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SAS[®] Financial Management 5.5: Migration Guide

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SAS® Financial Management 5.5: Migration Guide

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About This Book

Audience

This book is intended for SAS Financial Management administrators. To administer SAS Financial Management, you must be familiar with the operating system on which it is installed. For example, you must know how to create folders, run scripts, and update environment variables. If using Microsoft Windows, you must also be an administrator of the machine.

Documentation Conventions

Directory Paths

Directory Paths Used by Previous Installations

This book uses the following documentation conventions to identify directory paths used by SAS Financial Management 5.3 and earlier installations:

Term	Refers to	Example Path
!sasroot	Path to the SAS root directory in a SAS 9.2 installation (SAS Foundation)	Windows: <code>C:\Program Files\SAS\SASFoundation\9.2</code> UNIX: <code>/usr/local/SAS/SASFoundation/9.2</code>
!sasroot	Path to the SAS root directory in a SAS 9.3 installation (SAS Foundation)	Windows: <code>C:\Program Files\SASHome\SASFoundation\9.3</code> UNIX: <code>/usr/local/SASHome/SASFoundation/9.3</code>

Term	Refers to	Example Path
SAS-config-dir	Path to the SAS configuration directory	Windows: C:\SAS\Config\Lev1 UNIX: /usr/local/SAS/config/Lev1
MySQL-install-dir	Path to the MySQL installation directory in a SAS installation prior to SAS 9.4	Windows: C:\MySQL\bin UNIX: /usr/local/mysql <i>Note:</i> As of SAS Financial Management 5.4, MySQL is no longer supported. For more information, see <i>SAS Financial Management: System Administration Guide</i> .

Directory Paths Used by a SAS Financial Management 5.5 Installation or SAS Financial Management 5.5 Installation

This book uses the following documentation conventions to identify directory paths that are used by SAS Financial Management 5.5:

Term	Refers to	Example Path
lsasroot	Path to the SAS root directory (SAS Foundation)	Windows: C:\Program Files\SASHome\SASFoundation\9.4 UNIX: /usr/local/install/SASHome/SASFoundation/9.4
lsasinst	Path to the SAS installation directory	Windows: C:\Program Files\SASHome UNIX: /usr/local/install/SASHome
SAS-config-dir	Path to the SAS configuration directory	Windows: C:\SAS\Config\Lev1 UNIX: /usr/local/SAS/config/Lev1

Terms

This book uses the following terms:

Term	Description
Data Mart	The SAS Financial Management Data Mart.
data tier	The machine on which you install the data-tier software for SAS Financial Management.
middle tier	The machine on which you installed the web application server and on which your web applications run.
metadata tier	The machine on which you installed the SAS Metadata Server. Usually, this is the same machine as the data tier.
multi-tier installation	An installation that is done on more than one machine (for example, with a data tier and a middle tier).
single-tier installation	An installation that is done on one machine. In that case, the single machine functions as both the data tier and the middle tier. Follow instructions for both the data tier and the middle tier.
staging area	The SAS Financial Management staging area.

Note:

- The name of the configuration directory and the SAS release might be different at your site.
- If your configuration is the result of a migration from the previous release of SAS Financial Management, the SASApp directory might be called SASMain instead. For example: `C:\SAS\Config\Lev1\SASMain` instead of `C:\SAS\Config\Lev1\SASApp`. Please make the appropriate substitutions as you read this book.
- File system pathnames are typically shown with Windows separators (`\`); for UNIX, substitute a forward slash (`/`).
- Some code examples contain line breaks so that the code fits on the line. If you copy the code, remove the line breaks.

Accessibility Information

SAS Migration Utility has a command-line-only interface that is accessible using a keyboard or alternative keyboard assistive technologies. For this release, no accessibility testing was done and no additional features were added to address accessibility. If you have specific questions about the accessibility of SAS products, send them to accessibility@sas.com or call SAS Technical Support.

For information about the accessibility of SAS Financial Management, see the *SAS Financial Management: User's Guide*.

For information about the accessibility of any of the other products mentioned in this document, see the documentation for that product.

Chapter 1

Introduction

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Overview

This chapter describes the following topics:

- about SAS Financial Management
- SAS Financial Management server configuration
- important assumptions, features, and restrictions
- related documentation

About SAS Financial Management

SAS Financial Management Features

SAS Financial Management is an advanced system for planning and reporting. It is designed to support the following financial management activities:

- data collection and retrieval

- currency translation
- management of dynamic hierarchical structures
- intercompany eliminations
- allocations and balancing entries
- ownership eliminations
- reporting

SAS Financial Management User Interfaces

There are three ways to interface with SAS Financial Management:

Table 1.1 SAS Financial Management Interfaces

Interface	Description
SAS Financial Management Studio	Desktop application from which process administrators and other users build and manage the infrastructure that is required by the SAS Financial Management Add-In for Microsoft Excel application and the SAS Financial Management web portal. For example, using SAS Financial Management Studio, an administrator can define the metadata that feeds into reports and forms.
SAS Financial Management Add-In for Microsoft Excel	<p>SAS application that connects a desktop copy of Microsoft Excel to the SAS Financial Management database.</p> <p>With this client application, certain users build and save financial reports and forms. Other users (with permission) can use this interface to view report data and enter data into forms for financial planning purposes.</p> <p>Administrators also use this client to create form templates for financial planning.</p>
SAS Financial Management Web Application	<p>Web-based SAS Financial Management application that alerts the information consumer when a report has been published or alerts the information provider or information reviewer when an action is required.</p> <p>The SAS Financial Management web application includes a workspace for managing and editing data-entry forms for financial planning. The flow of data is controlled by a workflow that is defined by an administrator in SAS Financial Management Studio.</p> <p>The SAS Financial Management web application also includes workspaces for accessing business processes and (for administrators) viewing security information. In addition, from the SAS Financial Management web application, you can access financial reports by using the SAS Visual Analytics Viewer.</p>

Note: Every SAS Financial Management deployment also includes SAS Data Integration Studio. Administrators use SAS Data Integration Studio to load data and metadata for SAS Financial Management.

Elements of SAS Financial Management Data

Cycles and Dimension Types

In SAS Financial Management, a *cycle* is a structured pool of stored data. There are seven required dimension types in a cycle:

- Account
- Analysis
- Currency
- Frequency
- Organization
- Time
- Source
- Trader (a mirror of Organization)

Note: If necessary, administrators can define additional dimension types needs to meet the requirements of their site.

Note: The Source dimension and Frequency dimension are defined at implementation.

Dimension Members and Crossings

Each numeric value belongs to a *crossing*. A crossing consists of the set of all dimension members that are associated with that value. There is one member from each relevant dimension type in a crossing.

Each data record in the SAS Financial Management database consists of one crossing and one associated numeric value. The dimension members that are associated with a SAS Financial Management data record indicate what the numeric value in that record represents. For example, the dimension members of one record might indicate that the numeric value represents the actual revenue for an Italian subsidiary in October 2011, expressed in euros. The dimension members of another record might indicate that the numeric value represents the planned salary expense for a Japanese subsidiary for fiscal year 2012, expressed in yen.

Hierarchies

The dimension members that are used by SAS Financial Management belong to *hierarchies*. The hierarchical relationships between members help define the dimension structure.

For certain dimension types (specifically Currency, Frequency, and Analysis), there is no hierarchical relationship between the dimension members. The hierarchy of these dimension types is known as a flat hierarchy.

Models

A *model* is a structure for viewing and interacting with the data in a cycle. It is the basis of both forms and reports. The structure of a model includes a set of hierarchies (from required and optional dimension types) as well as rates and formulas. In addition, a model can have its own set of adjustments and rules.

SAS Financial Management Server Configuration

When using SAS Financial Management, you might work with the following types of servers.

- Metadata server—Server on which the SAS Metadata Server software is running.
- Data Tier server—Server on which SAS runs data-handling programs (including the logical servers for SAS Workspace and SAS Stored Process servers). Transformations, error tables, and jobs are installed on the data tier server.

Note: The same machine is often used as both the data tier server and the metadata server.

- Middle-Tier server—Server on which the managed servers and SAS Remote Services run. Certain activities require you to start or stop the managed servers and SAS Remote Services.

Note: SAS 9.4 does not use SAS Remote Services. However, SAS Remote Services is included in SAS 9.4 installations for backward capability.

For more information about these activities, see the *SAS Financial Management: System Administration Guide* (see [“Related Documentation”](#) on page 5) .

What’s in This Book

This book describes how to migrate to SAS Financial Management 5.5 for the following scenarios:

- migrating from SAS 9.2 (SAS Financial Management 5.2) to SAS 9.4
- migrating from SAS 9.3 to SAS 9.4
- migrating from SAS 9.4 to SAS 9.4

Before performing a migration, note the following:

- The migration of SAS Strategy Management or SAS Human Capital Management is not covered in this document.
- The migration includes both configuration and content. Some limitations apply to migrating content.
- If you are performing a migration, begin with this document. For additional information that might be helpful, see [“Related Documentation”](#) on page 5

Important Assumptions, Features, and Restrictions

This document is written with the following assumptions:

- You have prepared as you would for a standard installation (such as installing required third-party applications, planning which tiers are going to be installed on which machines, and so on).

For information about pre-installation steps, see the *SAS Financial Management: Installation and Configuration Guide* (see “[Related Documentation](#)” on page 5).

For migration-specific information about external accounts, see “[Creating Operating System Accounts](#)” on page 8.

- You have prepared a software depot and a deployment plan.

In addition, when using this document, note the following features and restrictions:

- **Operating systems**—Migrations must take place on the same platform (Windows or UNIX). However, you can migrate within the Windows family (for example, Windows 32-bit to Windows 64-bit) or migrate within the UNIX family (for example, Solaris to Linux).
- **Configuration**—Migrations from a previous release must use the same configuration for the old and new systems.
- **Web application server**—When migrating from SAS 9.2 (SAS Financial Management 5.2) or SAS 9.3, you migrate SAS web applications from your existing web server to the SAS Web Application Server.
- **SAS Migration Utility and SAS Deployment Wizard**—You cannot use the SAS Migration Utility and the SAS Deployment Wizard to migrate the SAS Intelligence Platform and then rerun the same software to migrate SAS Financial Management later.
- **Installations prior to SAS Financial Management 5.2**—Migrations from SAS Financial Management 5.2, SAS 9.2M3 and later to SAS Financial Management, SAS 9.4 are supported. For information about migrating installations prior to SAS Financial Management 5.2, contact your SAS account manager or customer loyalty representative for assistance.

If you are running a SAS Financial Management release prior to 5.2, you must migrate to SAS Financial Management 5.2 before migrating to SAS Financial Management 5.5. For information about migrating to SAS Financial Management 5.2, see the *SAS Financial Management 5.2: Migration Guide* (see “[Related Documentation](#)” on page 5).

- **New products**—If you are installing new products in addition to migrating old ones, first migrate the older release installation. After migrating the older products, install the new products.

Related Documentation

SAS Financial Management

For information about installing, administrating, or migrating SAS Financial Management, see the documentation located at

<http://support.sas.com/documentation/onlinedoc/fm/>

Note: This site is password-restricted. You can find the user name and password in the pre-installation checklist, the *Instructions.html*, or by contacting SAS Technical Support at <http://support.sas.com/techsup/contact/>.

SAS Intelligence Platform

For information about administering the SAS Intelligence Platform, see the documentation located at

<http://support.sas.com/documentation/onlinedoc/intellplatform/index.html>

SAS Information Delivery Portal

For information about the SAS Information Delivery Portal, see the documentation located at

<http://support.sas.com/documentation/onlinedoc/portal/index.html>

SAS Notes

SAS Technical Support develops SAS Notes to inform customers of issues that they need to be aware of when using SAS software. SAS Notes contain additional information about a SAS product and support fixes.

To view SAS Notes for SAS Financial Management, see the product page at

<http://support.sas.com/software/products/fm/index.html>

On the left side of the product page, select **Samples & SAS Notes** from the menu.

Chapter 2

Completing the Preliminary Tasks

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Overview

This chapter applies to migrations from SAS 9.2 (SAS Financial Management 5.2) and SAS 9.3 to SAS 9.4 and SAS 9.4 maintenance releases. This chapter also applies to migrations from SAS 9.4 to SAS 9.4 maintenance releases.

This chapter describes the following topics:

- requirements and assumptions
- creating operating system accounts

Requirements and Assumptions

This document is written with the following assumptions:

- You have prepared as you would for a standard installation (such as installing required third-party applications, planning which tiers are to be installed on which machines, and so on).
- You have prepared a software depot and a deployment plan.

For information about these steps, see the *SAS Financial Management: Installation and Configuration Guide* (see [“Related Documentation”](#) on page 5).

For migration-specific information about external accounts, see [“Creating Operating System Accounts”](#) on page 8.

Creating Operating System Accounts

Required External User Accounts

Before migration, you must create the required external accounts in the operating system for the primary users. The required accounts are listed in the pre-installation checklist. You define external accounts outside the metadata repository (for example, in the operating system).

When you install software and migrate from SAS 9.2 (SAS Financial Management 5.2) or SAS 9.3, you have the option to use the new SAS 9.4 internal accounts. Using the new SAS 9.4 internal accounts is the preferred option.

The following table lists the required external user accounts required and the machines on which they are authenticated.

Table 2.1 Required External User Accounts

External Account	Example Path
SAS Installer	<i>domain\sas</i>
SAS Spawned Servers account	<i>domain\sassrv</i>
SAS First User	<i>domain\sasdemo</i>
Solutions Host User	<i>domain\sassln</i>

Note:

- The *domain* variable is not applicable for UNIX accounts.
- The *sasdemo* account is optional. If you include this account, you must refer it to an external account.

For more information about the account that you must use for installation with migration, see [“The SAS Installer Account”](#) on page 9.

Optional External Accounts

The following external accounts are required only if you do not convert to internal-account option:

Table 2.2 Optional External User Accounts

External Account	Example
SAS Administrator	<i>domain\sasadm</i>
SAS Trusted User	<i>domain\sastrust</i>

External Account	Example
Solutions Role Administrator	<i>domain\slnadm</i>

Note: The *domain* is not used for UNIX accounts.

The SAS Installer Account

Note: The information in this section applies to SAS Financial Management 5.2 and SAS Financial Management 5.3 source systems. The environment variables for SAS Financial Management 5.5 are automatically set by the installation process.

The account that you must use for installation with migration is the SAS Installer account. The SAS Installer account must be the same account that was used to install SAS 9.2 (SAS Financial Management 5.2), SAS 9.3, or SAS 9.4. It must have a corresponding metadata identity with membership in the Administrators group.

On Windows, this user must be a member of the Administrators group in the operating system.

On UNIX, this user's profile must be the same as the prior SAS 9.x profile, including the environment variables for the SAS Financial Management Database Server. The following code fragment is an AIX example:

```
# Path to the libdir in your mysql install
MYSQL_LIBDIR=/usr/local/mysql/lib
export MYSQL_LIBDIR
# Path to directory to hold shared library for SAS Access to MySQL
MYSQL_CLIENT_DIR=/usr/local/SAS/libmysql
export MYSQL_CLIENT_DIR
# Set or add to the shared library load path
LIBPATH=$LIBPATH:$MYSQL_CLIENT_DIR
Or
LIBPATH=/usr/lib/./lib:$MYSQL_CLIENT_DIR
export LIBPATH
# Add mysql/bin to the PATH environment variable
PATH=$PATH:/usr/local/mysql/bin
export PATH
```

For information about the SAS Installer account, see *SAS Financial Management: Installation and Configuration Guide* (see [“Related Documentation”](#) on page 5).

Chapter 3

Using the Migration Utility

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Overview

The SAS Migration Utility is a tool that packages content from a previous installation so that the content can be migrated to a new installation.

Using the SAS Migration Utility

For complete instructions on how to use the SAS Migration Utility, see [SAS 9.4 Intelligence Platform: Migration Guide](#).

SAS Financial Management Migration Requirements and Restrictions

When using the SAS Migration Utility, note the following requirements and restrictions that are specific to SAS Financial Management.

SAS 9.2 (SAS Financial Management 5.2) or SAS 9.3 Migrations

- On Windows, the Windows path must include the `mysql\bin` folder.
- On UNIX, the user's profile must be the same as the SAS profile, including the environment variables for MySQL, similar to the following AIX example

```
# Path to the libdir in your mysql install
MYSQL_LIBDIR=/usr/local/mysql/lib
export MYSQL_LIBDIR
# Path to directory to hold shared library for SAS Access to MySQL
```

```

MYSQL_CLIENT_DIR=/usr/local/SAS/libmysql
export MYSQL_CLIENT_DIR
# Set or add to the shared library load path
LIBPATH=$LIBPATH:$MYSQL_CLIENT_DIR
Or
LIBPATH=/usr/lib/./lib:$MYSQL_CLIENT_DIR
export LIBPATH
# Add mysql/bin to the PATH environment variable
PATH=$PATH:/usr/local/mysql/bin
export PATH

```

Note: Verify that the link-editor for object files (ld) is in the SAS installer's path.

(Data Tier) Renaming Data Set Names

If the physical names of any custom data sets in the StageFM library begin with “STAGE_”, you must rename them in the SAS Migration Utility package before installing SAS Financial Management 5.5. If the physical name of a custom data set consists of a single letter, you must rename the data set so that it does not contain a single letter. For example, you would rename “a.sas7dat” to “aa.sas7dat.”

Note: These steps apply regardless of whether the prefix is in uppercase, lowercase, or mixed case.

To rename a data set, complete the following steps:

1. Navigate to the `path-to-SMU-package\data-tier-name\levconfig\levdata\Data` directory.
 - Depending on your system, `levdata` might be `levconfig1` instead.
 - `path-to-SMU-package` is the directory in which the SAS Migration Utility package was created.
 - `data-tier-name` is the name for the data tier machine.
2. Open the ZIP file in the `Data` directory and make the following changes:
 - If you find any data sets with a name that begins with “STAGE_”, rename each matching data set to begin with “STG_” (or a similar string).
 - If you find any data sets with a name that is a single letter, rename each matching data set so that it has more than one letter in its name.

Chapter 4

Performing a Single-Tier Installation and Configuration

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Overview

This chapter describes the following topics:

- running the SAS Deployment Wizard
- finalizing the installation

Running the SAS Deployment Wizard

To perform a single-tier installation, complete the following steps:

1. Read the instructions in this chapter before starting the migration process and make note of the specifics that apply to migrations.
2. Follow the installation steps in the *SAS Financial Management: Installation and Configuration Guide* (see “[Related Documentation](#)” on page 5).

For information about installation and migration on the data tier (the system on which you installed the SAS Solutions Services data tier software), see [Chapter 6](#), “[Completing Post-Migration Tasks](#),” on page 21.

3. Run the SAS Deployment Wizard, making the following selections:

Table 4.1 Explanation of SAS Deployment Wizard Prompts and Input

Prompt or Type of Input	Notes
Deployment type	Select both Install SAS Software and Configure SAS Software as the deployment type.

Prompt or Type of Input	Notes
Perform migration	When you reach the Migration Information page, select the Perform migration check box. In the SAS Migration Utility Package Directory field, navigate to the shared directory in which the SAS Migration Utility stored its output.
Internal accounts	SAS recommends that you select Use SAS internal accounts when appropriate on the Deployment Accounts page. For information about creating accounts, see “Creating Operating System Accounts” on page 8 .
External accounts	When you are prompted for the user name and password of an external account, check the domain name prefix carefully to ensure that it is correct for your site. The domain name prefix from a previous migrated system might still be in use.
Server context	The SAS Deployment Wizard presents several pages in which you must select the application server context. During migration, the correct application server context might not be selected by default. There is typically a list of server contexts, consisting of the correct new server context as well as all the migrated OLAP server contexts. Choose the correct server context for your site.

4. Check input before proceeding.

When you see the Deployment Summary page, the deployment wizard has finished collecting installation and configuration input. This is the last opportunity to change any information that you have provided in previous pages before the wizard begins writing to your system.

Before proceeding with the migration, ensure that the input that you have provided to the deployment wizard is correct.

CAUTION:

Incorrect user input such as user ID and passwords causes all or portions of your migration to fail.

For information about running the SAS Deployment Wizard, see the *SAS 9.4 Intelligence Platform Installation and Configuration Guide* (see [“Related Documentation” on page 5](#)).

Finalizing the Installation

After running the SAS Deployment Wizard, complete the following steps:

1. Follow the steps in the Instructions.html file.
2. Perform the post-migration tasks as described in the [Chapter 6, “Completing Post-Migration Tasks,” on page 21](#).
3. Install the client applications.

For information about installing the client applications, see the *SAS Financial Management: Installation and Configuration Guide* (see [“Related Documentation” on page 5](#)).

Note: Both pre- 5.5 and 5.5 versions of the following client applications can exist on the same machine:

- SAS Financial Management Studio
- SAS Management Console
- SAS Data Integration Studio

However, only one version of the SAS Financial Management Add-In for Microsoft Excel can exist on a machine.

Chapter 5

Performing a Multi-Tier Installation and Configuration

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Overview

This chapter describes the following topics:

- running the SAS Deployment Wizard
- finalizing the installation

Running the SAS Deployment Wizard

To perform a multi-tier installation, complete the following steps:

1. Read the instructions in this chapter, making note of the specifics that apply to migrations.
2. Follow the installation steps in the *SAS Financial Management: Installation and Configuration Guide* (see “[Related Documentation](#)” on page 5).
3. Run the SAS Deployment Wizard on each tier of the installation, except for client tiers. If the data tier and metadata tier are on different machines, run the SAS Deployment Wizard on the metadata tier first.

When you run the SAS Deployment Wizard, make the following selections as necessary:

Table 5.1 Explanation of SAS Deployment Wizard Prompts and Input

Prompt or Type of Input	Notes
Deployment type	Select both Install SAS Software and Configure SAS Software as the deployment type.

Prompt or Type of Input	Notes
Perform migration	On the Migration Information page, select the Perform migration check box. In the SAS Migration Utility Package Directory field, navigate to the shared directory in which the SAS Migration Utility stored its output.
Internal accounts	SAS recommends that you select Use SAS internal accounts when appropriate on the Deployment Accounts page. For information about creating accounts, see “Creating Operating System Accounts” on page 8 .
External accounts	When you are prompted for the user name and password of an external account, check the domain name prefix carefully to ensure that it is correct for your site. It might still have the domain name prefix from the previous installation.
Server context	The SAS Deployment Wizard presents several pages in which you must select the application server context. During migration, the correct application server context might not be selected by default. There is typically a list of server contexts, consisting of the correct new server context as well as all the migrated OLAP server contexts. Choose the correct server context for your site.

4. Check input before proceeding.

When you see the Deployment Summary page, the deployment wizard has finished collecting installation and configuration input. This is the last opportunity to change any information that you have provided in previous pages before the wizard begins writing to your system.

Before proceeding with the migration, ensure that the input that you have provided to the deployment wizard is correct.

CAUTION:

Incorrect user input such as user ID and password with a typographical error causes all or portions of your migration to fail.

For detailed information about running the SAS Deployment Wizard, see the *SAS 9.4 Intelligence Platform Installation and Configuration Guide* (see [“Related Documentation” on page 5](#)).

Finalizing the Installation

After running the SAS Deployment Wizard, complete the following steps:

1. Follow the steps in the Instructions.html file.
2. Perform the post-migration tasks as described in the [Chapter 6, “Completing Post-Migration Tasks,” on page 21](#).
3. Install the client applications.

For information about installing the client applications, see the *SAS Financial Management: Installation and Configuration Guide* (see [“Related Documentation” on page 5](#)).

Note: Both pre-5.4 and 5.5 versions of the following client applications can exist on the same machine:

- SAS Financial Management Studio
- SAS Management Console
- SAS Data Integration Studio

However, only one version of SAS Financial Management Add-In for Microsoft Excel can exist on a machine.

Chapter 6

Completing Post-Migration Tasks

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Overview

This chapter describes the following topics:

- requirements and assumptions
- applying file permissions
- migrating SAS data sets from 32-Bit to 64-Bit Microsoft Windows
- modifying the conform library (optional)
- migrating additional libraries
- validating the installation

Requirements and Assumptions

This chapter applies to migrations from SAS 9.2 (SAS Financial Management 5.2) and SAS 9.3 to SAS 9.4 and SAS 9.4 maintenance releases. This chapter also applies to migrations from SAS 9.4 to SAS 9.4 maintenance releases.

This chapter describes tasks that you must perform after the installation and migration steps are complete.

Completing the tasks in this chapter requires the following:

- Access to SAS Management Console in the SAS 9.4 installation.

- Access to SAS Data Integration Studio in the SAS 9.4 installation.

Running these SAS Data Integration Studio jobs requires the following group and role memberships:

- SASSDM DatabaseUsers group
- Financial Management: Process Administrator role

A user with this role has all the Financial Management capabilities. If this user does not need the full set of capabilities after the installation is complete, you can edit the user properties in SAS Management Console after installation.

Note: Do not connect as the unrestricted user. The unrestricted user cannot start a workspace server session.

Note: If your SAS 9.2 (SAS Financial Management 5.2) or SAS 9.3 installation was the result of a migration from SAS 9.1.3, the `SAS-config-dir\Lev1\SASApp` directory might be called `SAS-config-dir\Lev1\SASMain` instead.

Applying File Permissions

Before you perform any post-migration tasks, apply file permissions as described in the *SAS Financial Management: System Administration Guide*. Otherwise, some tasks in this chapter might fail.

Specifically, apply the following permissions to the `SAS-config-dir\Lev1\SASApp\Data` directory and its subdirectories:

- For Windows installations—Grant Full Control to SAS General Server User (sassrv). Grant Read/Write/Modify permission to users who run ETL or SAS jobs to update data in the warehouse. These users should include the Solutions Host User.
- For UNIX installations—Permit full access for the SAS General Server User (sassrv). Grant Read/Write/Execute permission to subdirectories for users who run ETL or SAS jobs through the use of group permissions.

Note: On UNIX, the SAS Deployment Wizard automatically applies the appropriate permissions.

For more information about applying file permissions, see the “Securing Your Installation” section of the “Completing Post-Configuration Tasks” chapter in the *SAS Financial Management: System Administrator’s Guide* and the *SAS 9.4 Intelligence Platform: Migration Guide*. For information about the repositories, folders, and libraries in a migrated system, see [Appendix 1, “Changes in the Migrated System,”](#) on page 25.

Migrating SAS Data Sets from 32-Bit to 64-Bit Microsoft Windows

Note: This section applies only if you are migrating from 32-bit to 64-bit Microsoft Windows.

During migration, libraries that are located under the `SAS-config-dir` directory are automatically converted from 32-bit format to 64-bit format. This includes the StageFM library, which was introduced in SAS Financial Management 5.3. The StageFM library replaces both the DDS and StageDDS libraries.

The migration process does not automatically convert data sets in SAS libraries that are not located under the *SAS-config-dir*. After migration is complete, you must use PROC MIGRATE to manually convert data sets that are not located under the *SAS-config-dir*.

For more information about converting these data sets, see the SAS Note at <http://support.sas.com/kb/37/695.html>.

(Optional) Modifying the Conform Library

In SAS Financial Management 5.5, by default, the Conform library points to the same location as the StageFM library: *SAS-config-dir\Lev1\SASApp\Data\FinancialManagement\StageFM*.

If you do not want to use a separate conform area, skip the rest of this section.

If you want to create a separate conform area, you must modify the Conform LIBNAME statement. You also might need to upgrade the statement's data sets.

To create a separate conform area, complete the following steps:

1. In the file system, create a **ConformedDataMart** directory under *SAS-config-dir\Lev1\SASApp\Data\FinancialManagement*.
2. Prepend the path for the ConformedDataMart to the Conform LIBNAME statement by completing the following steps:
 - a. On the **Plug-ins** tab of SAS Management Console, navigate to **Environment Management** ⇒ **Data Library Manager** ⇒ **Libraries**.
 - b. Right-click **Conform** and open its properties.
 - c. On the **Options** tab, add *SAS-config-dir\Lev1\SASApp\Data\FinancialManagement\ConformedDataMart* to the **Path Specification**.
 Replace *SAS-config-dir* with the path to your site's configuration directory. If necessary, use the up or down arrows so that this path precedes the path to the StageFM library.
3. If your site does not need the Conform data from the prior SAS installation, copy the StageFM data sets to the *SAS-config-dir\Lev1\SASApp\Data\FinancialManagement\ConformedDataMart* folder, replacing all the data sets in that folder.
4. If your site does need the Conform data from the installation, complete the following steps:
 - a. Manually upgrade the ConformedDataMart data sets to match the StageFM data model. If a StageFM data set contains one or more columns that are not present in the corresponding ConformedDataMart data set, add those columns to the ConformedDataMart data set.
 - b. If the tables are registered in the metadata repository, in SAS Data Integration Studio, navigate to the Conform library. With the table names selected, right-click and select **Update Metadata**.

For more information, see “Appendix 2: The Conform Area” in the *SAS Financial Management: Data Administration Guide*.

Migrating Additional Libraries

SAS libraries that are located outside the configuration directory are not automatically migrated. Therefore, you have to manually migrate the libraries. For information about migrating SAS libraries that are located outside the configuration directory, see “Migrating Content Stored Outside the SAS Configuration Directory” in the *SAS 9.4 Intelligence Platform: Migration Guide* (see [“Related Documentation” on page 5](#)).

Validating the Installation

After performing the post-migration tasks, validate the installation by completing the following steps:

1. Perform the post-configuration tasks that are described in “Post-Configuration Steps” in the *SAS Financial Management: System Administrator’s Guide* (see [“Related Documentation” on page 5](#)).

CAUTION:

Do not install the sample data! Doing so overwrites existing data from the migrated system.

2. Perform the validation tasks that are described in the Instructions.html file on the middle tier.
3. Check for content that is known to be present in the source SAS 9.2 (SAS Financial Management 5.2), SAS 9.3, or SAS 9.4 configuration.

Note: You can or should delete some migrated content. For information about this content, see [Appendix 1, “Changes in the Migrated System,” on page 25](#).

4. If your original system contained system filters, they are converted to visibility rules in the migrated system. After you complete the migration, installation, and configuration procedures, you might need to edit the visibility rules that are associated with migrated models. For information about system filters and visibility rules, see [“System Filters and Visibility Rules” on page 28](#).

To help validate the installation after migrating, you can also run *authorization differences reports*. Authorization differences reports identify differences in access to libraries, tables, folders, OLAP schemas, and cubes between a SAS release and prior installations.

For information about authorization differences reports, see the “Performing Post-migration Tasks” chapter of the *SAS 9.4 Intelligence Platform: Migration Guide*.

For information about the differences between releases, see *What’s New in SAS 9.4 Intelligence Platform* and *What’s New in SAS Information Delivery Portal*.

For more information about changes that are specific to SAS Financial Management, see the “Changes in the Migrated System” and “What’s Changed in SAS Financial Management 5.5” in the *SAS Financial Management: System Administrator’s Guide*.

Note: For information about how to access these documents, see [“Related Documentation” on page 5](#).

Appendix 1

Changes in the Migrated System

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Overview

This appendix describes changes that you might notice after migration in objects such as metadata repositories, folders, libraries, and data sets.

This appendix describes the following topics:

- general changes
- SAS data sets
- system filters and visibility rules
- SAS 9.4 support
- SAS Web Application Server support
- new internal database
- jobs from prior release of SAS Financial Management

- roles and group memberships

Note: This is not a complete list of changes that might occur. Check your migrated system carefully to note differences from the previous release. For information about changes in SAS Financial Management 5.5, the “What’s New” information in the *SAS Financial Management: User’s Guide* (see “[Related Documentation](#)” on page 5).

General Changes

The following changes apply to the following migrations: SAS 9.2, SAS 9.3, and SAS 9.4.

Items That Are Not Migrated

Some items are not migrated, including the following:

- File permissions for SAS application servers. For instructions on how to manually migrate the file permissions, see the `Instructions.html` file.
- Alerts and alert settings.
Note: SAS Financial Management 5.4 and later does not support opt-in alerts.
- Items in a My Favorites portlet. The My Favorites portlet is no longer available.
- JVM options for the managed servers.
- Configuration settings for Oracle MySQL Server.
- Customizations to WebDAV templates.
- Workflow customizations. For new instructions on how to customize a workflow, see “Customizing a Workflow” in the *SAS Financial Management: Customization Guide*.
- Custom stored processes are migrated if they reside under the `SAS-config-dir` directory. They might need updating to match SAS 9.4 requirements. For more information about custom stored processes, see the *SAS Financial Management: Customization Guide*.
- If you created a custom cell action for use in the SAS Financial Management Add-In for Microsoft Excel, you must change the stored process definition. For information about creating a custom cell action, see the *SAS Financial Management: Customization Guide*.

Additional Changes to Note

After migration, note the following additional changes:

- For time rules with duplicate time periods, you must open the associated template in Microsoft Excel and save it. Performing this task ensures that when the form is opened using the SAS Financial Management web portal, the correct time periods are displayed.
- For web data entry in SAS Financial Management 5.5, no extraneous text is permitted in the same rows as a data-entry table. If such content exists in a form template, it is not displayed in the forms. (The text is displayed when the forms are

edited in Microsoft Excel.) If necessary, edit your form templates and move the content to a different location on the worksheet.

- Prior to SAS Financial Management 5.3, users could apply member selection rules to member properties and custom properties in a table using the table wizard or the Show Members window. In SAS Financial Management 5.3 and later, users can use properties to filter the hierarchy that the properties are associated with. Users can no longer apply member selection rules to those properties.

During migration, member selection rules for properties are converted to property filters for the associated hierarchy.

For more information about members and member selection rules, see the online Help for the Show Members window in SAS Financial Management Add-In for Microsoft Excel.

SAS Data Sets

About SAS Data Sets

SAS data sets in SAS libraries that are located in directories beneath the SAS configuration directory are automatically migrated to SAS 9.4.

The libraries for SAS Financial Management 5.5 are located in the *SAS-config-dir*\Lev1\SASApp\Data\FinancialManagement directory. Other SAS libraries are placed in the same location relative to the SAS configuration directory root as they were in the previous release.

Regarding SAS data sets post migration, note the following:

- The StageFM library replaces the StageDDS library.
- The Cross Industry Detail Data Store is no longer used. Data is loaded directly from the staging area to the SAS Financial Management data mart.

For more information, see the *SAS Financial Management: Data Administrator's Guide*.

SAS libraries that were in locations outside the configuration directory are not automatically migrated. For more information, see “Migrating Content Stored Outside the SAS Configuration Directory” in the *SAS 9.4 Intelligence Platform: Migration Guide*.

(Optional) Deleting Unused Directories

After migration is complete, you can safely delete the following directories from the SAS 9.4 installation:

- \Lev1\Data\DDSDATA
- \Lev1\Data\stagedds
- \Lev1\Data\ConformedDataMart
- \Lev1\Data\crossindustrydds

In metadata, the Cross Industry Detail Data Store folder and its dependencies can also be deleted or left in place.

System Filters and Visibility Rules

About Visibility Rules

In SAS Financial Management 5.4 and later, visibility rules replace system filters. A visibility rule applies the Hide cell contents or Unhide cell contents option to one or more crossings.

- If a cell matches a Hide visibility rule, the cell's contents are hidden.
- If all the cells in a row or column match a Hide visibility rule, the entire row or column is hidden.
- Unhide cell contents overrides any previous Hide visibility rules that affected the selected crossings.

Rules are applied to a data-entry table or a read-only table by the source member's hierarchy depth from the `sas_hierarchy_member_depth` table. By default, visibility rules are enabled, but they can be disabled via the table properties in a form template or a report.

Note: Visibility rules are enabled on newly created tables. For migrated tables, visibility rules are enabled if system filters were enabled.

A visibility rule can be associated with a model or with a form set. A form set rule cannot be less restrictive than a rule in the form set's model. If the model rules hide a crossing, the form set rules cannot unhide that crossing. A model's visibility rules can be created from SAS Financial Management Studio or from SAS Data Integration Studio.

How System Filters Are Converted to Visibility Rules

As part of the migration from a previous release of SAS Financial Management, system filters are converted to model-based visibility rules. During migration, a system filter is included in a model's visibility rules if its source member and target member are included in the model. (A system filter might become a visibility rule in multiple models.)

Visibility rules for a model are created as follows:

1. The first visibility rule is a Hide rule that hides all dimension members.

Do not move this rule. It must always be the first rule in a list of visibility rules that were created by migrating system filters. It contains no member selections.

If you accidentally delete this rule, you can replace it with a Hide rule that applies to the top level members of one dimension and all descendants.

2. Each remaining rule is an Unhide rule that is applied to crossings that include the following members:

- the source dimension member
- the target members that correspond to the system filter

Note: There is one special case: a rule of Exclude (0, 0, 0) is converted to a Hide rule for member and descendants.

Following the Hide rule (from Step 1), rules are ordered as follows:

1. system filter set
2. source dimension hierarchy, by the source member's hierarchy depth from the “sas_hierarchy_member_depth” table
3. target dimension hierarchy, by the target member's hierarchy depth from the “sas_hierarchy_member_depth” table

Updating Visibility Rules

Each model has only one set of visibility rules. The ordering of the rules can be affected by migration if there are multiple system filters sets, or the existing system filter sets are not ordered based on hierarchy depth. Begin by looking at your system filters, to see whether there are potential conflicts. Consider deleting any unused system filter sets prior to migration. If potential conflicts exist, you should examine the visibility rules for each migrated model to make sure that the rules meet your requirements. After you complete the migration, installation, and configuration procedures, complete the following steps:

1. Log on to SAS Financial Management Studio as a user with the Model Administration capability.
2. For each affected model:
 - a. Right-click the model and select **Cell Visibility Rules**. The Cell Visibility Rules dialog box appears in a Microsoft Excel workbook.
 - b. Open each rule to view its member selection rules.
 - c. Reorder or delete the rules if necessary.

For more information about reordering visibility rules, click the **Help** button. For background information about visibility rules, see “Designing Visibility Rules” in the online Help.

System Filters That Are Not Migrated

A system filter is not migrated if its member selection rules are not supported in visibility rules. The information for these system filters is added to a temporary table in the SAS Financial Management Data Mart:
SAS_DIM_TYPE_MEMBER_SELECTOR_NOT_SUPPORT.

If this table is empty after migration, then no filters were dropped due to unsupported member selection rules. For more information about this table, contact SAS Technical Support.

SAS 9.4 Support

SAS 9.4 contains some key enhancements including an embedded middle-tier web application server and support for only 64-bit Windows environments.

SAS Web Application Server Support

SAS Financial Management 5.4 and later no longer requires or supports external third-party application servers (JBoss, WebSphere, and WebLogic). Benefits of this new feature include the following:

- cost reduction by eliminating external application servers
- higher availability by eliminating remote services
- integrated support for enterprise authentication systems, including WebSEAL, SiteMinder, and IWA

New Internal Database

SAS Financial Management 5.4 and later includes a new internal database, PostgreSQL. SAS Financial Management directly accesses and updates the database. IT maintenance and administration are not required. This database is fully supported by SAS Technical Support.

Jobs from SAS Financial Management 5.2 or 5.3

SAS Financial Management 5.5 jobs are located in the following metadata folders: `/Products/SAS Financial Management/5.5 Jobs` and `/Products/SAS Financial Management/5.5 Standard Reports`.

Jobs from SAS Financial Management 5.2, and 5.3 are not upgraded in a migration. However, they are saved in folders such as the following:

- `/Products/SAS Solutions Services/5.2 Jobs`
- `/Products/SAS Solutions Services/5.2 Standard Reports`
- `/Products/Cross Industry Detail Data Store`

You can save the old jobs for reference, or you can delete them.

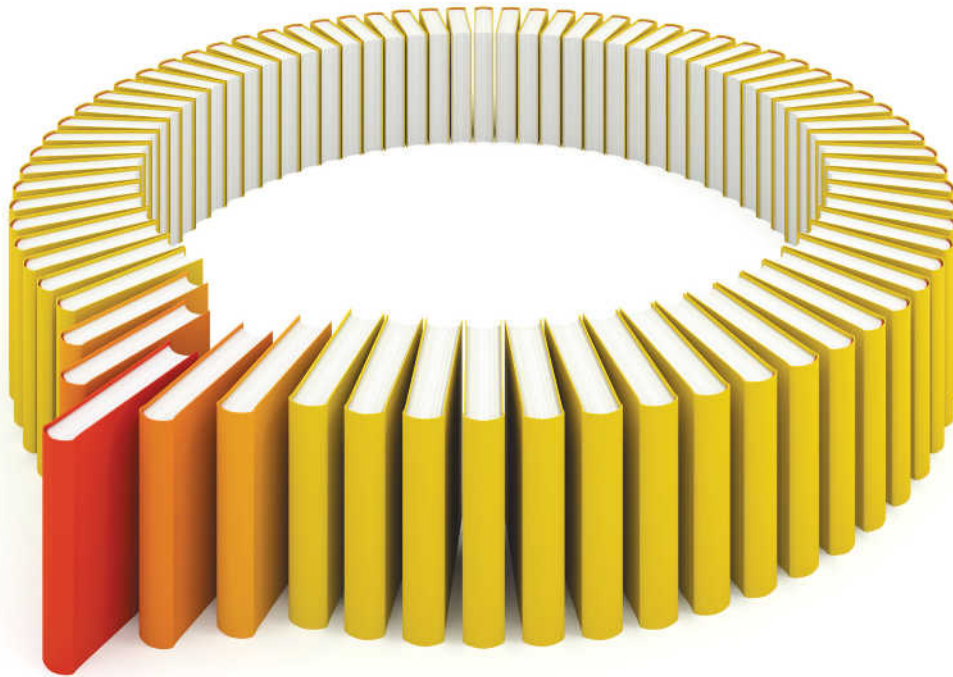
Role and Group Memberships

Metadata role and group memberships are migrated.

For information about groups, roles, and the use of capabilities in SAS Financial Management, see “Group and Role Assignments” in the *SAS Financial Management: System Administrator’s Guide*.

For information about groups, roles, and capabilities in the SAS Intelligence Platform, see the *SAS Intelligence Platform 9.4: Security Administration Guide*.

Note: For information about how to access these documents, see [“Related Documentation”](#) on page 5.



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