mid-tier servers for sites wishing to test and verify the 1.3 version prior to replacing their production version. See page 49 for more information.

SAS 9.1.3 Service Pack 4: You must apply the service pack before updating the final pieces of software. See page 51 for more information. Note that applying the service pack may require products that have not been upgraded to be redeployed.

SAS Foundation Services and SAS Management Console: SAS Foundation Services 1.4 includes a BI Manager plug-in for SAS Management Console, which replaces the Business Report Manager plug-in from earlier versions of SAS Query and Reporting Services. In addition, SAS Management Console requires some manual configuration after applying SAS Service Pack 4. See page 53 for more information.

Note about Xythos

If your original installation included Xythos WebFile Server, you may want to upgrade to a newer version. The Xythos upgrade media is available by contacting your SAS representative.

High Level Considerations

The following is a list of high-level issues that should be taken into account before performing the upgrade.

- Carefully review the compatibility chart below. Ensure that all personnel involved in the validation effort are familiar with its provisions. Changes to production reports and information maps may render them inoperable in the production environment. In the following table, a checkmark indicates they are supported and an X indicates they are not supported.

Product	Version	Information Maps *from Information Map Studio*		SAS Reports *from SAS Web Report Studio*		SAS Reports *from SAS Web OLAP Viewer for Java*	
		2.1	3.1	2.1	3.1	2.1	3.1
SAS Web Report Studio	**2.1**	✓	×	✓	×	✓	×
	3.1	✓	✓	✓	✓	✓	✓
SAS Web Report Viewer	**2.1**			✓	×	✓	×
	3.1			✓	✓	✓	✓
SAS Web OLAP Viewer for Java	**2.1**	✓	×				
	3.1	✓	✓				

- The Help documentation is not required to validate the upgrade.
- This document describes the individual upgrade for each client. SAS does not recommend upgrading multiple products simultaneously by using the SAS Software Navigator with a planned install and the SAS Configuration Wizard. The approach outlined in this document should be followed.

- If you require mount commands for using CD media on UNIX platforms, those mount commands can be found at http://support.sas.com/documentation/installcenter/common/91/ts1m3/softwarenav_user.pdf#page=11.

The Upgrade Procedure

The upgrade consists of the following steps. The rest of the document describes the process in detail.

1. Back up your repository and configuration directory before proceeding with any steps of the upgrade. For backing up your metadata repository, refer to http://support.sas.com/onlinedoc/913/docMainpage.jsp?_topic=bicag.hlp/a003109784.htm.

2. SAS Web Report Studio reports are located wherever you have specified for your content server. This location may be a database or a file directory. Back up these areas, particularly if you intend to run a side-by-side application and users have the ability to overwrite existing production reports. Backing them up will prevent changes to production reports that may render them inoperable in the production environment.

   Each SAS Web Report Studio report is associated with a metadata object stored in the metadata repository and a report definition file stored in the content server. The report metadata will be backed up via step 1 above. The report definition file (an XML file with the suffix .srx) exists either on a WebDAV server (such as Xythos) or in a file system. The contents of these WebDAV folders or file system folders need to be backed up.

   Alternatively, if you already have SAS BI Manager installed, you may use it to create a back-up of your reports. You can use SAS BI Manager to export your reports to a SAS package file (this will capture both the report content and metadata). These reports can then be restored to your environment later on, if necessary, by importing them via SAS BI Manager.

3. Complete any third party software upgrades required with the new release as noted on the Third Party Software Download page, located at http://support.sas.com/thirdpartysupport. It is especially important to verify that you have the latest required Java Runtime Environment (JRE) listed on that page, including recognizing when products from this upgrade kit are specifically called out on the Third Party Software Download page. Xythos WebFile Server is not a required upgrade and its users should see the "Note about Xythos" above.

4. Uninstall the existing clients and install the newer version of them according to their chapters below (specifically SAS Information Map Studio, SAS Query &Reporting Services, SAS Web OLAP Viewer for Java, SAS Web Report Studio, and SAS Web Report Viewer) .There are several options covered for dealing with your existing clients and new clients, depending on whether you want to immediately update your production environment or whether you want to perform a staged install that would allow you to run the existing clients at the same time as the new clients. **Be sure to perform the installs in the order they appear in this document.**

   Note: *Do not attempt to add the enclosed media to any existing SAS Software Depot; instead, you can either install directly from the CDs or copy the CDs to a location of your choosing and install them from there.*

   SAS Web OLAP Viewer for Java and SAS Web Report Studio have help files in a common area. In order to have the correct help files for these products during testing, you must upgrade both applications using the same method (production, single mid-tier, or dual mid-tier) at the same time, including the pre-installation steps for SAS Web OLAP Viewer for Java described in Chapter 5. If a staged installation is performed, you must complete the steps for each application in chapters 4 and 5 to configure the applications to look for the updated help files. You must also complete the steps in chapter 6 to configure and deploy the updated help files. Use the same name for the updated help files consistently in all three chapters. Unless all these steps are completed, the applications may open the wrong version of the help files or the help files may be unavailable.

5. Apply SAS Service Pack 4 to your entire environment. Note that applying the service pack may require products that have not been upgraded to be redeployed.
6. Evaluate and test the environment, including reviewing the compatibility chart.

Chapter 2 — SAS Information Map Studio 3.1

This chapter describes the methods for upgrading SAS Information Map Studio, found on the **SAS BI Metadata Management Clients** CD.

Note that for staged installs, both versions of SAS Information Map Studio will have access to the same information maps. Version 3.1 supports information maps created or edited by both versions 2.1 and 3.1 However, version 2.1 only supports information maps created or edited by version 2.1—it does not support information maps created or edited by version 3.1. It is important to communicate this constraint to all SAS Information Map Studio users.

You may perform the installation in one of three ways:

- production install, where you replace SAS Information Map Studio 2.1 with SAS Information Map Studio 3.1 (see below),
- dual client tier staged install, where you maintain both SAS Information Map Studio 2.1 and 3.1 for a testing period with SAS Information Map Studio 3.1 on a non-production client until you are ready to take it production (see page 6), or
- single client tier staged install, where you maintain both SAS Information Map Studio 2.1 and 3.1 for a testing period with both versions on the same production machine (see page 6).

Production Install

This process involves removing SAS Information Map Studio 2.1, and then installing SAS Information Map Studio 3.1. To perform a production install, follow the steps below.

1. Uninstall SAS Information Map Studio 2.1 from all client machines using the **Add or Remove Programs** utility in the Windows Control Panel.
2. Install SAS Information Map Studio 3.1 on the same client machines as above. The installation instructions can be found by inserting the **SAS BI Metadata Management Clients** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Information Map Studio** from the left-hand pane of the window that opens.

Permission Changes for Information Maps

With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission.

Setting the permissions can be performed either at the information map level or at the folder level. You may find that setting permission at the folder level is the most manageable approach. But for row-level security and other situations where the security settings must be specifically customized, setting permission on the information map itself might be required.

You probably will not have any Read permission rules applied to information maps or their folders prior to this release of the BI applications. In such a case, the easiest procedure is to perform a single permissions change. Open the SAS Management Console and then open **Authorization Manager→Resource Management→By Application→BIP Service**. Navigate to the highest-level folder that contains all your information maps, such as /BIP Tree/ReportStudio/Maps. Right-click on that folder and select **Properties**. In the **Properties** dialog, select the **Authorization** tab. On that tab, select or add the group to which you wish to give Read permissions (such as PUBLIC or SASUSERS). If the **Grant** column's checkbox for **Read** is not checked, then check it. If it is checked already, it is either already directly set (indicated by a light background around the **Grant** checkbox) or is being inherited (indicated by a darker background). Click **OK** to save your changes and exit.

Once this section is complete, you have installed SAS Information Map Studio 3.1 and should go on to Chapter 3.

Staged Install

If you want to maintain both SAS Information Map Studio 2.1 and 3.1 for a testing period before you make SAS Information Map Studio 3.1 your production version, you can perform a staged install using either a separate test client tier or the same production client tier.

Dual Client Tier Staged Install

If you choose to maintain your test environment in a separate client tier, simply install SAS Information Map Studio 3.1 on a separate, test client machine.

Building the test environment

To build the test environment for a dual mid-tier staged install, install SAS Information Map Studio 3.1 on the test client machine(s). The installation instructions can be found by inserting the **SAS BI Metadata Management Clients** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Information Map Studio** from the left-hand pane of the window that opens.

Permission changes for Information Maps

With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the “Permission Changes for Information Maps” section on page 5 for more information.

Updating the production environment

When you are satisfied with your testing and are ready to install SAS Information Map Studio 3.1 on your production client tier, perform the production install process described in the “Production Install” section of this chapter.

Alternatively, you can create a new production environment by redirecting users to the test client tier and removing SAS Information Map Studio 2.1 from the original client tier—in effect the test client tier becomes production. To remove SAS Information Map Studio 2.1, uninstall SAS Information Map Studio 2.1 from all client machines using the **Add or Remove Programs** utility in the Windows Control Panel.

Single Client Tier Staged Install

If you choose to maintain your test environment in the same client tier as production, simply install SAS Information Map Studio 3.1 on the same client tier.

Building the test environment

To build the test environment for a single client tier staged install, install SAS Information Map Studio 3.1 on the production client machine(s). The installation instructions can be found by inserting the **SAS BI Metadata Management Clients** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Information Map Studio** from the left-hand pane of the window that opens.

Permission changes for Information Maps

With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the “Permission Changes for Information Maps” section on page 5 for more information.

Updating the production environment

When you are satisfied with your testing and are ready to use SAS Information Map Studio 3.1 for production purposes, remove SAS Information Map Studio 2.1 from the production client tier. To remove SAS Information Map Studio 2.1, uninstall SAS Information Map Studio 2.1 from all client machines using the **Add or Remove Programs** utility in the Windows Control Panel.

Chapter 3 — SAS Query & Reporting Services 3.1

This chapter describes how to upgrade SAS Query & Reporting Services, found on the **SAS BI Metadata Management Clients** CD. This product provides a plug-in to the SAS Management Console, as well as tools for scheduling and batch reporting for SAS Web Report Studio. In addition, upgrading to SAS Query & Reporting Services 3.1 provides a new feature, report distribution. This feature allows users to distribute batch reports to designated recipients by email or channel.

Currently you should have SAS Query & Reporting Services 2.1 installed on both your client systems and the server tier. On the client systems, SAS Query & Reporting Services provides a plug-in to SAS Management Console and is not a stand-alone application; therefore a staged installation is currently not supported. On the server, where Query and Reporting Services provides scheduling, report distribution, and batch reporting tools for SAS Web Report Studio, you may choose to perform a staged installation or a production upgrade.

If scheduling has not or will not be enabled, then SAS Query and Reporting Services may be considered a client on all systems. Conversely, if you are upgrading a single-machine environment and will be configuring report scheduling, use only the instructions for the server tier system.

With this release of SAS Query & Reporting Services, the version of Java that is required differs for each component. For the client tier systems, SAS Query & Reporting Services will use the same Java Runtime Environment (JRE) as the SAS Management Console. You should have already confirmed this product is installed using the information here:

http://support.sas.com/documentation/configuration/thirdpartysupport/v913sp4/thirdparty913sp4.html#jre_client

On the server tier system, a JDK is required. See the following table:

http://support.sas.com/documentation/configuration/thirdpartysupport/v913sp4/thirdparty913sp4.html#jdk

Installation on the Client Tier Systems

On client tier systems, only a production installation is supported.

Note: *If you are upgrading a single-machine environment and will be configuring report scheduling, skip this section, and follow the steps in "Installation on the Server System," beginning on page 10.*

Production Install

Performing a production install will immediately replace SAS Query & Reporting Services 2.1 with SAS Query & Reporting Services 3.1. This process involves removing SAS Query & Reporting Services 2.1, and then installing SAS Query & Reporting Services 3.1.

To perform a production install, follow the steps below.

1. Uninstall SAS Query & Reporting Services 2.1 from all client and mid-tier machines on which SAS Management Console is installed. **Do not uninstall SAS Query & Reporting Services 2.1 from any server tier machines**.

   The uninstall wizard will display a prompt window every time it attempts to remove a file that has been modified since installation. You may respond **No to All**.

   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Query & Reporting Services 2.1.
   - For UNIX platforms, run the uninstall executable found in the `_uninstBIQR` subfolder in the SAS Query & Reporting Services 2.1 installation location. Run the executable from

one level above the root installation directory. For example, run the file `/usr/local/SAS/SASQueryandReportingServices/2.1/_uninstBIQR/UninstBIQR` from the location `/usr/local/SAS/SASQueryandReportingServices`. For example,

```
cd /usr/local/SAS/SASQueryandReportingServices
./2.1/_uninstBIQR/UninstBIQR
```

2. Remove the Business Report Manager plug-in. This has been replaced by the BI Manager plug-in which will be installed with SAS Foundation Services 1.3 (described in Chapter 13 below). To remove the Business Report Manager plug-in, perform the following steps.
   a. Locate the plug-ins folder for SAS Management Console 9.1 (for example, `C:\Program Files\SAS\SASManagementConsole\9.1\plugins`).
   b. Within the plugins folder, locate the file named `sas.smc.businessreportmgr.jar`. Delete this file.
3. Install SAS Query & Reporting Services 3.1 on the same machines as above. The installation instructions can be found by inserting the **SAS BI Metadata Management Clients** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Query and Reporting Services** from the left-hand pane of the window that opens.

Installation on the Server System

You have the option of performing a production install which replaces your existing 2.1 version with version 3.1 (see below), or you can perform a staged install and temporarily maintain separate applications of both versions. Both versions may be on separate servers (see page 11) or on the same server (see page 13).

Depending on how your environment is configured, SAS Query & Reporting Services 2.1 may be installed on more than one machine in your server tier. You will need to upgrade SAS Query & Reporting Services on all these machines. However, the steps for “Enabling the Scheduling and Distribution of Reports” on page 15 only need to be performed once for the server tier.

Note that if you did not enable report scheduling in SAS Web Report Studio 2.1 or did not have any scheduled reports, then you may disregard the references and steps involving scheduling throughout this chapter.

Production Install

If you enabled report scheduling in SAS Web Report Studio 2.1 and have scheduled reports, SAS recommends that you first reschedule these reports using a new Java Batch Server before removing SAS Query & Reporting Services 2.1 from your environment. This will involve having both SAS Query & Reporting Services 2.1 and 3.1 on your production environment, but will enable the scheduled reports to continue running until all the steps are complete. To perform a production install, follow perform all the steps in the “Single Tier Staged Install”, “Enabling the Scheduling and Distribution of Reports”, and “Updating the Production Environment” sections—in this order—starting on page 12.

Otherwise, if you either did not enable report scheduling in SAS Web Report Studio 2.1 or do not have any scheduled reports, performing a production install will immediately replace SAS Query & Reporting Services 2.1 with SAS Query & Reporting Services 3.1. This process involves removing SAS Query & Reporting Services 2.1, and then installing SAS Query & Reporting Services 3.1.

To perform a production install when there are no scheduled reports, follow the steps below.

1. Uninstall SAS Query & Reporting Services 2.1 from the server machine.

   The uninstall wizard will display a prompt window every time it attempts to remove a file that has been modified since installation. You may respond **Yes to All**.

a. On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Query & Reporting Services 2.1.
b. For UNIX platforms, run the uninstall executable found in the `_uninstBIQR` subfolder in the SAS Query & Reporting Services 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASQueryandReportingServices/2.1/_uninstBIQR/UninstBIQR` from the location `/usr/local/SAS/SASQueryandReportingServices`. For example,

```
cd /usr/local/SAS/SASQueryandReportingServices
./2.1/_uninstBIQR/UninstBIQR
```

2. Remove the Business Report Manager plug-in. This has been replaced by the BI Manager plug-in which will be installed with SAS Foundation Services 1.3 (described in Chapter 13 below). To remove the Business Report Manager plug-in, perform the following steps.
   a. Locate the plug-ins folder for SAS Management Console 9.1 (for example, `C:\Program Files\SAS\SASManagementConsole\9.1\plugins`).
   b. Within the plugins folder, locate the file named `sas.smc.businessreportmgr.jar`. Delete this file.
3. Install SAS Query & Reporting Services 3.1 on the same machine. The installation instructions can be found by inserting the **SAS BI Metadata Management Clients** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Query and Reporting Services** from the left-hand pane of the window that opens. By default, the installation folder is `!SASHOME/SASQueryandReportingServices/3.1`.
4. During installation you will be prompted to enable the query cache and distribution libraries. Use these same library names when installing SAS Web Report Studio and SAS Web Report Viewer in chapters 6 and 7 of this document. Note that distribution is an optional feature.
5. After completing the installation, refer to the section "Enabling the Scheduling and Distribution of Reports" on page 15 to complete the configuration for these features, if you desire to enable these features.

Dual Tier Staged Install

If you already use or you plan to use report scheduling, then the scheduling component of SAS Query & Reporting Services must be installed on a system from which the SAS Object Spawner and SAS Workspace Server can be run.

This component may be installed on a different system than the Platform Job Scheduler, as long as the location is shared or networked so that Job Scheduler can find and run the SAS Query & Reporting Services executables.

To simplify the installation, perform a single-tier staged install so that SAS Query & Reporting Services ~~is~~ on the same system as the Platform Job Scheduler. See the section below, "Single Tier Staged Install", for instructions to install this version on the same system as the previous version configured for scheduling.

If Platform Job Scheduler is available on an additional system, you may perform a dual tier staged install by installing and configuring SAS Query & Reporting Services on this other system.

Building the test environment

To build the test environment for a dual server staged install, perform the steps below on the test server.

1. The installation instructions can be found by inserting the **SAS BI Metadata Management Clients** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Query and Reporting Services** from the left-hand pane of the window that opens. By default, the installation folder is `!SASHOME/SASQueryandReportingServices/3.1`.

2. During installation you will be prompted to enable the query cache and distribution libraries. Use the same library names when installing SAS Web Report Studio and SAS Web Report Viewer in chapters 6 and 7 of this document.
3. After completing the installation, refer to the section "Enabling the Scheduling and Distribution of Reports" on page 15 to complete the configuration for these features.

Updating the production environment

When you are satisfied with your testing and are ready to install SAS Query & Reporting Services 3.1 on your production server, complete the following steps. Reports that are created for Web Report Studio 3.1 cannot be displayed in Web Report Studio 2.1, so do not complete these steps until all testing is complete and you are ready to uninstall SAS Web Report Studio 2.1.

Before uninstalling SAS Query & Reporting Services 2.1, convert any existing jobs that were scheduled with SAS Query & Reporting Services 2.1 to SAS Query & Reporting Services 3.1. The command parameters required for scheduling with SAS Web Report Studio 3.1 are different than those required by SAS Web Report Studio 2.1. You must reschedule each job so that it uses the Java Batch Server and correct parameters for SAS Query & Reporting Services 3.1.

If you have many jobs that need to be rescheduled, you can quickly reschedule them all by simply editing the command for the Java Batch Server used by Web Report Studio 2.1. However, as time permits, each report should be rescheduled from within SAS Web Report Studio 3.1 so that the command parameters are updated.

Use the following instructions to reschedule each scheduled report. These steps can be performed in SAS Web Report Studio 3.1 by the report author.

1. Log into SAS Web Report Studio 3.1.
2. Click **Manage** in the upper right corner of the window.
3. For each report to be rescheduled, click on the icon in the Actions column, and then select **Schedule**.
4. The current scheduling parameters are displayed. Change the date or time as needed so the scheduled time is in the future.
5. Click **Finish**.

After all the jobs have been rescheduled, use the SAS Management Console to delete the BRM Java Batch Server associated with SAS Web Report Studio 2.1.

1. Log in to the SAS Management Console.
2. Expand the Server Manager and the Logical SAS Java Batch Server.
3. Select the first server component that is listed.
4. From the menu select **File**, then **Properties**.
5. Click the **Options** tab.
6. Confirm the Command Line references the "2.1" subdirectory of the `SASWebReportStudio` installation folder. If so, this is the server to delete. If not, close the dialog, and select the second server component, then repeat steps 4-6.
7. Click **Cancel** to close the dialog.
8. Click **Edit**, then **Delete**.
9. You will be warned that the server will be permanently deleted. Click **OK**.

After you have confirmed the scheduled reports can execute successfully, you can uninstall SAS Query & Reporting Services 2.1 from the server.

- On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Query & Reporting Services 2.1.
- For UNIX platforms, run the uninstall executable found in the `_uninstBIQR` subfolder in the SAS Query & Reporting Services 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASQueryandReportingServices/2.1/_uninstBIQR/UninstBIQR` from the location `/usr/local/SAS/SASQueryandReportingServices`. For example,

```
cd /usr/local/SAS/SASQueryandReportingServices
./2.1/_uninstBIQR/UninstBIQR
```

Next remove the Business Report Manager plug-in. This has been replaced by the BI Manager plug-in which will be installed with SAS Foundation Services 1.3. (Installation of SAS Foundation Services 1.3 is described in Chapter 13.) To remove the Business Report Manager plug-in, perform the steps below.

1. Locate the plug-ins folder for SAS Management Console 9.1 (for example, `C:\Program Files\SAS\SASManagementConsole\9.1\plugins`).
2. Within the plugins folder, locate the file named `sas.smc.businessreportmgr.jar`. Delete this file.

Optionally, if you performed a side-by-side installation, you can edit the `LocalProperties.xml` file located in the `SASWebReportStudio` installation folder to remove the following elements:

```
wrs.scheduling.batchServerComponentName
wrs.scheduling.schedulingServerComponentName
```

Single Tier Staged Install

SAS Query & Reporting Services can be installed on the same system in a side-by-side configuration with the previous installation that was configured for scheduling.

Building the test environment

To build the test environment for a single server staged install, perform the steps below on the production server.

1. The installation instructions can be found by inserting the **SAS BI Metadata Management Clients** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Query and Reporting Services** from the left-hand pane of the window that opens. By default, the installation folder is `!SASHOME/SASQueryandReportingServices/3.1`.
2. During installation you will be prompted to enable the query cache and distribution libraries. Use the same library names when installing SAS Web Report Studio and SAS Web Report Viewer in chapters 6 and 7 of this document.
3. After completing the installation, refer to the section “Enabling the Scheduling and Distribution of Reports” on page 15 to complete the configuration for these features.

Updating the production environment

When you are satisfied with your testing and are ready to install SAS Query & Reporting Services 3.1 on your production server, complete the following steps. Reports that are created for Web Report Studio 3.1 cannot be displayed in Web Report Studio 2.1, so do not complete these steps until all testing is complete and you are ready to uninstall SAS Web Report Studio 2.1.

Before uninstalling SAS Query & Reporting Services 2.1, convert any existing jobs that were scheduled with SAS Query & Reporting Services 2.1 to SAS Query & Reporting Services 3.1. The command parameters required for scheduling with SAS Web Report Studio 3.1 are different than those required by SAS Web Report Studio 2.1. You must reschedule each job so that it uses the Java Batch Server and correct parameters for SAS Query & Reporting Services 3.1.

If you have many jobs that need to be rescheduled, you can quickly reschedule them all by simply editing the command for the Java Batch Server used by Web Report Studio 2.1. However, as time permits, each report should be rescheduled from within SAS Web Report Studio 3.1 so that the command parameters are updated.

Use the following instructions to reschedule each scheduled report. These steps can be performed in SAS Web Report Studio 3.1 by the report author.

1. Log into SAS Web Report Studio 3.1.
2. Click **Manage** in the upper right corner of the window.
3. For each report to be rescheduled, click on the icon in the Actions column, and then select **Schedule**.
4. The current scheduling parameters are displayed. Change the date or time as needed so the scheduled time is in the future.
5. Click **Finish**.

After all the jobs have been rescheduled, use the SAS Management Console to delete the BRM Java Batch Server associated with SAS Web Report Studio 2.1.

1. Log in to the SAS Management Console.
2. Expand the Server Manager and the Logical SAS Java Batch Server.
3. Select the first server component that is listed.
4. From the menu select **File**, then **Properties**.
5. Click the **Options** tab.
6. Confirm the Command Line references the "2.1" subdirectory of the `SASWebReportStudio` installation folder. If so, this is the server to delete. If not, close the dialog, and select the second server component, then repeat steps 4-6.
7. Click **Cancel** to close the dialog.
8. Click **Edit**, then **Delete**.
9. You will be warned that the server will be permanently deleted. Click **OK**.

After you have confirmed the scheduled reports can execute successfully, you can uninstall SAS Query & Reporting Services 2.1 from the server.

- On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Query & Reporting Services 2.1.
- For UNIX platforms, run the uninstall executable found in the `_uninstBIQR` subfolder in the SAS Query & Reporting Services 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASQueryandReportingServices/2.1/_uninstBIQR/UninstBIQR` from the location `/usr/local/SAS/SASQueryandReportingServices`. For example,

```
cd /usr/local/SAS/SASQueryandReportingServices
./2.1/_uninstBIQR/UninstBIQR
```

Next remove the Business Report Manager plug-in. This has been replaced by the BI Manager plug-in which will be installed with SAS Foundation Services 1.3. (Installation of SAS Foundation Services 1.3 is described in Chapter 13.) To remove the Business Report Manager plug-in, perform the steps below.

1. Locate the plug-ins folder for SAS Management Console 9.1 (for example, `C:\Program Files\SAS\SASManagementConsole\9.1\plugins`).
2. Within the plugins folder, locate the file named `sas.smc.businessreportmgr.jar`. Delete this file.

Optionally, if you performed a side-by-side installation, you can edit the `LocalProperties.xml` file located in the `SASWebReportStudio` installation folder to remove the following elements:

```
wrs.scheduling.batchServerComponentName
wrs.scheduling.schedulingServerComponentName
```

Enabling the Scheduling and Distribution of Reports

The enabling of these features is optional. These features are not required for SAS Web Report Studio to function, so you may complete these steps later if desired.

The *SAS 9.1.3 Intelligence Platform: Administration Guide, Third Edition* (located at `http://support.sas.com/913administration`) contains a chapter called "SAS Scheduling". You may wish to review the "Overview of SAS Scheduling" and "Scheduling Architecture" before beginning the steps documented here.

Use the section "Enabling the Scheduling of Reports" of the Administration Guide to enable the scheduling of reports. The steps you complete will vary, depending on whether report scheduling was enabled for your previous installation of SAS Web Report Studio. Complete the steps in one of the following sections to enable this feature. The steps listed here refer to sections in the *SAS 9.1.3 Intelligence Platform: Administration Guide, Third Edition* unless otherwise noted.

- If you had not previously enabled report scheduling in SAS Web Report Studio 2.1, please use the steps in this section:
  1. Make sure the installation and setup of Platform Computing has been completed, according to the steps in the *SAS® 9.1.3 Intelligence Platform Installation Guide*, located at `http://support.sas.com/documentation/configuration/biig.pdf`.
  2. Make sure the users listed in Table 20.2, "User Ids Needed for Report Scheduling", have been created correctly.
  3. Skip the section "Configure SAS Web Report Studio"; you will complete these steps in chapter 5 of this document when installing SAS Web Report Studio.
  4. On the system, create a subdirectory, `logs`, under the `SASQueryandReportServices/3.1` installation folder. Grant Write access on this folder to users who will schedule reports and to the LSFUSER.

  Note: *The remainder of the steps in this section, "Configure the Output Generation Tool", were completed during the installation of SAS Query and Reporting Services 3.1.*

  5. If you run Platform Job Schedule on a Windows system, make sure you have registered the LSFUSER account as described in step 2 of "Configure the Scheduling Server."
  6. Create the Scheduling Admins Group as described in "Define a Scheduling Admins Group in the Metadata." You will use the SAS Management Console to complete this step and steps 7, 8 and 9.
  7. Create metadata for the LSF Scheduling Server, as described in the *SAS Management Console User's Guide, located at* `http://support.sas.com/onlinedoc/913/getDoc/en/mcug.hlp/a002688103.htm#a002688112.`
  8. All users who schedule reports must have a userid and password defined in the metadata. See the section "Update the Logins for Users Who Will Schedule Reports" for more information.
  9. Create a Java Batch Server using the steps in the section "Define a Java Batch Server."
  10. Skip the section entitled "Define a Java Batch Server to Run SAS Web Report Studio 2.1 and 3.1 Reports."
  11. Review the section, "Channel-Specific Tasks."

- If you have previously configured SAS Web Report Studio 2.1 to schedule reports, complete the steps in this section:
  1. On the system, create a subdirectory, `logs`, under the `SASQueryandReportServices/3.1` installation folder. Grant Write access on this folder to users who will schedule reports and to the LSFUSER.

  Note: *The remainder of the steps in this section, "Configure the Output Generation Tool", were completed during the installation of SAS Query and Reporting Services 3.1.*

  2. Confirm the Scheduling Admins group exists, as described in "Define a Scheduling Admins Group in the Metadata." You will use the SAS Management Console to complete this step and steps 3 and 4.
  3. Confirm that all users who schedule reports have a userid and password defined in the metadata. See the section "Update the Logins for Users Who Will Schedule Reports" for more information.
  4. To define a Java Batch Server, begin with the following steps:
     a. Click on the existing Logical SAS Java Batch Server.
     b. Click **Actions**, then **Add Server**.
     c. Continue with step 4 of "Define a Java Batch Server", specifying a different name than the existing server component.

     Note: *If you have an existing Java Batch Server defined for a previous release of Web Report Studio, do not edit the commands for this existing server. Instead, define a new Java Batch Server using the instructions in this section.*

  5. Complete the remaining instructions as documented in the section, "Define a Java Batch Server".
  6. The steps in "Define a Java Batch Server to Run SAS Web Report Studio 2.1 and 3.1 Reports" must be completed after SAS Web Report Studio 3.1 is installed using chapter 7 of this document.

The *SAS 9.1.3 Intelligence Platform: Administration Guide, Third Edition* also contains a section about report Distribution, "Scheduling and Distributing Pre-generated Reports" in the "Administering Web Report Studio" chapter in Part 4.

1. If you did not create the library for recipient lists during the installation of SAS Query & Reporting Services, complete it now, following the instructions in the section "Create a Library for Recipient Lists." Otherwise, you can skip this step.
2. Recipient lists for distribution are created after users have defined reports, so they must be completed after SAS Web Report Studio 3.1 is installed using chapter 7 of this document. Use the section "Creating a Recipient List for Report Distribution" from the *Administration Guide* to create these lists.

Once this section is complete, you have installed SAS Query & Reporting Services 3.1 and should go on to Chapter 4.

Chapter 4 — SAS Web OLAP Viewer for Java 3.1

This chapter describes the methods for upgrading SAS Web OLAP Viewer for Java 3.1, found on the **SAS Web OLAP Viewer for Java** CD.

SAS Web OLAP Viewer for Java and SAS Web Report Studio have help files in a common area. In order to have the correct help files for them during testing, you must upgrade both applications using the same method (production, single mid-tier, or dual mid-tier) at the same time.

You may perform the installation in one of three ways:

- production install, where you replace SAS Web OLAP Viewer for Java 2.1 with SAS Web OLAP Viewer for Java 3.1 (see below),
- dual client tier staged install, where you maintain both SAS Web OLAP Viewer for Java 2.1 and 3.1 for a testing period with SAS Web OLAP Viewer for Java 3.1 on a non-production client until you are ready to take it production (see page 18), or
- single client tier staged install, where you maintain both SAS Web OLAP Viewer for Java 2.1 and 3.1 for a testing period with both versions on the same production machine (see page 19).

Note that for staged installs, both versions of SAS Web OLAP Viewer for Java will have access to the same information maps and bookmarks. It is important to communicate the following constraints regarding use of information maps and bookmarks to all SAS Web OLAP Viewer for Java 2.1 and 3.1 users:

- SAS Web OLAP Viewer for Java 3.1 supports information maps created or edited by SAS Information Map Studio 3.1. However, SAS Web OLAP Viewer for Java 2.1 only supports information maps created or edited by SAS Information Map Studio 2.1—not 3.1.
- SAS Web OLAP Viewer for Java 3.1 supports bookmarks created by both versions 2.1 and 3.1. However, version 2.1 only supports bookmarks created by version 2.1—it does not support bookmarks created by version 3.1.

Additionally for staged installs, there is a constraint regarding reports that affects both SAS Web OLAP Viewer for Java users and SAS Web Report Studio users. SAS Web OLAP Viewer for Java 3.1 has the ability to save reports. These reports can be viewed only by SAS Web Report Studio 3.1. SAS Web Report Studio 2.1 does not support reports created by SAS Web OLAP Viewer for Java 3.1.

If you choose to perform a staged install, it is important not to update the information maps during the testing period. Doing so would make those information maps unusable by SAS Information Map Studio 2.1 and SAS Web OLAP Viewer for Java 2.1. To test SAS Web OLAP Viewer for Java 3.1 in a single mid-tier staged install environment, you will need to create new maps using SAS Information Map Studio 3.1.

Production Install

Performing a production install will immediately replace SAS Web OLAP Viewer for Java 2.1 with SAS Web OLAP Viewer for Java 3.1. This process involves removing SAS Web OLAP Viewer for Java 2.1, and then installing, configuring and deploying SAS Web OLAP Viewer for Java 3.1.

To perform a production install, follow the steps below.

1. Undeploy and unconfigure SAS Web OLAP Viewer for Java 2.1 by following the steps found at the end of this section (see “Undeploy and Unconfigure SAS Web OLAP Viewer for Java” on page 25).
2. Uninstall SAS Web OLAP Viewer for Java 2.1:
    - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web OLAP Viewer for Java.

- For UNIX platforms, run the uninstall executable found in the `_uninstWOVJ` subfolder in the SAS Web OLAP Viewer for Java 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebOlapViewerforJava/2.1/_uninstWOVJ/UninstWOVJ` from the location `/usr/local/SAS/SASWebOlapViewerforJava`. For example,

```
cd /usr/local/SAS/SASWebOlapViewerforJava
./2.1/_uninstWOVJ/UninstWOVJ
```

3. Remove foundation services using the SAS Management Console. In the SAS Management Console, select the Foundation Services Manager. Right-click on **SAS Web OLAP Viewer Local Services** and select **Delete**.
4. Install SAS Web OLAP Viewer for Java 3.1. The installation instructions can be found by inserting the **SAS Web OLAP Viewer for Java** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web OLAP Viewer for Java** from the left-hand pane of the window that opens.
5. Configure and deploy SAS Web OLAP Viewer for Java 3.1 by following instructions in the `config.pdf` file found in the SAS Web OLAP Viewer for Java 3.1 installation folder.
6. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

Once this section is complete, you have installed SAS Web OLAP Viewer for Java 3.1 and should go on to Chapter 5.

Staged Install

If you want to maintain both SAS Web OLAP Viewer 2.1 and 3.1 for a testing period before you make SAS Web OLAP Viewer for Java 3.1 your production version, you can perform a staged install using either a separate test mid-tier or the same production mid-tier.

Dual Mid-Tier Staged Install

If you choose to maintain your test environment in a separate mid-tier, you should install, configure, and deploy SAS Web OLAP Viewer for Java 3.1 on a separate, test mid-tier. SAS recommends that the test mid-tier be on a separate server machine than the production mid-tier.

Building the test environment

To build the test environment for a dual mid-tier staged install, perform the steps below on the test mid-tier.

1. Install SAS Web OLAP Viewer for Java 3.1.
2. Remove foundation services using the SAS Management Console. Under the SAS Management Console, select the Foundation Services Manager plug-in. Right-click on **SAS Web OLAP Viewer Local Services** and select **Delete**.
3. Configure and deploy SAS Web OLAP Viewer for Java 3.1 manually by following instructions in the `config.pdf` file found in the SAS Web OLAP Viewer for Java 3.1 installation folder. If SAS Management Console is not installed on the machine you are working on, you will need to copy the `sas_services_webolapviewer_local_omr.xml` file to a machine where SAS Management Console is installed to complete the steps in the `config.pdf`.
4. Deploy the SAS Web OLAP Viewer for Java 3.1 help files. Refer to the complete instructions for **Deploying the SASDoc.war File** in

http://support.sas.com/documentation/installcenter/misc/webdoc913-install.pdf.

5. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

Updating the production environment

When you are satisfied with your testing and are ready to install SAS Web OLAP Viewer for Java 3.1 on your production mid-tier, perform the production install process described previously (see the "Production Install" section of this chapter above).

On the second mid-tier, remove SAS Web OLAP Viewer for Java 3.1 using the steps below:

1. Undeploy and unconfigure SAS Web OLAP Viewer for Java 2.1 by following the steps found at the end of this chapter (see "Undeploy and Unconfigure SAS Web OLAP Viewer for Java" on page 25). When following the steps, keep in mind that you are undeploying version 2.1, not version 3.1.
2. Uninstall SAS Web OLAP Viewer for Java 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web OLAP Viewer for Java 2.1.
   - For UNIX platforms, run the uninstall executable found in the `_uninstWOVJ` subfolder in the SAS Web OLAP Viewer for Java 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebOlapViewerforJava/2.1/_uninstWOVJ/UninstWOVJ` from the location `/usr/local/SAS/SASWebOlapViewerforJava`. For example,

     ```
     cd /usr/local/SAS/SASWebOlapViewerforJava
     ./2.1/_uninstWOVJ/UninstWOVJ
     ```

Single Mid-Tier Staged Install

If you choose to maintain your test environment in the same mid-tier as production, both versions of SAS Web OLAP Viewer for Java must be deployed to separate servers and applications within the web container, as explained in the steps below. When using WebLogic or WebSphere, SAS Web OLAP Viewer for Java 2.1 and 3.1 can be run simultaneously. However, when using Tomcat, SAS recommends that only one version be run at a time because both versions are limited to using the same Java Virtual Machine (JVM) when Tomcat is the web container.

If you install SAS Web OLAP Viewer for Java 3.1 and SAS Web Report Studio 3.1 on the same mid-tier alongside the previous releases, the older help files will be replaced by the newer versions during the installation. If you wish to allow users of both versions of the applications to access to the help files appropriate for their release, you must complete the steps for each application in this chapter and chapter 5 to configure the applications to look for the updated help files. You must also complete the steps in chapter 6 to configure and deploy the updated help files. Also, be sure to use the same context root for the help files in all three chapters in order for the configuration to be successful. In this document, the name SASDocUpdate is used. The help files may be inaccurate or unavailable unless all these steps are completed.

Building the test environment

To build the test environment for a single mid-tier staged install, perform the following steps on the mid-tier.

Remove Foundation Services

1. Remove foundation services using the SAS Management Console. In SAS Management Console, expand the Foundation Services Manager.
2. Right-click on **SAS Web OLAP Viewer Local Services** and select **Delete**.
3. After these foundation services have been deleted, perform one of the following procedures, depending on the web container you are using.

Tomcat

1. Stop the Tomcat server.
2. Install SAS Web OLAP Viewer for Java 3.1. The installation instructions can be found by inserting the **SAS Web OLAP Viewer for Java** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web OLAP Viewer for Java** from the left-hand pane of the window that opens.
3. To enable the help documentation for version 3.1, complete the following steps:
   a. Locate the installation folder for SAS Web OLAP Viewer for Java, version 3.1.
   b. In the directory saswebolapviewer/WEB-INF, locate the file called `WebOLAPViewerConfig.xml`.
   c. Look for a line like this in the file:

      ```
      <Help url="/SASDoc/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```

   d. Modify this line to change *SASDoc* to *SASDocUpdate*. Do not make any other changes to this line. After the change, your new line should look similar to this:

      ```
      <Help url="/SASDocUpdate/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```

   e. Save the file `WebOLAPViewerConfig.xml`.
4. Run the `configure.bat` (Windows) or `configure.sh` (UNIX) script to create a new `SASWebOLAPViewer.war` file. This script is found in the SAS Web OLAP Viewer for Java 3.1 installation folder. The war file will be created in the same folder.
5. In the Tomcat `webapps` folder, create a new folder for SAS Web OLAP Viewer for Java 3.1 (for example, `SASWebOLAPViewer3.1`).
6. Manually explode the `SASWebOLAPViewer.war` file into the folder created in the previous step. If you use Winzip to explode the war file, ensure that the “use folder name” option is selected.
7. Copy the `SASWebOLAPViewer.xml` file from the SAS Web OLAP Viewer for Java 3.1 installation folder into the Tomcat `webapps` folder. Edit this copied file and change all references to the Tomcat webapps SAS Web OLAPViewer for Java folder; for example, change all occurrences of `SASWebOLAPViewer` to `SASWebOLAPViewer3.1`.
8. SAS Web OLAP Viewer also requires that the SAS Foundation Services be defined in metadata. Start the SAS Management Console and follow these steps for registering services:
   a. Highlight the Foundation Services Manager. Using the right mouse button, select **Import Service Deployment...** .
   b. Select **Add...**. At the file dialog, do not select the default value. Instead, browse to the `SASServicesConfig` directory under the root install directory of the SAS Web OLAP Viewer.

c. Select the `sas_services_webolapviewer_local_omr.xml` file.

d. Select **OK** to save changes.

9. Edit the `catalina.policy` file found in the Tomcat `conf` folder and make a copy of the **SAS Web OLAPViewer for Java** permissions section. In the copied section, change all references to the Tomcat `webapps` SAS Web OLAP Viewer for Java folder; for example, change all occurrences of `SASWebOLAPViewer` to `SASWebOLAPViewer3.1`.

10. Start the Tomcat server.

11. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

WebLogic

1. Install SAS Web OLAP Viewer for Java 3.1. The installation instructions can be found by inserting the **SAS Web OLAP Viewer for Java** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web OLAP Viewer for Java** from the left-hand pane of the window that opens.

2. To enable the help documentation for version 3.1, complete the following steps.

   a. Locate the installation folder for SAS Web OLAP Viewer for Java, version 3.1.

   b. In the directory saswebolapviewer/WEB-INF, locate the file called `WebOLAPViewerConfig.xml`.

   c. Look for a line like this in the file:

   ```
   <Help url="/SASDoc/nav.jsp?_scontent=wbov.hlp/config.txt"/>
   ```

   d. Modify this line to change *SASDoc* to *SASDocUpdate*. Do not make any other changes to this line. After the change, your new line should look similar to this:

   ```
   <Help url="/SASDocUpdate/nav.jsp?_scontent=wbov.hlp/config.txt"/>
   ```

   e. Save the file `WebOLAPViewerConfig.xml`.

3. Configure and deploy SAS Web OLAP Viewer for Java 3.1 by following instructions in the `config.pdf` file found in the SAS Web OLAP Viewer for Java 3.1 installation folder. Incorporate the items below when following the instructions.

   a. During configuration, you must rename the target folder (or create a new target folder entirely) such that it is different than the 2.1 target folder name (for example, `C:\bea\webapps\SASWebOLAPViewer3.1`).

   b. During deployment while using the WebLogic Server Console, you must create a new server with a unique Listen Port. Do not specify the same server already being used for SAS Web OLAP Viewer for Java 2.1.

   c. During deployment while using the WebLogic Server Console, you must deploy a new web application module with a unique Name (for example, SASWebOLAPViewer3.1). Do not specify the same web application already being used for SAS Web OLAP Viewer for Java 2.1.

4. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

WebSphere

All the applications that are deployed to an application server share the same Java Virtual Machine (JVM). This configuration limits the memory available to each application and can impact performance. If your WebSphere environment already supports multiple application servers, SAS recommends that each version of SAS Web OLAP Viewer for Java be deployed to a separate server in WebSphere. If you are limited to a single WebSphere application server and deploy both products to this server, SAS recommends that only one version be running at a time.

1. Install SAS Web OLAP Viewer for Java 3.1. The installation instructions can be found by inserting the **SAS Web OLAP Viewer for Java** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web OLAP Viewer for Java** from the left-hand pane of the window that opens.
2. To enable the help documentation for version 3.1, complete the following steps
   a. Locate the installation folder for SAS Web OLAP Viewer for Java, 3.1.
   b. In the directory saswebolapviewer/WEB-INF, locate the file called `WebOLAPViewerConfig.xml`.
   c. Look for a line like this in the file:

      ```
      <Help url="/SASDoc/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```

   d. Modify this line to change the context root from *SASDoc* to *SASDocUpdate*. Do not make any other changes to this line. After the change, your new line should look similar to this:

      ```
      <Help url="/SASDocUpdate/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```

   e. Save the file `WebOLAPViewerConfig.xml`.
3. Configure and deploy SAS Web OLAP Viewer for Java 3.1 by following instructions in the `config.pdf` file found in the SAS Web OLAP Viewer for Java 3.1 installation folder. Incorporate the items below when following the instructions.
   a. During deployment while copying the `SASWebOLAPViewer.war` file, you must first rename the war file (for example, `SASWebOLAPViewer31.war`). Then copy it to the WebSphere `installableApps` folder. Do not overwrite the existing `SASWebOLAPViewer.war` file in the WebSphere `installableApps` folder.
   b. If your WebSphere environment supports multiple application servers, then during deployment while using the WebSphere Administrative Console, create a new application server.
   c. During deployment while using the WebSphere Server Console to install a new application, you must specify a unique Name in the context Root section (for example, SASWebOLAPViewer3.1). Do not use the same Name used for SAS Web OLAP Viewer for Java 2.1. If you created a new application server because your WebSphere environment supports multiple application servers, then in Step 3 of installing a new application, specify this new server. Otherwise, in Step 3 accept the default server.
   4. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the “Permission Changes for Information Maps” section on page 5 for more information.

Updating the production environment

When you are satisfied with your testing and are ready to install SAS Web OLAP Viewer for Java 3.1 on your production mid-tier, remove SAS Web OLAP Viewer for Java 2.1 and redeploy SAS Web OLAP Viewer for Java 3.1.

To update the production environment for a single mid-tier staged install, perform one of the procedures below, depending on the web container you are using.

Tomcat

1. Undeploy and unconfigure SAS Web OLAP Viewer for Java 2.1 by following the steps found at the end of this chapter (see "Undeploy and Unconfigure SAS Web OLAP Viewer for Java" on page 25). When following the steps, keep in mind that you are undeploying version 2.1, not version 3.1.
2. Uninstall SAS Web OLAP Viewer for Java 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web OLAP Viewer for Java 2.1.
   - For UNIX platforms, run the uninstall executable found in the `_uninstWOVJ` subfolder in the SAS Web OLAP Viewer for Java 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebOlapViewerforJava/2.1/_uninstWOVJ/UninstWOVJ` from the location `/usr/local/SAS/SASWebOlapViewerforJava`. For example,

     ```
     cd /usr/local/SAS/SASWebOlapViewerforJava
     ./2.1/_uninstWOVJ/UninstWOVJ
     ```
3. Undeploy and unconfigure SAS Web OLAP Viewer for Java 3.1:
   a. When you deployed SAS Web OLAP Viewer for Java 3.1 previously, you created a unique folder in the Tomcat `webapps` folder, such as **SASWebOLAPViewer3.1**. Delete this folder and all of its contents from the Tomcat `webapps` folder.
   b. Also during the deployment, you edited the `catalina.policy` file found in the Tomcat `conf` folder. Edit this file again and remove the second section with code permissions for SAS Web OLAP Viewer for Java that you added.
4. Previously you modified the `WebOLAPViewerConfig.xml` file to enable support of the 3.1 files. To return this file to its original state, perform the following steps:
   a. Locate the installation folder for SAS Web OLAP Viewer for Java, version 3.1.
   b. In the directory saswebolapviewer/WEB-INF, locate the file called `WebOLAPViewerConfig.xml`.
   c. Look for a line like this in the file:

      ```
      <Help url="/SASDocUpdate/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```
   d. Modify this line to change *SASDocUpdate* back to *SASDoc*. Do not make any other changes to this line. After the change, your new line should look similar to this:

      ```
      <Help url="/SASDoc/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```
   e. Save the file `WebOLAPViewerConfig.xml`.
5. Update the help files in your production environment by following the instructions in Chapter 6, in the "Updating help files in the production environment" section, beginning on page 43.

6. Configure and deploy SAS Web OLAP Viewer for Java 3.1 by following instructions in the `config.pdf` file found in the SAS Web OLAP Viewer for Java 3.1 installation folder. When following these instructions, skip the steps to define Foundation Services, since the new services have already been registered.

WebLogic

1. Undeploy and unconfigure SAS Web OLAP Viewer for Java 2.1 by following the steps found at the end of this chapter (see "Undeploy and Unconfigure SAS Web OLAP Viewer for Java" on page 25). When following the steps, keep in mind that you are undeploying version 2.1, not version 3.1.
2. Uninstall SAS Web OLAP Viewer for Java 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web OLAP Viewer for Java 2.1.
   - For UNIX platforms, run the uninstall executable found in the `_uninstWOVJ` subfolder in the SAS Web OLAP Viewer for Java 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebOlapViewerforJava/2.1/_uninstWOVJ/UninstWOVJ` from the location `/usr/local/SAS/SASWebOlapViewerforJava`. For example,

     ```
     cd /usr/local/SAS/SASWebOlapViewerforJava
     ./2.1/_uninstWOVJ/UninstWOVJ
     ```
3. Undeploy and unconfigure SAS Web OLAP Viewer for Java 3.1 by following the steps found at the end of this chapter (see "Undeploy and Unconfigure SAS Web OLAP Viewer for Java" on page 25). When following the steps, keep in mind that you are undeploying version 3.1, not version 2.1.
4. Previously you modified the `WebOLAPViewerConfig.xml` file to enable support of the 3.1 files. To return this file to its original state, perform the following steps:
   a. Locate the installation folder for SAS Web OLAP Viewer for Java, version 3.1.
   b. In the directory saswebolapviewer/WEB-INF, locate the file called `WebOLAPViewerConfig.xml`.
   c. Look for a line like this in the file:

      ```
      <Help url="/SASDocUpdate/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```
   d. Modify this line to change *SASDocUpdate* back to *SASDoc*. Do not make any other changes to this line. After the change, your new line should look similar to this:

      ```
      <Help url="/SASDoc/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```
   e. Save the file `WebOLAPViewerConfig.xml`.
5. Update the help files in your production environment by following the instructions in Chapter 6, in the "Updating help files in the production environment" section, beginning on page 43.
6. Configure and deploy SAS Web OLAP Viewer for Java 3.1 by following instructions in the `config.pdf` file found in the SAS Web OLAP Viewer for Java 3.1 installation folder. When following these instructions, skip the steps to define Foundation Services, since the new services have already been registered.

WebSphere

1. Undeploy and unconfigure SAS Web OLAP Viewer for Java 2.1 by following the steps found at the end of this chapter (see "Undeploy and Unconfigure SAS Web OLAP Viewer for Java" on page 25). When following the steps, keep in mind that you are undeploying version 2.1, not version 3.1.

2. Uninstall SAS Web OLAP Viewer for Java 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web OLAP Viewer for Java 2.1.
   - For UNIX platforms, run the uninstall executable found in the `_uninstWOVJ` subfolder in the SAS Web OLAP Viewer for Java 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebOlapViewerforJava/2.1/_uninstWOVJ/UninstWOVJ` from the location `/usr/local/SAS/SASWebOlapViewerforJava`. For example,

     ```
     cd /usr/local/SAS/SASWebOlapViewerforJava
     ./2.1/_uninstWOVJ/UninstWOVJ
     ```

3. Undeploy and unconfigure SAS Web OLAP Viewer for Java 3.1 by following the steps found at the end of this chapter (see "Undeploy and Unconfigure SAS Web OLAP Viewer for Java" on page 25).When following the steps, keep in mind that you are undeploying version 3.1, not version 2.1.
4. Previously you modified the `WebOLAPViewerConfig.xml` file to enable support of the 3.1 files. To return this file to its original state, perform the following steps:
   a. Locate the installation folder for SAS Web OLAP Viewer for Java, version 3.1.
   b. In the directory saswebolapviewer/WEB-INF, locate the file called `WebOLAPViewerConfig.xml`.
   c. Look for a line like this in the file:

      ```
      <Help url="/SASDocUpdate/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```

   d. Modify this line to change *SASDocUpdate* back to *SASDoc*. Do not make any other changes to this line. After the change, your new line should look similar to this:

      ```
      <Help url="/SASDoc/nav.jsp?_scontent=wbov.hlp/config.txt"/>
      ```

   e. Save the file `WebOLAPViewerConfig.xml`.
5. Update the help files in your production environment by following the instructions in Chapter 6, in the "Updating help files in the production environment" section, beginning on page 43.
6. Configure and deploy SAS Web OLAP Viewer for Java 3.1 by following instructions in the `config.pdf` file found in the SAS Web OLAP Viewer for Java 3.1 installation folder. When following these instructions, skip the steps to define Foundation Services, since the new services have already been registered.

Undeploy and Unconfigure SAS Web OLAP Viewer for Java

This section describes how to undeploy and unconfigure SAS Web OLAP Viewer for Java in preparation of uninstalling the software.

Tomcat

1. Stop Tomcat.
2. Delete the `SASWebOLAPViewer.war` file and the `SASWebOLAPViewer` folder and all of its contents from the Tomcat `webapps` folder.
3. Delete the `SASWebOLAPViewer` folder and all of its contents from the Tomcat `work\Standalone\localhost` folder.

WebLogic

1. Open the WebLogic Server Console and log in. Click on **Web Application Modules** under the **Your Deployed Resources** middle column, under the second section **Domain Configurations**, in the right-hand pane.

2. Click on the name of the SAS Web OLAP Viewer for Java deployment (such as SASWebOLAPViewer).

3. Click on the **Deploy** tab, and then click on the **Stop** button under the **Actions** column. Wait until this step completes.

4. Click on the **Targets** tab. Deselect (remove the check from) the servers to which SAS Web OLAP Viewer for Java was deployed. Click the **Apply** button. In the left-hand pane of the WebLogic console, navigate from ***<yourdomain>*→Deployments→Web Application Modules**. Expand **Web Application Modules**, and then right-click on the name of the SAS Web OLAP Viewer for Java deployment. Choose **"Delete *<Web OLAP Viewer for Java deployment name>*..."** Choose **Yes** at the confirmation page.

5. Restart the WebLogic server to ensure that your changes take effect properly.

6. Delete the entire target folder (for example, `c:\bea\webapps\SASWebOLAPViewer`). If your original installation used a planned install, this target directory will be in your `<configuration directory>/Lev1/web/webapps` location as well as in `<configuration directory>/Lev1/web/webapps/exploded`.

7. Delete the `SASWebOLAPViewer.war` file in the SAS Web OLAP Viewer for Java installation folder.

WebSphere

1. Log on to the WebSphere Administrative Console. In the left-hand section, expand the **Applications** link. Click on **Enterprise Applications**.

2. In the right-hand pane, select (enable the check mark of) the name of the deployed SAS Web OLAP Viewer for Java application, such as **SASWebOLAPViewer_war**. Click on **Stop**.

3. Once more, select the name of the deployed SAS Web OLAP Viewer for Java application. Click on **Uninstall**.

4. In the "Message(s)" area, click on the **Save** link.

5. In the "Save to Master Configuration" box, click on the **Save** button.

6. Delete the `SASWebOLAPViewer.war` file in the WebSphere `installableApps` folder.

Chapter 5 — SAS Web Report Studio 3.1

This chapter describes how to upgrade SAS Web Report Studio 3.1, found on the **SAS BI Mid-tier Components** CD.

SAS Web OLAP Viewer for Java and SAS Web Report Studio have help files in a common area. In order to have the correct help files for them during testing, you must upgrade both applications using the same method (production, single mid-tier, or dual mid-tier) at the same time.

SAS Web Report Studio 3.1 introduces configuration changes to the application. See the "Note Regarding Configuration Changes for SAS Web Report Studio 3.1" on page 36 for more information.

Additionally, existing batch report jobs will need to be revised to comply with SAS Web Report Studio 3.1. See the "Revise Existing Batch Report Jobs" section on page 37 for more information.

You may perform the installation in one of three ways:

- production install, where you replace SAS Web Report Studio 2.1 with SAS Web Report Studio 3.1 (see below),
- dual client tier staged install, where you maintain both SAS Web Report Studio 2.1 and 3.1 for a testing period with SAS Web Report Studio 3.1 on a non-production client until you are ready to take it production (see page 28), or
- single client tier staged install, where you maintain both SAS Report Studio 2.1 and 3.1 for a testing period with both versions on the same production machine (see page 30).

Note that for staged installs, both versions of SAS Web Report Studio will have access to the same reports and information maps. SAS Web Report Studio 3.1 supports reports created or edited by both versions 2.1 and 3.1 of SAS Web Report Studio and SAS Web OLAP Viewer for Java. However, SAS Web Report Studio 2.1 only supports reports created or edited by SAS Web Report Studio 2.1 and SAS Web OLAP Viewer for Java 2.1—not the respective 3.1 versions. Likewise for information maps, SAS Web Report Studio 3.1 supports information maps created or edited by both SAS Information Map Studio versions 2.1 and 3.1. However, SAS Web Report Studio 2.1 only supports information maps created or edited by SAS Information Map Studio 2.1—not 3.1. It is important to communicate this constraint to all SAS Web Report Studio 2.1 and 3.1 users.

Production Install

If you want to immediately replace SAS Web Report Studio 2.1 with SAS Web Report Studio 3.1, you can perform a production install. This process involves removing SAS Web Report Studio 2.1, and then installing, configuring and deploying SAS Web Report Studio 3.1.

To perform a production install, follow the steps below.

1. **For Tomcat:** Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 2.1 installation folder. Additionally, delete the `SASWebReportStudio` folder and all of its contents from the Tomcat `work\Standalone\localhost` folder.
   For WebLogic: Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 2.1 installation folder. However, while following the instructions, do not perform steps 7-9 which remove the WebLogic server in which SAS Web Report Studio was deployed. Instead, simply restart the WebLogic server to ensure that your changes take effect properly.
   For WebSphere: Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the deployment.html file found in the SAS Web Report Studio 2.1 installation folder. However, note a change to step 6—the `SASWebReportStudio.war` file should be in the WebSphere `installableApps` subfolder, not the Websphere `webapps` subfolder.

2. Uninstall SAS Web Report Studio 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web Report Studio. Search for and remove SAS Web Report Studio 2.1.
   - For UNIX platforms, run the uninstall executable found in the `_uninstWRS` subfolder in the SAS Web Report Studio 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebReportStudio/2.1/_uninstWRS/UninstWRS` from the location `/usr/local/SAS/SASWebReportStudio`. For example,
     ```
     cd /usr/local/SAS/SASWebReportStudio
     ./2.1/_uninstWRS/UninstWRS
     ```
3. Install SAS Web Report Studio 3.1. The installation instructions can be found by inserting the **SAS BI Mid-Tier Components** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web Report Studio** from the left-hand pane of the window that opens.
4. Define the set of user groups to the metadata by opening the SAS Management Console and highlighting the User Manager plug-in. Right-click and select **New→Group.** Enter the Group names from the following list. After each item, select **OK** to save the group information.
   - **General** tab, name WRS Report Consumer. Select **Make this group available as a Role for applications.**

   The WRS Administrator, WRS Report Author and WRS Advanced User groups should already exist. For more information about changes in the roles due to updating SAS Web Report Studio, please refer to the "Administering SAS Web Report Studio" section of the *SAS 9.1.3 Intelligence Platform: Administration Guide, Third Edition*, available from `http://support.sas.com/913administration`.
5. Configure and deploy SAS Web Report Studio 3.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder.
6. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

Once this section is complete, you have installed SAS Web Report Studio 3.1 and should go to the configuration information in "Note Regarding Configuration Changes for SAS Web Report Studio 3.1" and "Revise Existing Batch Report Jobs", beginning on page 36.

Staged Install

If you want to maintain both SAS Web Report Studio 2.1 and 3.1 for a testing period before you make SAS Web Report Studio 3.1 your production version, you can perform a staged install using either a separate test mid-tier or the same production mid-tier.

See the section "Note Regarding Configuration Changes for SAS Web Report Studio 3.1" for information and restrictions for using the existing configuration file from SAS Web Report Studio 2.1 with SAS Web Report Studio 3.1.

Dual Mid-Tier Staged Install

If you choose to maintain your test environment in a separate mid-tier, you simply need to install, configure and deploy SAS Web Report Studio 3.1 on a separate, test mid-tier. SAS recommends that the test mid-tier be on a separate server machine than the production mid-tier.

Building the test environment

To build the test environment for a dual mid-tier staged install, perform the steps below on the test mid-tier.

1. Install SAS Web Report Studio 3.1. The installation instructions can be found by inserting the **SAS BI Mid-Tier Components** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web Report Studio** from the left-hand pane of the window that opens.
2. Define the set of user groups to the metadata by opening the SAS Management Console and highlighting the User Manager plug-in. Right-click and select **New→Group.** Enter the Group names from the following list. After each item, select **OK** to save the group information.
   - **General** tab, name WRS Report Consumer. Select **Make this group available as a Role for applications.**

   The WRS Administrator, WRS Report Author and WRS Advanced User groups should already exist. For more information about changes in the roles due to updating SAS Web Report Studio, please refer to the "Administering SAS Web Report Studio" section of the *SAS 9.1.3 Intelligence Platform: Administration Guide, Third Edition*, available from `http://support.sas.com/913administration`.
3. Configure and deploy SAS Web Report Studio 3.1 manually by following instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder.
4. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

Updating the production environment

When you are satisfied with your testing and are ready to install SAS Web Report Studio 3.1 on your production mid-tier, perform the production install process described in the "Production Install" section above.

To remove SAS Web Report Studio 2.1, follow the steps below:

For Tomcat: Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 2.1 installation folder. Additionally, delete the `SASWebReportStudio` folder and all of its contents from the Tomcat `work\Standalone\localhost` folder.

For WebLogic: Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 2.1 installation folder. However, while following the instructions, do not perform steps 7-9 which remove the WebLogic server in which SAS Web Report Studio was deployed. Instead, simply restart the WebLogic server to ensure that your changes take effect properly.

For WebSphere: Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the deployment.html file found in the SAS Web Report Studio 2.1 installation folder. However, note a change to step 6—the `SASWebReportStudio.war` file should be in the WebSphere `installableApps` subfolder, not the Websphere `webapps` subfolder.

Once this section is complete, you have installed SAS Web Report Studio 3.1 and should go to the configuration information in "Note Regarding Configuration Changes for SAS Web Report Studio 3.1" and "Revise Existing Batch Report Jobs", beginning on page 36.

Single Mid-Tier Staged Install

If you choose to maintain your test environment in the same mid-tier as production, both versions of SAS Web Report Studio must be deployed to separate servers and applications within the web container, as explained in the steps below. When using WebLogic or WebSphere, SAS Web Report Studio 2.1 and 3.1 can be run simultaneously. However, when using Tomcat, SAS recommends that only one version be run at a time because both versions are limited to using the same Java Virtual Machine (JVM) when Tomcat is the web container.

If you install SAS Web OLAP Viewer for Java 3.1 and SAS Web Report Studio 3.1 on the same mid-tier alongside the previous releases, the older help files will be replaced by the newer versions during the installation. If you wish to allow users of both versions of the applications to access to the help files appropriate for their release, you must complete the steps for each application in this chapter and chapter 5 to configure the applications to look for the updated help files. You must also complete the steps in chapter 6 to configure and deploy the updated help files. Also, be sure to use the same context root for the help files in all three chapters in order for the configuration to be successful. In this document, the name SASDocUpdate is used. The help files may be inaccurate or unavailable unless all these steps are completed.

Also note that when installing SAS Web Report Studio 3.1 and specifying configuration information, specify a different location for the web container log files (`$LOG_FILE_PATH$`) than the one used for SAS Web Report Studio 2.1. Please see the "Note Regarding Configuration Changes for SAS Web Report Studio 3.1" on page 36 for more information.

Building the test environment

To build the test environment for a single mid-tier staged install, perform one of the procedures below depending on the web container you are using.

Tomcat

1. Stop the Tomcat server.
2. Install SAS Web Report Studio 3.1. The installation instructions can be found by inserting the **SAS BI Mid-Tier Components** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web Report Studio** from the left-hand pane of the window that opens.
3. Define the set of user groups to the metadata by opening the SAS Management Console and highlighting the User Manager plug-in. Right-click and select **New→Group.** Enter the Group names from the following list. After each item, select **OK** to save the group information.
   - **General** tab, name WRS Report Consumer. Select **Make this group available as a Role for applications.**

   The WRS Administrator, WRS Report Author and WRS Advanced User groups should already exist. For more information about changes in the roles due to updating SAS Web Report Studio, please refer to the "Administering SAS Web Report Studio" section of the *SAS 9.1.3 Intelligence Platform: Administration Guide, Third Edition*, available from `http://support.sas.com/913administration`.
4. Run the `sas.wrs.config.bat` (Windows) or `sas.wrs.config.sh` (UNIX) script to create a `new SASWebReportStudio.war` file. This script is found in the SAS Web Report Studio 3.1 installation folder. The war file will be created in the same folder.
5. To enable the help documentation for version 3.1, complete the following steps.
   a. In the `customer` folder under the SAS Web Report Studio 3.1 installation folder, look for the file `<install_folder>/customer/LocalProperties.xml.sample`.
   b. Make a copy of the `LocalProperties.xml.sample` file and name it `LocalProperties.xml`.

c. Within `LocalProperties.xml`, locate the section starting with *<webreportstudio>*. In that section, remove the comment indicator above *<webreportstudio>* and the one at the bottom of the section, then add the following text:

```
<online.help>
   <webapp>SASDocUpdate</webapp>
   <baseurl></baseurl>
</online.help>
```

Descriptions of the help properties are as follows:

- `webapp` - Set to the name of the new copy of Webdoc, *SASDocUpdate*. (The default value is *SASDoc*.)
- `baseurl` - Set to base URL for Webdoc.

6. In the Tomcat `webapps` folder, create a new folder for SAS Web Report Studio 3.1 (for example, **SASWebReportStudio3.1**).
7. Manually explode the `SASWebReportStudio.war` file into the folder created in the previous step.
8. Make a copy of the `sas.wrs.context.xml` found in the Tomcat `webapps` folder. The copied file will also reside in the Tomcat `webapps` folder, so you will need to rename it (for example, `sas.wrs3.1.context.xml`). Edit this copied file and change all references to the Tomcat `webapps` SAS Web Report Studio folder; for example, change all occurrences of **SASWebReportStudio** to **SASWebReportStudio3.1**.
9. Edit the `catalina.policy` file found in the Tomcat `conf` folder and make a copy of the **SAS Web Report Studio Permissions** section. In the copied section, change all references to the Tomcat `webapps` SAS Web Report Studio folder; for example, change all occurrences of **SASWebReportStudio** to **SASWebReportStudio3.1**.
10. In the `live` folder under the SAS Web Report Studio 3.1 installation folder, run the `sas.wrs.runtomcat.bat` (Windows) or `sas.wrs.runtomcat.sh` (UNIX) script to start the Tomcat server.

Note that both versions of SAS Web Report Studio will be using the same login configurations information as defined by the `login.config` file. Both versions of SAS Web Report Studio will use the same libname for the rendering optimizer.

With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

WebLogic

1. Install SAS Web Report Studio 3.1. The installation instructions can be found by inserting the **SAS BI Mid-Tier Components** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web Report Studio** from the left-hand pane of the window that opens.
2. Define the set of user groups to the metadata by opening the SAS Management Console and highlighting the User Manager plug-in. Right-click and select **New→Group.** Enter the Group names from the following list. After each item, select **OK** to save the group information.

   - **General** tab, name WRS Report Consumer. Select **Make this group available as a Role for applications.**

   The WRS Administrator, WRS Report Author and WRS Advanced User groups should already exist. For more information about changes in the roles due to updating SAS Web Report Studio, please refer to the "Administering SAS Web Report Studio" section of the *SAS 9.1.3 Intelligence Platform: Administration Guide, Third Edition*, available from `http://support.sas.com/913administration`.

3. Configure SAS Web Report Studio 3.1 by following instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder. When you run the `sas.wrs.weblogic.prepare.bat` script and specify a deployment folder (the second parameter for the script), you must specify a folder name that does not already exist, for example, **SASWebReportStudio3.1**.

4. To enable the help documentation for version 3.1, complete the following steps.

   a. In the customer folder under the SAS Web Report Studio 3.1 installation folder, look for the file `<install_folder>/customer/LocalProperties.xml.sample`.

   b. Make a copy of the `LocalProperties.xml.sample` file and name it `LocalProperties.xml`.

   c. Within the `LocalProperties.xml` file, locate the section starting with *<webreportstudio>*. In that section, remove the comment indicator above *<webreportstudio>* and the one at the bottom of the section, then add the following text:

   ```
   <online.help>
      <webapp>SASDocUpdate</webapp>
      <baseurl></baseurl>
   </online.help>
   ```

   Descriptions of the help properties are as follows:

   - `webapp` - Set to the name of the new copy of Webdoc, *SASDocUpdate*. (The default value is *SASDoc*.)
   - `baseurl` - Set to base URL for Webdoc. (The default URL is the same base URL used to start the SAS Web Report Studio 3.1 application.)

5. Deploy SAS Web Report Studio 3.1 by following instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder. Incorporate the items below when following the instructions.

   Note: *Deploying WebLogic can take between 15 and 30 minutes.*

   - During deployment while using the WebLogic Server Console, you can deploy SAS Web Report Studio 3.1 into the same managed server as SAS Web OLAP Viewer for Java 3.1. This is the recommended configuration. However, if you have not deployed SAS Web OLAP Viewer for Java 3.1 or if SAS Web Report Studio 2.1 is already deployed in this managed server, you must create a new server with a unique Listen Port. Do not specify the same server already being used for SAS Web Report Studio 2.1.
   - During deployment while using the WebLogic Server Console to create a new application, you must deploy a new Web application module with a unique Name (for example, **SASWebReportStudio3.1**). Using different names for the applications will make them easier to manage.

6. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

WebSphere

All the applications that are deployed to an application server share the same Java Virtual Machine (JVM). This configuration limits the memory available to each application and can impact performance. If your WebSphere environment already supports multiple application servers, SAS recommends that each version of SAS Report Studio be deployed to a separate server in WebSphere. If you are limited to a single WebSphere application server and deploy both products to this server, SAS recommends that only one version be running at a time.

1. Install SAS Web Report Studio 3.1. The installation instructions can be found by inserting the **SAS BI Mid-Tier Components** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web Report Studio** from the left-hand pane of the window that opens.
2. Define the set of user groups to the metadata by opening the SAS Management Console and highlighting the User Manager plug-in. Right-click and select **New→Group.** Enter the Group names from the following list. After each item, select **OK** to save the group information.
   - **General** tab, name WRS Report Consumer. Select **Make this group available as a Role for applications.**

   The WRS Administrator, WRS Report Author and WRS Advanced User groups should already exist. For more information about changes in the roles due to updating SAS Web Report Studio, please refer to the "Administering SAS Web Report Studio" section of the *SAS 9.1.3 Intelligence Platform: Administration Guide, Third Edition*, available from `http://support.sas.com/913administration`.
3. Configure SAS Web Report Studio 3.1 by following instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder.
4. To enable the help documentation for version 3.1, complete the following steps.
   a. In the `customer` folder under the SAS Web Report Studio 3.1 installation folder, look for the file `<install_folder>/customer/LocalProperties.xml.sample`.
   b. Make a copy of the `LocalProperties.xml.sample` file and name it `LocalProperties.xml`.
   c. Within `LocalProperties.xml`, locate the section starting with *<webreportstudio>*. In that section, remove the comment indicator above *<webreportstudio>* and the one at the bottom of the section, then add the following text:

      ```
      <online.help>
         <webapp>SASDocUpdate</webapp>
         <baseurl></baseurl>
      </online.help>
      ```

      Descriptions of the help properties are as follows:

      - `webapp` - The name of the new copy of Webdoc, for example, *SASDocUpdate*. (The default value is *SASDoc*.)
      - `baseurl` - The base URL for Webdoc. If the new Webdoc application is on the same host and WebSphere Application Server as SAS Web Report Studio 3.1, leave this value blank. (The default URL is the same base URL used to start the SAS Web Report Studio 3.1 application.)
5. Deploy SAS Web Report Studio 3.1 by following instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder. Incorporate the items below when following the instructions.
   - During deployment while copying `the SASWebReportStudio.war` file, you must first rename the war file (for example, `SASWebReportStudio31.war`). Then copy it to the WebSphere `installableApps` folder. Do not overwrite the existing `SASWebReportStudio.war` file in the WebSphere `installableApps` folder. Additionally, rename `the SASDoc.war` file `SASDocUpdate.war`. Then copy it to the WebSphere `installableApps` folder.

- If your WebSphere environment supports multiple application servers, deploy SAS Web Report Studio 3.1 to a new application server. This new application server may already exist—you can deploy SAS Web Report Studio 3.1 into the same application server as SAS Web OLAP Viewer for Java 3.1. This is the recommended configuration. However, if you have not deployed SAS Web OLAP Viewer for Java 3.1 or if SAS Web Report Studio 2.1 is already deployed in this application server, then create a new application server at this time using the WebSphere Administrative Console.
- During deployment while using the WebSphere Server Console to create a new application, you must specify a unique Name in the context Root section (for example, **SASWebReportStudio3.1**). Using different names for the applications will make them easier to manage. If your WebSphere environment supports multiple application servers and you previously created a new application server, then in Step 3 of installing a new application, specify this new server. Otherwise, in Step 3 accept the default server.

6. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the "Permission Changes for Information Maps" section on page 5 for more information.

Updating the production environment

When you are satisfied with your testing and are ready to install SAS Web Report Studio 3.1 on your production mid-tier, remove SAS Web Report Studio 2.1, redeploy SAS Web Report Studio 3.1, and update the help files.

To update the production environment for a single mid-tier staged install, perform one of the procedures below, depending on the web container you are using.

Tomcat

1. Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 2.1 installation folder. Additionally, delete the `SASWebReportStudio` folder and all of its contents from the Tomcat `work\Standalone\localhost` folder.
2. Uninstall SAS Web Report Studio 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web Report Studio.
   - For UNIX platforms, run the uninstall executable found in the `_uninstWRS` subfolder in the SAS Web Report Studio 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebReportStudio/2.1/_uninstWRS/UninstWRS` from the location `/usr/local/SAS/SASWebReportStudio`. For example,
     ```
     cd /usr/local/SAS/SASWebReportStudio
     ./2.1/_uninstWRS/UninstWRS
     ```
3. Undeploy and unconfigure SAS Web Report Studio 3.1 by following the steps below.
   a. When you deployed SAS Web Report Studio 3.1 previously, you created a unique folder in the Tomcat `webapps` folder (for example, **SASWebReportStudio3.1**). Delete this folder and all of its contents from the Tomcat `webapps` folder.
   b. Previously during deployment you also created a copy of the `sas.wrs.context.xml` in the Tomcat `webapps` folder named (for example, `sas.wrs3.1.context.xml`). Delete this file from the Tomcat `webapps` folder.
   c. Previously during deployment you also edited the `catalina.policy` file found in the Tomcat `conf` folder. Edit this file again and remove the second **SAS Web Report Studio Permissions** section you previously added.

d. Run the `sas.wrs.unconfigure.bat` (Windows) or `sas.wrs.unconfigure.sh` (UNIX) script found in the SAS Web Report Studio 3.1 installation folder.

e. Previously you created the *`LocalProperties.xml`* file to enable support of the 3.1 help files. Delete this file from the `customer` folder under the SAS Web Report Studio installation folder.

4. Configure SAS Web Report Studio 3.1 by following instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder.
5. Update the help files in your production environment by following the instructions in Chapter 6, in the "Updating help files in the production environment" section, beginning on page 43.

WebLogic

1. Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 2.1 installation folder. However, while following the instructions, do not perform steps 7-9 which remove the WebLogic server in which SAS Web Report Studio was deployed. Instead, simply restart the WebLogic server to ensure that your changes take effect properly.
2. Uninstall SAS Web Report Studio 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web Report Studio.
   - For UNIX platforms, run the uninstall executable found in the `_uninstWRS` subfolder in the SAS Web Report Studio 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebReportStudio/2.1/_uninstWRS/UninstWRS` from the location `/usr/local/SAS/SASWebReportStudio`. For example,
     ```
     cd /usr/local/SAS/SASWebReportStudio
     ./2.1/_uninstWRS/UninstWRS
     ```
3. Undeploy and unconfigure SAS Web Report Studio 3.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder. If you deployed SAS Web Report Studio into a separate managed server, follow steps 7-9 to delete this managed server. Otherwise, simply restart the WebLogic server to ensure that your changes take effect properly.
4. Previously you created the *`LocalProperties.xml`* file to enable support of the 3.1 help files. Delete this file from the `customer` folder under the SAS Web Report Studio installation folder.
5. Configure and deploy SAS Web Report Studio 3.1 by following instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder. You can deploy SAS Web Report Studio into the same managed server where your other SAS BI applications, such as SAS Web OLAP Viewer for Java, are deployed.
6. Update the help files in your production environment by following the instructions in Chapter 6, in the "Updating help files in the production environment" section, beginning on page 43.

WebSphere

1. Undeploy and unconfigure SAS Web Report Studio 2.1 by following the instructions in the deployment.html file found in the SAS Web Report Studio 2.1 installation folder. However, note a change to step 6—the `SASWebReportStudio.war` file should be in the WebSphere `installableApps` subfolder, not the Websphere `webapps` subfolder.
2. Uninstall SAS Web Report Studio 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web Report Studio.

- For UNIX platforms, run the uninstall executable found in the `_uninstWRS` subfolder in the SAS Web Report Studio 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebReportStudio/2.1/_uninstWRS/UninstWRS` from the location `/usr/local/SAS/SASWebReportStudio`. For example,
  ```
  cd /usr/local/SAS/SASWebReportStudio
  ./2.1/_uninstWRS/UninstWRS
  ```

3. Undeploy and unconfigure SAS Web Report Studio 3.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder.
4. Previously you created the *`LocalProperties.xml`* file to enable support of the 3.1 help files. Delete this file from the `customer` folder under the SAS Web Report Studio installation folder.
5. Configure SAS Web Report Studio 3.1 by following instructions in the `deployment.html` file found in the SAS Web Report Studio 3.1 installation folder.
6. Update the help files in your production environment by following the instructions in Chapter 6, in the "Updating help files in the production environment" section, beginning on page 43.

Once this section is complete, you have installed SAS Web Report Studio 3.1 and should go to the configuration information in "Note Regarding Configuration Changes for SAS Web Report Studio 3.1" and "Revise Existing Batch Report Jobs", below.

Note Regarding Configuration Changes for SAS Web Report Studio 3.1

Data input during the SAS Web Report Studio installation process is used to create a file called `wrs.config`. This file is written to the SAS Web Report Studio installation folder. During the GUI install, you may choose either a) to be prompted for all required configuration information or b) to specify a pre-existing `wrs.config` file. Note that a `wrs.config` file used for a SAS Web Report Studio 2.1 installation does not contain enough information to configure and deploy a SAS Web Report Studio 3.1 installation. If you want to re-use the data in the 2.1 `wrs.config` file, you must create a new `wrs.config` file via SAS Management Console. Note that SAS Query and Reporting Services 3.1 must be installed before you can create a new 3.1 `wrs.config` file.

To create a new `wrs.config` file via SAS Management Console, perform the steps below:

1. Log on to SAS Management Console on the machine where SAS Web Report Studio is installed.
2. Select **Application Management→Report Studio Configuration→Web Report Studio**.
3. From the tool bar, select **Action→Open Configuration File**.
4. Using the file browser dialog, select your SAS Web Report Studio 2.1 `wrs.config` file.
5. When the `wrs.config` file has been read, you'll see the repository host name in the main pane. Right-click on the host name and select **Modify Server Definition** from the popup menu.
6. Edit the `wrs.config` contents in the dialog that comes up. Click **OK** when you're done.
7. From the tool bar, select **Action→Save Configuration File**.
8. Use the file browser dialog to save your file. Be careful not to overwrite the old file—you want to create a **new** `wrs.config` file in your SAS Web Report Studio 3.1 installation folder.

Revise Existing Batch Report Jobs

This section describes how to revise existing batch report jobs that do not already comply with SAS Web Report Studio. A batch report is a static, pre-generated version of a report. Only existing batch report jobs that do not already include **BIP Tree/** in the path for the batch parameter **–url** need to be revised. Note that only batch report jobs need to be revised—regular SAS Web Report Studio reports do not. Once revised, the batch report jobs will comply with SAS Web Report Studio 3.1.

To revise an existing batch report job to comply with SAS Web Report Studio, perform the following steps:

1. Open the batch job in an editor, for example, Notepad.
2. Locate and change the value for the batch parameter **–url** by adding **BIP Tree/** to the path. See examples below.
3. Save the modified batch job.

Example of a batch job saved in a .cmd file

Change

```
Batchgen.exe extract -username "sasuser" -password "password" -
repository "Foundation" -host "hostname" -port "8561" -workspaceserver
"Pooled Workspace Server - Logical Workspace Server" -url
"SBIP://Foundation/ReportStudio/Shared/Reports/Batch Folder" -
outputfile "c:\Batch\reportlist.lst"
```

to

```
Batchgen.exe extract -username "sasuser" -password "password" -
repository "Foundation" -host "hostname" -port "8561" -workspaceserver
"Pooled Workspace Server - Logical Workspace Server" -url
"SBIP://Foundation/BIP Tree/ReportStudio/Shared/Reports/Batch Folder" -
outputfile "c:\Batch\reportlist.lst"
```

Example of an extracted list (generated in "extract mode")

Change

```
URL1.report=SBIP://Foundation/ReportStudio/Shared/Reports/Batch
Folder/Report.srx
```

to

```
URL1.report=SBIP://Foundation/BIP
Tree/ReportStudio/Shared/Reports/Batch Folder/Report.srx
```

Chapter 6 — Updating SAS Online Help for the SAS BI Applications

The procedures described in this chapter are common to upgrading SAS Web OLAP Viewer for Java and SAS Web Report Studio. Following these steps will

- allow the 2.1 versions of the applications to access the 2.1 version of the Help documents
- allow the 3.1 versions of the applications to access the new help documents provided with version 3.1.

These steps should be completed after SAS Web OLAP Viewer for Java and SAS Web Report Studio have both been installed in a single mid-tier staged install.

Post-Installation Instructions

Tomcat

1. Locate the documentation and help files for your SAS applications. This location is called the *DOCLOC*, and, on Windows, the default location for the *DOCLOC* is `C:\Program Files\SAS\Documentation\9.1`.
2. Make a complete copy of the *DOCLOC* files and folders in a new location. For example, within the Documentation folder, copy the entire 9.1 folder into a new folder named `9.1update`. The new *DOCLOC* would be `C:\Program Files\SAS\Documentation\9.1update`. This location now contains the 3.1 help files.

Note: *If you are installing a testing image that will be used to test multiple languages, you will have to repeat steps 3 and 4 for each language directory.*

3. Follow these steps to backup the help files that were just installed in the original *DOCLOC* location by the new versions of the applications.
   a. In the original *DOCLOC* (the `9.1` folder), find the folder named `en`.
   b. Within the `en` folder, locate the following folders:
      - `citweb.hlp`
      - `citweb.hlp_backup`
      - `citugpdf.hlp`
      - `wbov.hlp`
      - `wbov.hlp_backup`

Note: *The* `citweb` *and* `citugpdf` *folders will only exist if you are installing Web Report Studio. The* `wbov` *folders will only exist if you are installing SAS Web OLAP Viewer.*

   c. If you found the citweb directories in the *DOCLOC,* copy `citweb.hlp` and rename the copy `citweb.hlp_update`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder). You do not need to make a copy of the `citugpdf.hlp` directory.
   d. If you found the wbov directories in the *DOCLOC,* copy `wbov.hlp` and rename the copy `wbov.hlp_update`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder).

4. Restore the help files for the previous versions the BI software.
   a. If you found the `citweb` directories in the **original** *DOCLOC* (the `9.1` folder), copy the contents of the folder `citweb.hlp_backup` to the folder named `citweb.hlp`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder). You do not need to complete this step with the `citugpdf.hlp` file.
   b. If you found the `wbov` directories in the **original** *DOCLOC* (the `9.1` folder), copy the contents of the folder `wbov.hlp_backup` to the folder named `wbov.hlp`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder).
5. Locate the `SASDoc.war` file in the **new** *DOCLOC* that you have created. For example, on Windows, look in the `location C:\Program Files\SAS\Documentation\9.1update \SASDoc.war`.
6. Rename or copy this file. The name should match the context root you specified in the `WebOLAPViewerConfig.xml` and `LocalProeprties.xml` files. For example, if you changed the applications to look for help under /SASDocUpdate, copy or rename `C:\Program Files\SAS\Documentation\9.1update\SASDoc.war` to `C:\Program Files\SAS\Documentation\9.1update\SASDocUpdate.war`.
7. Run the UpdateDocLoc utility for the `SASDocUpdate.war` file in the **new** *DOCLOC*. Be sure to use the new *DOCLOC* location when running this program (the `9.1update` folder). For example, move to the directory containing the `SASDocUpdate.war` file and run the following command:

   ```
   <PATH_To_JAVA>\java -cp sas.sasdoc.jar com.sas.doc.util.UpdateDocLoc
   -war "C:\Program Files\SAS\Documentation\9.1update\SASDocUpdate.war"
   -docloc "C:\Program Files\SAS\Documentation\9.1update"
   ```

   Both the `-war` and `-docloc` parameters require the absolute path to be specified.

   When this step completes, you will see a message, "`UpdateDocLoc completed successfully`."
8. If you are running a security manager, update the security grants for the SASDocUpdate application:
   a. For Tomcat, the grants are in the `sasdoc.tomcat.permissions` file located in the `WEB-INF` directory in the `SASDocUpdate.war` file. Change the name of the application in this file from *SASDoc* to *SASDocUpdate*.
   b. Add these grants to your Tomcat `catalina.policy` file, or the policy file in effect for your server if you are not using the default Tomcat configuration.

      Refer to `http://jakarta.apache.org/tomcat/tomcat-4.1-doc/security-manager-howto.html` for more details about running Tomcat with a Security Manager.
9. In the Tomcat `webapps` folder, create a new folder for the SASDocUpdate application named `SASDocUpdate`. Manually explode the `SASDocUpdate.war` file into this folder.

WebLogic

1. Locate the documentation and help files for your SAS applications. This location is called the *DOCLOC*, and, on Windows, the default location for the *DOCLOC* is `C:\Program Files\SAS\Documentation\9.1`.
2. Make a complete copy of the *DOCLOC* files and folders in a new location. For example, within the Documentation folder, copy the entire 9.1 folder into a new folder named `9.1update`. The new *DOCLOC* would be `C:\Program Files\SAS\Documentation\9.1update`. This location now contains the 3.1 help files.

Note: *If you are installing a testing image that will be used to test multiple languages, you will have to repeat steps 3 and 4 for each language directory.*

3. Follow these steps to backup the help files that were just installed in the original *DOCLOC* location by the new versions of the applications.
   a. In the original *DOCLOC* (the `9.1` folder), find the folder named `en`.
   b. Within the `en` folder, locate the following folders:
      - `citweb.hlp`
      - `citweb.hlp_backup`
      - `citugpdf.hlp`
      - `wbov.hlp`
      - `wbov.hlp_backup`

Note: *The* `citweb` *and* `citugpdf.hlp` *folders will only exist if you are installing Web Report Studio. The* `wbov` *folders will only exist if you are installing SAS Web OLAP Viewer.*

   c. If you found the citweb directories in the *DOCLOC,* copy `citweb.hlp` and rename the copy `citweb.hlp_update`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder). You do not need to make a copy of the citugpdf.hlp directory.
   d. If you found the wbov directories in the *DOCLOC, c*opy `wbov.hlp` and rename the copy `wbov.hlp_update`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder).
4. Restore the help files for the previous versions the BI software.
   a. If you found the `citweb` directories in the **original** *DOCLOC* (the `9.1` folder), copy the contents of the folder `citweb.hlp_backup` to the folder named `citweb.hlp`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder). You do not need to complete this step with the `citugpdf.hlp` file.
   b. If you found the `wbov` directories in the **original** *DOCLOC* (the `9.1` folder), copy the contents of the folder `wbov.hlp_backup` to the folder named `wbov.hlp`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder).
5. Locate the `SASDoc.war` file in the **new** *DOCLOC* that you have created. For example, on Windows, look in the `location C:\Program Files\SAS\Documentation\9.1update \SASDoc.war`.
6. Rename or copy this file. The name should match the context root you specified in the `WebOLAPViewerConfig.xml` and `LocalProeprties.xml` files. For example, if you changed the applications to look for help under /SASDocUpdate, copy or rename `C:\Program Files\SAS\Documentation\9.1update\SASDoc.war` to `C:\Program Files\SAS\Documentation\9.1update\SASDocUpdate.war`.
7. Run the UpdateDocLoc utility for the `SASDocUpdate.war` file in the **new** *DOCLOC*. Be sure to use the new *DOCLOC* location when running this program (the `9.1update` folder). For example, move to the directory containing the `SASDocUpdate.war` file and run the following command:

```
<PATH_To_JAVA>\java -cp sas.sasdoc.jar com.sas.doc.util.UpdateDocLoc
-war "C:\Program Files\SAS\Documentation\9.1update\SASDocUpdate.war"
-docloc "C:\Program Files\SAS\Documentation\9.1update"
```

   Both the `-war` and `-docloc` parameters require the absolute path to be specified.

   When this step completes, you will see a message, "`UpdateDocLoc completed successfully`."

8. In the deployment directory, create a new subfolder for the SASDocUpdate. For example on Windows, create `c:\SAS\<configuration directory>\Lev1\web\webapps\SASDocUpdate`.
9. Explode the `SASDocUpdate.war` file to the deployment directory you just created.
10. Deploy the new SASDocUpdate application from the deployment directory into the same managed server where SAS Web OLAP Viewer for Java 3.1 and SAS Web Report Studio 3.1 are deployed.

    If you are running a security manager, update the security grants for the SASDocUpdate application. For WebLogic, the grants in the `sasdoc.weblogic.permissions` file, located in the `WEB-INF` directory in the `SASDoc.war` file, should be added to the WebLogic policy file, or the policy file in effect for your server if you are not using the default WebLogic configuration. Refer to `http://e-docs.bea.com/wls/docs81/security/` for more details about running WebLogic with a Security Manager.

WebSphere

1. Locate the documentation and help files for your SAS applications. This location is called the *DOCLOC*, and, on Windows, the default location for the *DOCLOC* is `C:\Program Files\SAS\Documentation\9.1`.
2. Make a complete copy of the *DOCLOC* files and folders in a new location. For example, within the Documentation folder, copy the entire 9.1 folder into a new folder named `9.1update`. The new *DOCLOC* would be `C:\Program Files\SAS\Documentation\9.1update`. This location now contains the 3.1 help files.

Note: *If you are installing a testing image that will be used to test multiple languages, you will have to repeat steps 3 and 4 for each language directory.*

3. Follow these steps to backup the help files that were just installed in the original *DOCLOC* location by the new versions of the applications.
   a. In the original *DOCLOC* (the `9.1` folder), find the folder named `en`.
   b. Within the `en` folder, locate the following folders:
      - `citweb.hlp`
      - `citweb.hlp_backup`
      - `citugpdf.hlp`
      - `wbov.hlp`
      - `wbov.hlp_backup`

Note: *The* `citweb` *and* `citugpdf` *folders will only exist if you are installing Web Report Studio. The* `wbov` *folders will only exist if you are installing SAS Web OLAP Viewer.*

   c. If you found the `citweb` directories in the *DOCLOC,* copy `citweb.hlp` and rename the copy `citweb.hlp_update`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder). You do not need to make a copy of the citugpdf.hlp directory.
   d. If you found the wbov directories in the *DOCLOC,* copy `wbov.hlp` and rename the copy `wbov.hlp_update`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder).
4. Restore the help files for the previous versions the BI software.
   a. If you found the `citweb` directories in the **original** *DOCLOC* (the `9.1` folder), copy the contents of the folder `citweb.hlp_backup` to the folder named `citweb.hlp`. Do not

change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder). You do not need to complete this step with the `citugpdf.hlp` file.

b. If you found the `wbov` directories in the **original** *DOCLOC* (the `9.1` folder), copy the contents of the folder `wbov.hlp_backup` to the folder named `wbov.hlp`. Do not change any folder names in the copy of the *DOCLOC* that you created in step 2 (the `9.1update` folder).

5. Locate the `SASDoc.war` file in the **new** *DOCLOC* that you have created. For example, on Windows, look in the `location C:\Program Files\SAS\Documentation\9.1update \SASDoc.war`.

6. Rename or copy this file. The name should match the context root you specified in the `WebOLAPViewerConfig.xml` and `LocalProeprties.xml` files. For example, if you changed the applications to look for help under /SASDocUpdate, copy or rename `C:\Program Files\SAS\Documentation\9.1update\SASDoc.war` to `C:\Program Files\SAS\Documentation\9.1update\SASDocUpdate.war`.

7. Run the UpdateDocLoc utility for the `SASDocUpgrade.war` file in the **new** *DOCLOC*. Be sure to use the new *DOCLOC* location when running this program (the `9.1update` folder). For example, move to the directory containing the `SASDocUpdate.war` file and run the following command:

```
<PATH_To_JAVA>\java -cp sas.sasdoc.jar com.sas.doc.util.UpdateDocLoc
-war "C:\Program Files\SAS\Documentation\9.1update\SASDocUpdate.war"
-docloc "C:\Program Files\SAS\Documentation\9.1update" -container
Websphere
```

   Both the `-war` and `-docloc` parameters require the absolute path to be specified.

   When this step completes, you will see a message, "`UpdateDocLoc completed successfully`."

8. Copy the `SASDocUpdate.war` file to the `/WebSphere/AppServer/installableApps` directory.

9. Deploy the application using this .war file.

   - During deployment, change the context root to SASDocUpdate. This name must match the context root you specified in the `WebOLAPViewerConfig.xml` and `LocalProperties.xml` files.
   - If you are running a security manager, update the security grants for the SASDocUpdate application. When running under WebSphere, the grants in the `sasdoc.websphere.permissions` file, located in the `WEB-INF` directory in the `SASDoc.war` file, should be added to the WebSphere policy file, or the policy file in effect for your server if you are not using the default WebSphere configuration. Refer to `http://publib.boulder.ibm.com/infocenter/ws51help/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/tsec_enablejava2sec.html` for more details about running WebSphere with a Security Manager.

Updating help files in the production environment

These instructions should be completed only if you have previously deployed a Single Mid-Tier Staged installation of SAS Web OLAP Viewer for Java or SAS Web Report Studio. When you are satisfied with your testing and are ready to install SAS Web OLAP Viewer for Java 3.1 or SAS Web Report Studio on your production mid-tier, follow these steps to complete the upgrade of the help files for these applications.

1. Update the help files for the version 3.1 BI components:

a. Locate the documentation files for your SAS applications. This location is called the *DOCLOC*, and, on Windows, the default location for the *DOCLOC* is `C:\Program Files\SAS\Documentation\9.1`.

b. Update the help files.

   i. In the *DOCLOC,* find the `en` folder.

   ii. If you are upgrading the SAS Web Report Studio application, delete the `citweb.hlp` folder. Also, in the `en` folder, copy `citweb.hlp_update` and rename the copy `citweb.hlp`. The `citugpdf.hlp` folder does not change.

   iii. If you are upgrading the SAS Web OLAP Viewer application, delete the `wbov.hlp` folder. Also, in the en folder, copy `wbov.hlp_update` and rename the copy `wbov.hlp`.

   iv. If your deployment will use multiple languages, these steps should be repeated for each language folder.

Note: *Do not copy or deploy the* `SASDoc.war` *file to your production mid-tier server. With these changes to the .hlp directories, the* `SASDoc.war` *file that is deployed on your production mid-tier server is configured to deliver the documentation for your production version of SAS Web OLAP Viewer for Java 3.1 and SAS Web Report Studio 3.1.*

2. Remove the special help files created for the testing environment:

For Tomcat:

a. Stop Tomcat.

b. Remove the SASDocUpdate application. In the Tomcat `webapps` and `work/Standalone/localhost` folder, delete the new folder created previously for the SASDocUpdate application (for example, `SASDocUpdate`).

c. Delete the new *DOCLOC* that was created to contain the help files for the testing image. Remove the entire `C:\Program Files\SAS\Documentation\9.1update` folder.

d. Start Tomcat.

For WebLogic:

a. Using the WebLogic Server Console, undeploy the new web application module previously created for the SASDocUpdate application.

b. Delete the new *DOCLOC* that was created to contain the help files for the testing image. Remove the entire `C:\Program Files\SAS\Documentation\9.1update` folder.

For Websphere:

a. Using the WebSphere Server Console, undeploy the new web application module previously created for the SASDocUpdate application.

b. Delete the new *DOCLOC* that was created to contain the help files for the testing image. Remove the entire `C:\Program Files\SAS\Documentation\9.1update` folder.

Chapter 7 — SAS Web Report Viewer 3.1

This chapter describes how to install SAS Web Report Viewer 3.1, found on the **SAS Web Report Viewer** CD, for a production install. A staged install is not necessary since SAS Web Report Studio also provides the ability to view reports and a staged install can be performed for SAS Web Report Studio, if desired. SAS recommends that you wait to perform the production install of SAS Web Report Viewer 3.1 until after you have made SAS Web Report Studio 3.1 the production version. SAS Web Report Viewer cannot be used as a stand-alone application. You must access it from the SAS Information Delivery Portal.

SAS Web Report Viewer 3.1 introduces configuration changes. See the "Note Regarding Configuration Changes for SAS Web Report Viewer 3.1" below for more information.

Note Regarding Configuration Changes for SAS Web Report Viewer 3.1

Data input during the SAS Web Report Viewer installation process is used to create a file called `wrv.config`. This file is written to the SAS Web Report Viewer installation folder. During the GUI install, you may choose either a) to be prompted for all required configuration information or b) to specify a pre-existing `wrv.config` file. Note that a `wrv.config` file used for a SAS Web Report Viewer 2.1 installation does not contain enough information to configure and deploy a SAS Web Report Viewer 3.1 installation. If you want to re-use the data in the 2.1 `wrv.config` file, you must create a new `wrv.config` file via SAS Management Console. Note that SAS Query and Reporting Services 3.1 must be installed before you can create a new 3.1 `wrv.config` file.

To create a new `wrv.config` file via SAS Management Console, perform the steps below:

1. Log on to SAS Management Console on the same machine where the `wrv.config` file is located.
2. Select **Application Management→Report Studio Configuration→Web Report Studio**.
3. From the tool bar, select **Action→Open Configuration File**.
4. Using the file browser dialog, select your SAS Web Report Viewer 2.1 `wrv.config` file.
5. When the `wrv.config` file has been read, you'll see the repository host name in the main pane. Right-click on the host name and select **Modify Server Definition** from the popup menu.
6. Edit the `wrv.config` contents in the dialog that comes up. Click **OK** when you're done.
7. From the tool bar, select **Action→Save Configuration File**.
8. Use the file browser dialog to save your file. Be careful not to overwrite the old file—you want to create a **new** `wrv.config` file in your SAS Web Report Viewer 3.1 installation folder.

Production Install

Performing a production install will immediately replace SAS Web Report Viewer 2.1 with SAS Web Report Viewer 3.1. This process involves removing SAS Web Report Viewer 2.1, and then installing, configuring, and deploying SAS Web Report Viewer 3.1.

To perform a production install, follow the steps below.

1. **For Tomcat:** Undeploy and unconfigure SAS Web Report Viewer 2.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Viewer 2.1 installation folder. Additionally, delete the `SASWebReportViewer` folder and all of its contents from the Tomcat `work\Standalone\localhost` folder.

For WebLogic: Undeploy and unconfigure SAS Web Report Viewer 2.1 by following the instructions in the `deployment.html` file found in the SAS Web Report Viewer 2.1 installation folder. However, while following the instructions, do not perform steps 7-9 which remove the WebLogic server in which SAS Web Report Viewer was deployed. Instead, simply restart the WebLogic server to ensure that your changes take effect properly.
For WebSphere: Undeploy and unconfigure SAS Web Report Viewer 2.1 by following the instructions in the deployment.html file found in the SAS Web Report Viewer 2.1 installation folder. However, note a change to step 6—the `SASWebReportViewer.war` file should be in the WebSphere `installableApps` subfolder, not the Websphere `webapps` subfolder.

2. Uninstall SAS Web Report Viewer 2.1:
   - On Windows platforms, use the **Add or Remove Programs** utility in the Windows Control Panel to uninstall SAS Web Report Viewer. Search for and remove SAS Web Report Viewer 2.1.
   - For UNIX platforms, run the uninstall executable found in the `_uninstWRV` subfolder in the SAS Web Report Viewer 2.1 installation location. Run the executable from one level above the root installation directory. For example, run the file `/usr/local/SAS/SASWebReportViewer/2.1/_uninstWRV/UninstWRV` from the location `/usr/local/SAS/SASWebReportViewer`. For example,
     ```
     cd /usr/local/SAS/SASWebReportViewer
     ./2.1/_uninstWRV/UninstWRV
     ```
3. Install SAS Web Report Viewer 3.1. The installation instructions can be found by inserting the **SAS Web Report Viewer** CD in your CD-ROM drive, selecting your language, and then selecting **SAS Web Report Viewer** from the left-hand pane of the window that opens.
4. Configure and deploy SAS Web Report Viewer 3.1 by following instructions in the `deployment.html` file found in the SAS Web Report Viewer 3.1 installation folder.
5. With the latest release of the SAS BI applications, queries and reports against Information Maps require that the client user have Read permission. If you have not already updated those permissions, see the “Permission Changes for Information Maps” section on page 5 for more information.

Chapter 8 — SAS Add-in for Microsoft Office 2.1

Since SAS Add-in for Microsoft Office is running as part of Microsoft Office, you cannot run two versions of this application on the same machine. Therefore, a staged installation would require installing SAS Add-in for Microsoft Office 2.1 on a separate machine and copying Microsoft Office documents to that machine for use with the new version. SAS recommends performing a production installation by uninstalling the older version of SAS Add-in for Microsoft Office from your machine and then installing the new version.

1. Install SAS Add-in for Microsoft Office 2.1 by finding the **SAS BI Reporting Clients** CD in your package and inserting it into your CD-ROM drive. If the CD does not begin to autoplay, open your **Start** menu and select **Run**. In the text box of the **Run** dialog that opens, enter

   ```
   X: setup.exe
   ```

   where `X:` is your CD-ROM drive.

2. When the CD is running, it will present you with the choice of language you wish to run in. Select your language, then click **OK**.

3. The SAS Software Navigator opens. Read through the information in the right-hand pane. The installation instructions are available from the link in the installation table. When you are ready, click the **Install** link to begin your installation and follow the procedures described in those installation instructions.

Once SAS Add-in for Microsoft Office 2.1 is installed, you must migrate Office documents with SAS content to the new version. To migrate the documents, simply open them. SAS Add-in for Microsoft Office 2.1 will display a migration dialog that describes how this process will affect the document. Read and complete the dialog to finish the migration process.

Please note that after a document has been migrated to SAS Add-in for Microsoft Office 2.1, the SAS content in it will no longer be refreshable with SAS Add-in for Microsoft Office 1.3. The document will still be usable by Microsoft Excel, but SAS Add-in for Microsoft Office 1.3 will not recognize any SAS content. This is especially important if you decide to have two versions of SAS Add-in for Microsoft Office running on separate machines, since it requires that separate versions of your Office documents be available to the machines.

Chapter 9 — SAS Web OLAP Viewer for .NET 1.3

This chapter describes the methods for upgrading SAS Web OLAP Viewer for .NET 1.3, found on the **SAS Web OLAP Viewer for .NET** CD.

You may perform the installation in one of three ways:

- production install, where you replace SAS Web OLAP Viewer for .NET 1.2 with SAS Web OLAP Viewer for .NET 1.3 (see below),
- dual client tier staged install, where you maintain both SAS Web OLAP Viewer for .NET 1.2 and 1.3 for a testing period with SAS Web OLAP Viewer for .NET 1.3 on a non-production client until you are ready to take it production (see page below), or
- single client tier staged install, where you maintain both SAS Web OLAP Viewer for .NET 1.2 and 1.3 for a testing period with both versions on the same production machine (see page 50).

Version 1.2 of SAS Web OLAP Viewer for .NET was released several months after the 2.1 version of the other SAS BI Server products, so you may not have this particular product installed. If you do not, you can simply perform a production install of SAS Web OLAP Viewer for .NET 1.3.

Production Install

If you want to immediately replace SAS Web OLAP Viewer for .NET 1.2 with SAS Web OLAP Viewer for .NET 1.3, you can perform a production install. This process involves removing SAS Web OLAP Viewer for .NET 1.2, and then installing SAS Web OLAP Viewer for .NET 1.3.

To perform a production install, follow the steps below.

1. Uninstall SAS Web OLAP Viewer for .NET 1.2 from all client machines using the **Add or Remove Programs** utility in the Windows Control Panel.
2. Install Web OLAP Viewer for .NET 1.3 on the same client machines as above. The installation instructions can be found by inserting the **SAS Web OLAP Viewer for .NET** CD in your CD-ROM drive, selecting your language, and then reviewing the information in the right-hand pane of the window that opens.

Migrating SAS Web OLAP Viewer for .NET Metadata

SAS Web OLAP Viewer for .NET stores its metadata in a separate repository than the SAS Metadata Server. Each release of SAS Web OLAP Viewer for .NET has an individual repository, meaning that when you install the 1.3 release, the resulting metadata repository will be empty. As of this printing, there is no way to migrate the metadata from the 1.2 repository to the 1.3 repository. SAS is working to complete such a migration tool as of the printing of this document. When the tool is completed, it will be available through SAS Technical Support.

Once this section is complete, you have installed SAS Web OLAP Viewer for .NET 1.3 and should go on to Chapter 10.

Staged Install

If you want to maintain both SAS Web OLAP Viewer for .NET 1.2 and 1.3 for a testing period before you make SAS Web OLAP Viewer for .NET 1.3 your production version, you can perform a staged install using either a separate test client tier or the same production client tier.

Dual Client Tier Staged Install

If you choose to maintain your test environment in a separate client tier, simply install SAS Web OLAP Viewer for .NET 1.3 on a separate, test client machine.

Building the test environment

To build the test environment for a dual mid-tier staged install, install SAS Web OLAP Viewer for .NET 1.3 on the test client machine(s). The installation instructions can be found by inserting the **SAS Web OLAP Viewer for .NET** CD in your CD-ROM drive, selecting your language, and then reviewing the information in the right-hand pane of the window that opens.

Migrating SAS Web OLAP Viewer for .NET Metadata

For more information about migrating the metadata for SAS Web OLAP Viewer for .NET, see the "Migrating SAS Web OLAP Viewer for .NET Metadata" section above.

Updating the production environment

When you are satisfied with your testing and are ready to install SAS Web OLAP Viewer for .NET 1.3 on your production client tier, perform the production install process described in the "Production Install" section of this chapter.

Alternatively, you can create a new production environment by redirecting users to the test client tier and removing SAS Web OLAP Viewer for .NET 1.2 from the original client tier—in effect the test client tier becomes production. To remove SAS Web OLAP Viewer for .NET 1.2, uninstall SAS Web OLAP Viewer for .NET 1.2 from all client machines using the **Add or Remove Programs** utility in the Windows Control Panel.

Once this section is complete, you have installed SAS Web OLAP Viewer for .NET 1.3 and should go on to Chapter 10.

Single Client Tier Staged Install

If you choose to maintain your test environment in the same client tier as production, simply install SAS Web OLAP Viewer for .NET 1.3 on the same client tier.

Building the test environment

To build the test environment for a dual mid-tier staged install, install SAS Web OLAP Viewer for .NET 1.3 on the test client machine(s). The installation instructions can be found by inserting the **SAS Web OLAP Viewer for .NET** CD in your CD-ROM drive, selecting your language, and then reviewing the information in the right-hand pane of the window that opens.

Migrating SAS Web OLAP Viewer for .NET Metadata

For more information about migrating the metadata for SAS Web OLAP Viewer for .NET, see the "Migrating SAS Web OLAP Viewer for .NET Metadata" section above.

Updating the production environment

When you are satisfied with your testing and are ready to use SAS Web OLAP Viewer for .NET 1.3 for production purposes, remove SAS Web OLAP Viewer for .NET 1.2 from the production client tier. To remove SAS Web OLAP Viewer for .NET 1.2, uninstall SAS Web OLAP Viewer for .NET 1.2 from all client machines using the **Add or Remove Programs** utility in the Windows Control Panel.

Chapter 10 — SAS 9.1.3 Service Pack 4

Once the SAS BI applications have been installed, you can apply SAS 9.1.3 Service Pack 4. The Service Pack must be installed on all machines with SAS BI and SAS Enterprise BI products installed, including all client tier, mid-tier, and server tier machines.

If you performed a staged install, some applications may require redeployment after the service pack is applied. Applications you deployed following the instructions in this document do not need to be redeployed.

For more information, refer to the *SAS 9.1.3 Service Pack Installation Instructions*, included in SAS 9.1.3 Service Pack kit.

Chapter 11 — SAS Management Console and SAS Foundation Services 1.4

SAS Management Console

After applying SAS 9.1.3 Service Pack 4, when using the SAS Management Console, it may appear to be in a wait state or may appear to hang as a result of being out of memory. An out of memory error will be written by the Java Virtual Machine to the SAS Management Console `errorlog.txt` file located in your user profile directory.

To circumvent the problem, set the maximum memory allocation for the JAVA Virtual Machine using the JVM argument `-Xmx512m` in the SAS Management Console scripts. Depending on the service level of your original installation, these changes may have already been applied.

Windows

Add `-Xmx512m` to the `CommandLineArgs=` in the `sasmc.ini` file located `in C:\Program Files\SAS\SASManagementConsole\9.1`.

For example:

```
CommandLineArgs=-Xmx512m
-Djava.system.class.loader=com.sas.app.AppClassLoader
-Dsas.app.class.dirs="C:\Program Files\SAS\SASManagementConsole\9.1"
-Dsas.app.class.path=sas.smc.jar;. -cp sas.launcher.jar
-Djava.security.auth.login.config=security/login.config
-Djava.security.auth.policy=security/auth.policy
-Dcache.auth.policy=true com.sas.console.visuals.MainConsole
```

UNIX

Add the same JVM argument to the SAS Management Console script file, `sasmc`, located in the `!SASROOT/SASManagementConsole/9.1` directory. The argument can be added to `$CommandToExecute`.

For example:

```
exec $CommandToExecute -Xmx512m $CommandLineArgs "$@"
```

Note: *The CommandLineArgs options must be on the same line in the* `SASMC.ini` *or* `sasmc` *script file. Line breaks will cause SAS Management Console to fail.*

SAS Foundation Services

SAS Foundation Services 1.4 includes a BI Manager plug-in for SAS Management Console, which replaces the Business Report Manager plug-in from earlier versions of SAS Query and Reporting Services.

SAS Foundation Services 1.4 must be installed/updated after you have applied the SAS Service Pack. If you have reached this section without applying the SAS Service Pack, go back to Chapter 10 to find the procedures for applying the service pack. Once you have completed that chapter, proceed with the steps in this section.

SAS Foundation Services 1.4 should be installed on every machine on which you have installed SAS Management Console. If you are performing a side-by-side installation, such that you are installing a test version of the latest software on the same machine as your existing SAS software, do not include SAS Foundation Services 1.4 in that test installation. You should only install SAS Foundation Services 1.4 when you are ready to promote the latest software to production.

Production Install

If SAS Foundation Services 1.1 is already installed on your system, do not uninstall it before installing SAS Foundation Services 1.4. The install executable for SAS Foundation Services 1.4 will act as an update installer rather than a new installer on systems with the older version of the software. This installation will install to the existing subfolder, either `SASFoundationServices/1.1` or `SASFoundationServices/1.2`, depending on the version of the first installed release.

When you are ready to install SAS Foundation Services 1.4, find the **SAS Client-side Components, Volume 2** CD (found in your SAS Service Pack folder) and insert it into your CD-ROM drive. After the SAS Software Navigator opens and you have selected your language, select SAS Integration Technologies in the left-hand pane and then SAS Foundation Services in the right-hand pane. Follow the instructions there and in the linked Installation Instructions to install SAS Foundation Services 1.4.

Note: *If at any time during the installation a dialog that says "Newer versions of this file exist, do you want to overwrite them?" opens, click* ***No****. It is important that you do not overwrite newer versions of jars that you may have installed with other software.*

Once SAS Foundation Services has been installed, you should also apply any available hot fixes. The hot fixes and their instructions can be found at the Technical Support Hot Fixes Web page, located at `http://ftp.sas.com/techsup/download/hotfix/op_home.html`. Select the BI Manager 1.4 link, and be sure to read the information with each hot fix to determine where in your installation it should be applied.

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