Installation Instructions for SAS® Strategy Management Release 5.4 for SAS® 9.3

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Chapter 1 — Getting Started

Before You Begin the Installation

SAS Software Order and SAS Software Depot

Your SAS Software Order will provide you information about how to download your SAS Software Depot. Follow those instructions to download your software and create a SAS Software Depot.

QuickStart Guide

Your SAS Software Order and the SAS Download Manager instruct you to follow the steps in the *QuickStart Guide: SAS® 9.3 Planned Deployments using Electronic Software Delivery*. A link to the QuickStart Guide is found in your SAS Software Depot in the `depotsummary.html` file which is located at the top level of the SAS Software Depot.

Deployment Plan and SAS 9 Pre-Installation Checklist

This solution requires you to complete a planned installation. A deployment plan is an XML-based description of the topology for your SAS system. The plan file describes the intended final SAS software environment. The plan file is used in the SAS software deployment process to tell the SAS Deployment Wizard which software components to install and configure on each machine.

A deployment plan will be generated and provided for each deployment. There are sample plans for complex deployments in the SAS Planning Application. The SAS Planning Application can only be used by SAS representatives. You must log in with a valid sas.com email address before you access the Planning Application 2.0.

Note: *If you want SAS Visual Analytics Report Services to be installed, select SAS Strategy Management as well as SAS Visual Analytics Report Services offerings in the planning application.*

More information about the planning application and sample plans is found in the SAS Planning Application, `http://support.sas.com/planning`.

Mobile Support

If you have already installed a previous version of SAS Strategy Management and want to add mobile support, please refer to the *SAS Strategy Management Migration Guide.* If this is a new install of SAS Strategy Management, please add the SAS Visual Analytics Report Services to the deployment plan.

Pre-Installation Checklist

The *SAS 9 Pre-Installation Checklist* document is found in the same directory as the plan file. The filename is `checklist.pdf` or `checklist.rtf`. The *SAS 9 Pre-Installation Checklist* document will explain what users, groups and third party software are needed on each tier of the deployment. In these instructions, pre-installation checklist refers to this customized document.

Migration Guides

If you have already installed SAS Strategy Management 2.4/2.4.1 and want to maintain data, please refer to the *SAS Performance Management Solutions: 9.1.3 to 9.2 Migration Guide*.

If you have already installed SAS Strategy Management 5.1 or 5.2 and want to maintain data, please refer to the *SAS Strategy Management: 9.2 to 9.3 Migration Guide*.

Chapter 2 — Pre-Installation Steps

Steps to Perform Before You Install SAS Software

For more information about these steps, please see the pre-installation checklist and the *SAS 9.3 Intelligence Platform Installation and Configuration Guide*:

http://www.support.sas.com/93administration

Operating System Users and Groups

Create the users and groups that are specified in the pre-installation checklist for each tier of your installation.

Third Party Software and System Requirements

The *QuickStart Guide* contains a link to the System Requirements on SAS Install Center. Review the System Requirements of the products that you will install. **(VERIFY)** Install the required third party products. Strategy Management system requirements can be found here:

http://support.sas.com/documentation/onlinedoc/stm/index.html

MySQL Database Server Components

The pre-installation checklist provides the location of the installation instructions for MySQL, *MySQL Database Server Installation Guide for SAS Strategy Management* is located here:

http://support.sas.com/documentation/onlinedoc/stm/index.html

Note: *If you are upgrading from SAS Strategy Management 5.1 or 5.2 on SAS 9.2, you must upgrade to MySQL 5.1.55.*

Java Development Kit

The Java Development Kit requirements for SAS 9.3 in general are found here:

http://support.sas.com/resources/thirdpartysupport/v93/jdks.html.

Be sure to obtain the JDK that matches your Web application server.

Note: *Oracle WebLogic Server 10.3gR3 requires the Sun JDK version 1.6.0 with a required update level. See the Third Party documentation above for the update level.*

JBoss Application Server

Strategy Management supports JBoss 5.1.

Note: *Please see the "Strategy Management System Requirements 9.3" for details on supported version of JBoss.*

Apply all of the patches referenced for the Web Application server. Follow any post-installation steps for your platform documented on the site above.

WebLogic Application Server

Strategy Management supports Oracle WebLogic Server 10g Release 3.

Note: *Please see the "Strategy Management System Requirements 9.3" for details on supported version of WebLogic.*

Install your Web Application server using the documentation and system requirements found here: http://support.sas.com/resources/thirdpartysupport/v93/appservers/weblogicsw.html

If you have received Oracle WebLogic from SAS, WebLogic 10.3 will be found in the SAS Software Depot under `third_party\WebLogic\10_3`. Please see the `readme.pdf` file in this location for information about installing the WebLogic software and applying the required patches.

Another issue with the WebLogic installation is documented in SAS Installation Note 38566 "The Oracle WebLogic 10.3 installer fails when you run it from a network location that is specified as a universal naming convention (UNC) path http://support.sas.com/kb/38/566.html.

Apply all of the patches referenced for the Web Application server. Follow any post-installation steps for your platform documented on the site above.

WebSphere Application Server Network Deployment

Strategy Management support IBM WebSphere Application Server Network Deployment Release 7.0.0.13.

Note: *Please see the "Strategy Management System Requirements 9.3" for details on supported version of WebSphere.*

Install your Web Application server using the documentation and system requirements found here: http://support.sas.com/resources/thirdpartysupport/v93/appservers/webspheresw.html

If you have received IBM WebSphere from SAS, WebSphere 7.0.0.13 will be found in the SAS Software Depot under `third_party\WebSphere\7_0_0_13.` Please see the `readme.pdf` file in this location for information about installing the WebSphere software and applying the required patches.

For either version, apply all of the patches referenced for the Web Application server. Follow any post-installation steps for your platform documented on the site above.

Junit Jar

Download the Junit jar version 4.8.1 from this Web site:

http://sourceforge.net/projects/junit/files/junit/

Note: *The SAS Deployment Tester requires Junit 4.8.1. The SAS Deployment Wizard will prompt you for the location of Junit 4.8.1.*

AIX Operating System Consideration

When installing STM on the AIX operating system, do not use symbolic links (symlinks). If they are used, certain aspects of STM may not work properly because parts of Base SAS may not work properly. This has been observed with Export to IMaps and the Time Wizard, but the problem could manifest itself with any software that runs a stored process.

Chapter 3 — Install and Configure SAS Software

SAS Deployment Wizard

Adding SAS Strategy Management to an Existing SAS 9.3 Intelligence Platform Deployment

Follow the steps outlined in *SAS 9.3 Intelligence Platform Installation and Configuration Guide* "Managing your SAS Deployment: Adding SAS Products," which can be found in these two locations:

http://support.sas.com/documentation/cdl/en/biig/62611/PDF/default/biig.pdf

or

http://support.sas.com/documentation/cdl/en/biig/62611/HTML/default/viewer.htm#titlepage.htm

If the current deployment's Web application server is not the required version for SAS Strategy Management, or the deployment has been configured with only a single managed server, the Web application server must be temporarily removed from your deployment. Follow these steps:

1. Use the instructions in *SAS 9.3 Intelligence Platform Installation and Configuration Guide* "Removing a SAS Configuration."

2. During the add-on of SAS Strategy Management, redeploy the Web application server at the required version and configuration along with *all* of your Web applications.

Quickstart Guide

The *QuickStart Guide* explains how to launch the SAS Deployment Wizard. Prompts and windows that apply only to these solutions are documented in this reference. Use the SAS Deployment Wizard help screens and SAS 9.3 Intelligence Platform documentation to guide you as needed.

Installation on 2-Tiers (Data Tier/Mid-Tier and Client Tier)

Refer to the *SAS 9.3 Intelligence Platform Installation and Configuration Guide* for more detailed information about the installation:

http://www.support.sas.com/93administration

Before You Begin the Data Tier and Mid-Tier on a Single Server

Verify External Users and Groups

1. Verify that the following users have been created on the data tier as instructed in the pre-installation checklist.

SAS Installer	`mydomain\installer-ID`
SAS Spawned Servers account	`mydomain\sassrv`
SAS First User	`mydomain\sasdemo`
SAS Server Users group	SAS Server Users

   Note: *The SAS Installer account should be available in the long term for future SAS maintenance.*

2. Verify that SAS Server Users group has the user right "Log on as a batch job." The SAS Spawned Servers Account (sassrv) can be added to this group to obtain this right or it can be assigned by the SAS Deployment Wizard.

Verify Third Party Products

Review the System Requirements and verify that the following third party products are installed:

- JBoss Application Server 5

  or

  Oracle WebLogic Server 10.3

  or

  IBM WebSphere Application Server Network Deployment 7.0.0.13

- Sun Java Development Kit 6 with required update level

- MySQL Enterprise Database Server 5.1.55

- MySQL Connector J 5.1.13

- MySQL Database Runtime Library 5.1.55

- Junit 4.8.1 – required for SAS Deployment Tester

- Internet Explorer 8 or 9 – For more information see the "SAS Strategy Management 5.4 System Requirements."

- Firefox – For more information see the "SAS Strategy Management 5.4 System Requirements."

Software Deployment Wizard for Data Tier and Mid-Tier on a Single Server

1. In the **Select Products to Install** dialog, select "Server and Middle Tier" as the machine.

2. At the **Specify SAS PC Files Service Options** dialog, check "Start Service Now and Automatically when Windows Starts."

3. After the **Review Required Software** dialog, you will be prompted for third-party software. The default locations are below. Refer to the notes you made on your pre-installation checklist to find the locations you chose if they are not the default locations.

   - **MySQL Connector_J Configuration 5.1:**

     `C:\Program Files\SAS\MySQLConnectorJ`

     Note: Enter the location of MySQL Connector_J jar version 5.1.13.

   - **MySQL Database Runtime Library Configuration 5.1:**

     `C:\mysql\bin`

   - **MySQL Database Server Configuration 5.1:**

     `C:\mysql`

   - **JBoss Application Server:**

     Windows: `C:\Program Files\jboss-eap-5.1\jboss-as`
     UNIX: `…/jboss-eap-5.1/jboss-as`

     or Oracle WebLogic Server:

     Windows: `C:\bea\wlserver_10.3`
     UNIX: `/usr/bea/wlserver_10.3`

or IBM WebSphere Application Server:

Windows: `C:\Program Files\IBM\WebSphere\AppServer`

UNIX: `/usr/IBM/WebSphere\AppServer`

- **Java Development Kit:**

  `C:\Program Files\Java\jdk1.6.0_XX`

Note: *WebLogic 10.3 requires Java Development Kit 1.6.0 with an update level.*

4. Select *Typical* in the **Select Configuration Prompting Level** dialog. If the default values are appropriate for your site, you can accept many of the SAS Deployment Wizard dialogs as they are presented. Noted below are changes that need to be made.

   Note: *If you select "Full" for the prompting level, do not check the checkbox to* **Secure JMS Resources** *in the dialog* **Web Application Server: Secure JMS Resources***.*

5. For the solution-specific dialogs listed below, the following information supplements the help screens:

   A. **MySQL Database Host** dialog; accept the defaults or enter the location and port of the MySQL server.

   B. **MySQL Database** dialog:

      Deployment Instance Name: Leave this blank or enter a unique instance name. If you have more than one MySQL server in your deployment then you must enter a unique name such as the short hostname of the server.

      Service Name: During *Custom* prompting level only, enter the name of the service you chose during the MySQL installation configuration.

   C. **SAS Web Infrastructure Platform: Database Type** dialog; Select database type. MySQL is recommended.

   D. **Database Account: Database Administrator** dialog; the default user name is `sqladmin`. Enter a userid and password. This is not an operating system account but is used to secure and administer the MySQL database server.

   E. **Database Account: SPM Database Administrator** dialog; the default database account identity is *spmdbadm*. Enter a userid and password. This is not an operating system account but is used to secure and administer the MySQL SPM database.

   F. In the **SAS Web Infrastructure Database JDBC Properties** dialog, if you are using MySQL, enter the password for the `sqladmin` database user and the path to `MySQL Connector/J`.

      Note: *This user (sqladmin) should match the userid that was defined as the Database administrator.*

6. At the Deployment Summary dialog, press **Start**.

Client Tier

On the **Select Products to Install** dialog, select "Client Tier" as the machine and respond to the prompts. You will need to enter the host and port of the SAS Metadata Server.

Installation on 3-Tiers (Data Tier, Mid-Tier and Client Tier)

Refer to the *SAS 9.3 Intelligence Platform Installation and Configuration Guide* for more detailed information the installation: http://www.support.sas.com/93administration

Before You Begin the Data Tier

Verify External Users and Groups

1. Verify that the following users have been created on the data tier as instructed in the pre-installation checklist.

   SAS Installer   `mydomain\installer-ID`

   SAS Spawned Servers account   `mydomain\sassrv`

   SAS First User   `mydomain\sasdemo`

   SAS Server Users group   SAS Server Users

   Note: *The SAS Installer account should be available in the long term for future SAS maintenance.*

2. Verify that SAS Server Users group has the user right "Log on as a batch job." The SAS Spawned Servers Account (sassrv) can be added to this group to obtain this right or it can be assigned by the SAS Deployment Wizard.

Verify Third Party Products

Verify that the following third party products are installed:

- MySQL Database Server 5.1.55
- MySQL Connector J 5.1.13
- MySQL Database Runtime Library 5.1.55
- Junit 4.8.1 – required for SAS Deployment Tester
- Internet Explorer 8 or 9 – For more information see on browser requirements see the "SAS Strategy Management 5.4 System Requirements."
- Firefox – For more information see the "SAS Strategy Management 5.4 System Requirements."

Software Deployment Wizard for Data Tier

1. Select *Server* as the machine in the **"Select Products to Install"** dialog.

2. At the **Specify SAS PC Files Server Options** dialog, check "Start Service Now and Automatically when Windows Starts."

3. After the **Review Required Software** dialog, you will be prompted for third-party software. The default locations are below. If the locations you chose were not the default locations, refer to the notes you made on your pre-installation checklist.

   - **MySQL Connector_J Configuration 5.1:**

     `C:\Program Files\SAS\MySQLConnectorJ`

     Note: *Enter the location of MySQL Connector_J jar version 5.1.13.*

   - **MySQL Database Runtime Library Configuration 5.1:**

     `C:\mysql\bin`

   - **MySQL Database Server Configuration 5.1:**

     `C:\mysql`

4. Specify *Typical* in the **Select Configuration Prompting Level** dialog. If the default values are appropriate for your site, you can accept many of the SAS Deployment Wizard dialogs as they are presented. Noted below are changes that need to be made.

5. For the solution-specific dialogs listed below, the following information supplements the help screens:

   A. **MySQL Database Host** dialog; accept the defaults or enter the location and port of the MySQL server.

   B. **MySQL Database** dialog;

      Deployment Instance Name: Leave this blank or enter a unique instance name. If you have more than one MySQL server in your deployment, then you must enter a unique name such as the short hostname of the server.

      Service Name: During *Custom* prompting level only, enter the name of the service you chose during the MySQL installation configuration.

   C. **"SAS Web Infrastructure Platform: Database Type"** dialog; Select database type. MySQL is recommended.

   D. **"Database Account: Database Administrator"** dialog; the default user name is *sqladmin*. Enter a userid and password. This is not an operating system account but is used to secure and administer the MySQL database server.

      Note: *This user (sqladmin) should match the userid that was defined as the* Database administrator.

   E. **"Database Account: SPM Database Administrator"** dialog; the default database account identity is *spmdbadm*. Enter a userid and password. This is not an operating system account but is used to secure and administer the MySQL SPM database.

6. At the **Deployment Summary** dialog press **Start.**

Before You Begin the Mid-Tier

Verify Third Party Products

Verify that the following third party products are installed:

- JBoss Application Server 5

  or

  Oracle WebLogic Server 10.3

  or

  IBM WebSphere Application Server Network Deployment 7.0.0.13

- Sun Java Development Kit 6 with required update level

- MySQL Connector J 5.1.13

- Internet Explorer 8 or 9 – For more information see on browser requirements, see the "SAS Strategy Management 5.4 System Requirements."

- Firefox – For more information see the "SAS Strategy Management 5.4 System Requirements."

Software Deployment Wizard for Mid-Tier

1. In the **Select Products to Install** dialog, select "Middle Tier" as the machine.

2. After the **Review Required Software** dialog, you will be prompted for third-party software. The default locations are below. If the locations you chose were not the default locations, refer to the notes you made on your pre-installation checklist.

    - **MySQL Connector_J Configuration 5.1:**

        `C:\Program Files\SAS\MySQLConnectorJ`

        Note: *Enter the location of MySQL Connector_J jar version 5.1.13.*

    - **JBoss Application Server:**

        Windows: `C:\Program Files\jboss-eap-5.1\jboss-as`

        UNIX: `…/jboss-eap-5.1/jboss-as`

        or

        Oracle WebLogic Server:

        Windows: `C:\bea\wlserver_10.3`

        UNIX: `/usr/bea/wlserver_10.3`

        or

        IBM WebSphere Application Server:

        Windows: `C:\Program Files\IBM\WebSphere\AppServer`

        UNIX: `/usr/IBM/WebSphere\AppServer`

    - **Java Development Kit:**

        `C:\Program Files\Java\jdk1.6.0_XX`

        Note: *WebLogic 10.3 requires Java Development Kit 1.6.0 with an update level.*

3. Specify *Typical* in the **Select Configuration Prompting Level** dialog. If the default values are appropriate for your site, you can accept many of the SAS Deployment Wizard dialogs as they are presented. Noted below are changes that need to be made.

    Note: *If you select "Full" for the prompting level, do not check the checkbox to **Secure** JMS* **Resources** *in the dialog* **Web Application Server: Secure JMS Resources***.*

4. In the **SAS Metadata Server** dialog, enter or change the server name to the fully qualified hostname of the data tier server**.**

5. For the solution-specific dialogs listed below, the following information supplements the help screens:

    A. **Database Account: Database Administrator** dialog; the default user name is `sqladmin`. Enter a userid and password. This is not an operating system account but is used to secure and administer the MySQL database server.

    B. **Database Account: SPM Database Administrator** dialog; the default database account identity is `spmdbadm`. Enter a userid and password. This is not an operating system account but is used to secure and administer the MySQL SPM database.

6. At the **Deployment Summary** dialog, press **Start**.

Client Tier

On the **Select Products to Install** dialog, select "Client Tier" as the machine and respond to the prompts. You will need to enter the host and port of the SAS Metadata Server.

Chapter 4 — Post-Configuration Guide

After you complete the installation and configuration of your software, follow the post-configuration steps in Chapter 2 of the *SAS Strategy Management 5.4 System Administration Guide, Second Edition* which can be found here:

http://support.sas.com/documentation/onlinedoc/stm/index.html

The *SAS 9.3 Intelligence Platform: System Administration Guide* provides additional general information on System Administration and can be found here:

http://www.support.sas.com/93administration