

Installation Instructions for Release 5.1 of the SAS[®] Performance Management Solutions



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Installation Instructions for Release 5.1 of the SAS Performance Management Solutions

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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 on 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 to your SAS® Electronic Software Delivery Installation for Planning Installations*.

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

These solutions require 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. More information about the planning application and sample plans is found in the SAS Planning Application, <http://support.sas.com/planning>.

Data-Step Batch Server

When you select data tier products in the SAS Planning Application, be sure to select the optional component Data-Step Batch Server. These products include Base SAS 9.21:

- SAS Financial Management Server 5.1
- SAS Human Capital Management-Data Server 5.1
- SAS Strategy Management Server 5.1

Remember to select the *Include SAS DATA Step Batch Server 9.2?* checkbox.

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 Guide

If you have already installed SAS Financial Management 4.4/4.4.1, SAS Strategic Performance Management 2.4/2.4.1 and/or SAS Human Capital Management 4.4/4.4.1 and want to maintain data, please refer to the *SAS Performance Management Solutions: 9.1.3 to 9.2 Migration Guide*.

Chapter 2 — Pre-Installation Steps

Steps to Perform Before You Install SAS Software

For more information of these steps see the pre-install checklist and the *SAS 9.2 Intelligence Platform Installation and Configuration Guide*:

<http://www.support.sas.com/92administration>

Operating System Users and Groups

Create the users and groups that are specified in the pre-install 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. Install the required third party products.

MySQL Database Server Components

The pre-install checklist provides the location of the installation instructions for MySQL. A copy can also be found in your SAS Software Depot in the `third_party\MySQL_Database_Server\5_0_80\Platform\readme.pdf` file.

Java Development Kit

The Java Development Kit requirements for SAS 9.2 in general are found here:

<http://support.sas.com/resources/thirdpartysupport/v92m3/jdks.html>. Be sure to get the JDK that matches your Web application server.

Note: Oracle WebLogic Server 10.3.0 requires the Sun JDK version 1.6.0 with a required update level. See the Third Party documentation above for the update level.

Create a JAVA_HOME environment variable and add %JAVA_HOME%\bin to your PATH variable. Using the following command to validate the path of your SAS Installer user:

```
java -version
```

Web Application Server

Install your Web Application server using the documentation and system requirements found here:

<http://support.sas.com/resources/thirdpartysupport/v92m3/appservers/weblogicsw.html>

If you have received Oracle Weblogic from SAS, WebLogic 10.3.0 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.

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

Note: These solutions support only Oracle WebLogic Server 10.3gR3. These solutions do not support JBoss or WebSphere. **Do not install any versions of Oracle WebLogic 10.3 greater than 10.3.0.**

Junit 4.5 Jar

Download the Junit jar from this Web site:

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

Note: *The SAS Deployment Tester requires Junit 3.8.1 and SAS Human Capital Management requires Junit 4.5. The SAS Deployment Wizard will prompt you for the location of Junit 3.8.1. There are post-installation instructions for completing the configuration of SAS Human Capital Management.*

Chapter 3 — Install and Configure SAS Software

SAS Deployment Wizard

Adding SAS Performance Management Solutions to an Existing SAS 9.2 Intelligence Platform Deployment

Follow the steps outlined in *SAS 9.2 Intelligence Platform Installation and Configuration Guide* “Appendix 2, Managing your SAS Deployment: Configuring or Adding SAS Products” which can be found in these two locations:

<http://support.sas.com/documentation/cdl/en/biig/60946/PDF/default/biig.pdf>

or

<http://support.sas.com/documentation/cdl/en/biig/60946/HTML/default/config.htm>

If the current deployment’s Web application server is not the required version for these solutions, 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 9.2 Intelligence Platform Installation and Configuration Guide* “Appendix 2: Removing a SAS Configuration.”
2. During the add-on of the Performance Management Solutions, redeploy the Web application server at the required version and configuration along with **all** of your Web applications.

For solution-specific information, refer to the sections below that match your server deployment. If you are adding to a SAS 9.2 platform system released before Maintenance 2, please see Chapter 5 for additional instructions.

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 9.2 Intelligence Platform documentation to guide you as needed.

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

Refer to the *SAS 9.2 Intelligence Platform Installation and Configuration Guide* for more detailed information the installation:

<http://www.support.sas.com/92administration>

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-install checklist.

SAS Spawnd Servers Account	mydomain\sassrv
SAS First User	mydomain\sasdemo
Solutions Host User	mydomain\slnhost
SAS Server Users Group	SAS Server Users

2. Verify that SAS Server Users Group has the user right 'Log on as a batch job.'

Verify Third Party Products

1. Verify that the following third party products are installed:
 - Oracle WebLogic Server 10.3gR3 (10.3.0)
 - Sun Java Development Kit 6 with required update level
 - MySQL Database Server 5.0.80
 - MySQL Connector J 5.0.8
 - MySQL Database Runtime Library 5.0.80
 - Junit 3.8.1
 - Junit 4.5
 - Internet Explorer 6 with SP2 or Internet Explorer 7
2. Verify that the path to MySQL Database Server's bin directory is in your PATH environment variable. The default is C:\mysql\bin.
3. Verify that Sun JDK 1.6_0 with required update level is in your path and that the JAVA_HOME environment variable is set to that version of the JDK.
4. On Windows, if the Web Application server is WebLogic, stop the Oracle Weblogic NodeManager service before configuring your software.

```
net stop "Oracle Weblogic NodeManager (C_bea_wlserver_10.3)"
The Oracle WebLogic NodeManager (C_bea_wlserver_10.3) service is
stopping.
The Oracle WebLogic NodeManager (C_bea_wlserver_10.3) service was
stopped successfully.
net start
```

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

1. 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 5.0.8: C:\Program Files\SAS\MySQLConnectorJ

MySQL Database Runtime Library Configuration 5.0.80: C:\mysql\bin

MySQL Database Server Configuration 5.0.80: C:\mysql

BEA WebLogic Server 9.2: C:\bea\wlserver_10.3

Note: The system requirement is for WebLogic Server 10.3.0. WebLogic 9.2 is not supported for these solutions.

Java Development Kit JAVA 5 UPDATE 15: C:\Program Files\Java\jdk1.6.0_XX

Note: WebLogic 10.3.0 requires Java Development Kit 1.6.0 with an update level. Click "Yes" at the warning dialog.

2. Select **Typical** in the **Select Configuration Prompting Level** dialog.
3. When prompted for the **SAS Internal Account: Solutions Administrator**, enter a password for the slnadm user. This is not an operating system user.
4. If prompted for a **SAS Application Server Context**, select the default which is **SASApp**. If you are performing a migration, select **SASMain**.

5. For the following solution-specific dialogs, 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; 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.
 - C. **SAS Solutions Services Mid-Tier: ODCS** dialog; accept the default or enter the host name and port number of your ODCS server. The default WebLogic port is 7301. If the ODCS server is on the same machine as the SAS Solutions Server this is SASServer4.
 - D. **MySQL / SASOP database Installation** dialog; enter the host name and port number of your MySQL server. This is typically your data tier server and the default port is 3306.
 - E. **SAS OLAP Data and Compute Server: Deployment Instance Name** dialog; leave this blank or enter a unique instance name. If you have more than one ODCS server in your deployment then you must enter a unique name such as the short hostname of the server.
 - F. **SAS OLAP Data and Compute Server: Installation** dialog; specify that this is the primary ODCS server.
 - G. **External Account: Solutions Host User** dialog; enter the user that you defined for access to SAS Datasets by JDBC. The default user name is slnhost. Leave the checkbox selected for “Automatically Enable Local Security Policy Settings” to grant the user log on as a batch job.
 - H. **Database Account: Database Administrator** dialog; the default user name is sqladmin. This is not an operating system account but is used to secure and administer the MySQL database server.
 - I. **Database Account: SASSDM Database Administrator** dialog; the default database account identity is sasdmdbadm. This is not an operating system account but is used to secure and administer the MySQL SASSDM database.
 - J. **Database Account: SPM Database Administrator** dialog; the default database account identity is spmdbadm. This is not an operating system account but is used to secure and administer the MySQL SPM database.
 - K. **Database Account: HCM Database Administrator** dialog; the default database account identity is hcmdmdbadm. This is not an operating system account but is used to secure and administer the MySQL HCM database.
6. Database Type dialog; change the default database from SAS Table Server to MySQL.
7. At the Deployment Summary dialog, press Start.

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

Refer to the *SAS 9.2 Intelligence Platform Installation and Configuration Guide* for more detailed information the installation:

<http://www.support.sas.com/92administration>

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-install checklist.

SAS Spawned Servers Account	mydomain\sassrv
SAS First User	mydomain\sasdemo
Solutions Host User	mydomain\slnhost
SAS Server Users Group	SAS Server Users

2. Verify that SAS Server Users Group has the user right 'Log on as a batch job.'

Verify Third Party Products

1. Verify that the following third party products are installed:
 - MySQL Database Server 5.0.80
 - MySQL Connector J 5.0.8
 - MySQL Database Runtime Library 5.0.80
 - Junit 3.8.1
 - Junit 4.5
 - Internet Explorer 6 with SP2 or Internet Explorer 7
2. Verify that the path to MySQL Database Server's bin directory is in your PATH environment variable. The default is `C:\mysql\bin`.

Software Deployment Wizard for Data Tier

1. Select "Server" as the machine in the "Select Products to Install" dialog.
2. 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 5.0.8:** `C:\Program Files\SAS\MySQLConnectorJ`
 - MySQL Database Runtime Library Configuration 5.0.80:** `C:\mysql\bin`
 - MySQL Database Server Configuration 5.0.80:** `C:\mysql`
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.
4. When you are prompted for the "**SAS Internal Account: Solutions Administrator**," enter a password for the `slnadm` user. This is not an external system user.
5. For the following solution-specific dialogs, 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; enter your data tier server for the deployment instance.
 - C. "**External Account: Solutions Host User**" dialog; enter the user that you defined for access to SAS Datasets by JDBC. The default user name is `slnhost`. Leave the

checkbox selected for “Automatically Enable Local Security Policy Settings” to grant the user log on as a batch job.

- D. “**Database Account: Database Administrator**” dialog; the default user name is sqladmin. This is not an operating system account but is used to secure and administer the MySQL database server.
 - E. “**Database Account: SASSDM Database Administrator**” dialog; the default database account identity is sasdmdbadm. This is not an operating system account but is used to secure and administer the MySQL SASSDM database.
 - F. “**Database Account: SPM Database Administrator**” dialog; the default database account identity is spmdbadm. This is not an operating system account but is used to secure and administer the MySQL SPM database.
 - G. “**Database Account: HCM Database Administrator**” dialog; the default database account identity is hcmdmdbadm. This is not an operating system account but is used to secure and administer the MySQL HCM database.
6. At the “**Deployment Summary**” dialog; press **Start**.

Before You Begin the Mid-Tier

Verify Third Party Products

1. Verify that the following third party products are installed:
 - Oracle WebLogic Server 10.3gR3 (10.3.0)
 - Sun Java Development Kit 6 with required update level
 - MySQL Connector J 5.0.8
 - Junit 4.5
 - Internet Explorer 6 with SP2 or Internet Explorer 7
2. Verify that Sun JDK 1.6_0 with required update level is in your path and that the JAVA_HOME environment variable is set to that version of the JDK.
3. On Windows, if the Web Application server is WebLogic, stop the Oracle Weblogic NodeManager service before configuring your software.

```
net stop "Oracle Weblogic NodeManager (C_bea_wlserver_10.3)"
The Oracle WebLogic NodeManager (C_bea_wlserver_10.3) service is
stopping.
The Oracle WebLogic NodeManager (C_bea_wlserver_10.3) service was
stopped successfully.
net start
```

Software Deployment Wizard for Mid-Tier

1. 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 5.0.8:

C:\Program Files\SAS\MySQLConnectorJ

BEA WebLogic Server 9.2: C:

\bea\wlserver_10.3

Note: *The system requirement is for WebLogic Server 10.3.0. WebLogic 9.2 is not supported for these solutions.*

Java Development Kit JAVA 5 UPDATE 15:

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

Note: *WebLogic 10.3.0 requires Java Development Kit 1.6.0 with an update level. Click “Yes” at the warning dialog.*

2. 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.
3. In the **SAS Metadata Server** dialog, enter or change the server name to the fully qualified hostname of the data tier server.
4. If prompted for a **SAS Application Server Context**, change from the default to **SASApp**. If you are performing a migration, **select SASMain**.
5. In the **SAS BI Dashboard Dependencies** dialog; verify that the “**SAS Application Server Context**” is **SASApp**. If you are performing a migration, **select SASMain**.
6. For the following solution-specific dialogs, the following information supplements the help screens:
 - A. In the **SAS Solutions Services Mid-Tier Dependencies** dialog, select MySQL database server on the data tier server. Set the **SAS Application Server Context** to **SASApp**. If you are performing a migration, set it to **SASMain**.
 - B. **SAS Solutions Services Mid-Tier: ODCS** dialog; accept the default or enter the host name and port number of your ODCS server. The default WebLogic port is 7301. If the ODCS server is on the same machine as the SAS Solutions Server this is **SASServer4**.
 - C. **MySQL / SASOP database Installation** dialog; enter the host name and port number of your MySQL server. This is typically your data tier server and the default port is 3306. If SAS Operational Planning data tier is on a separate server, then enter that hostname and port.
 - D. **SAS OLAP Data and Compute Server: Deployment Instance Name** dialog; leave this blank or enter a unique instance name. If you have more than one ODCS server in your deployment then you must enter a unique name such as the short hostname of the server.
 - E. **SAS OLAP Data and Compute Server: Installation** dialog; specify that this is the primary ODCS server.
 - F. In the **SAS Human Capital Management Mid-Tier Dependencies** dialog, verify that the **SAS Application Server Context** is **SASApp**. If you are performing a migration, set it to **SASMain**.
 - G. In the **SAS Human Capital Management Mid-Tier Dependencies** dialog, select MySQL database server on the data tier server.
 - H. In the **SAS Financial Management Mid-Tier Dependencies** dialog, select MySQL database server on the data tier server.
 - I. In the **SAS Strategy Management Mid-Tier Dependencies** dialog, select MySQL database server on the data tier server.
 - J. **External Account: Solutions Host User** dialog; enter the user that you defined for access to SAS Datasets by JDBC. The default user name is **slnhost**. This external user is typically local to the data tier server.

- K. **Database Account: Database Administrator** dialog; the default user name is `sqladmin`. This is not an operating system account but is used to secure and administer the MySQL database server.
- L. **Database Account: SASSDM Database Administrator** dialog; the default database account identity is `sasdmdbadm`. This is not an operating system account but is used to secure and administer the MySQL SASSDM database.
- M. **Database Account: SPM Database Administrator** dialog; the default database account identity is `spmdbadm`. This is not an operating system account but is used to secure and administer the MySQL SPM database.
- N. **Database Account: HCM Database Administrator** dialog; the default database account identity is `hcmdmdbadm`. This is not an operating system account but is used to secure and administer the MySQL HCM database.
- O. **Database Type** dialog; change the default database from **SAS Table Server** to **MySQL**.
- P. In the **SAS Shared Services Dependencies** dialog, select MySQL database server on the data tier server.
- Q. In the **SAS Shared Services JDBC Properties** dialog, enter the password for the `sqladmin` database user and the path to `MySQL Connector/J`.
- R. **SAS Financial Management Web Data Entry: Deployment Instance Name**; if there is only one instance of the Web application configured, leave the name blank. Otherwise, enter a unique instance name such as the short hostname of the Mid-Tier server.

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

Installation of SAS Financial Management on 5-Tiers (Data Tier, Mid-Tier, ODCS Secondary, Operation Planning Data Tier and Client Tier)

Refer to the *SAS 9.2 Intelligence Platform Installation and Configuration Guide* for more detailed information about the installation:

<http://www.support.sas.com/92administration>

Deployment of the Data Tier

Follow the instructions in the Data Tier section “Installation on 3-Tiers (Data Tier, Mid-Tier and Client Tier)” on page 6.

Deployment of the Operation Planning Data Tier

Before You Begin the Operational Planning Data Tier, Verify Third Party Products

1. Verify that the following third party products are installed:
 - MySQL Database Server 5.0.80
 - MySQL Database Runtime Library 5.0.80
 - Internet Explorer 6 with SP2 or Internet Explorer 7
2. Verify that the path to MySQL Database Server’s bin directory is in your PATH environment variable. The default is `C:\mysql\bin`.

Software Deployment Wizard for the Operational Planning Data Tier

1. Select “Server” as the machine on the **Select Products to Install** dialog.
2. After the **Review Required Software** dialog, you will be prompted for third-party software. The default locations are below. If the files are not in the default locations, refer to the notes you made on your pre-installation checklist to find the locations you chose.

MySQL Connector_J Configuration 5.0.8: C:\Program Files\SAS\MySQLConnectorJ

MySQL Database Server Configuration 5.0.80: C:\mysql

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.
4. When prompted for the “**SAS Metadata Server**,” enter the fully qualified hostname and port of the SAS Metadata Server. This is typically your data-tier server. The default port is *8561*.
5. For the following solution-specific dialogs, the associated information supplements the help screens:
 - A. **MySQL Database Host** dialog; enter the hostname and MySQL port of this server. The default port is *3306*.
 - B. **MySQL Database** dialog; enter the short name of this server for the deployment instance.
 - C. **Database Account: Database Administrator** dialog; the default user name is *sqladmin*. This is not an operating system account but is used to secure and administer the MySQL database server.
 - D. **Database Account: SASSDM Database Administrator** dialog; the default database account identity is *sasdmdbadm*. This is not an operating system account but is used to secure and administer the MySQL SASSDM database.
6. At the **Deployment Summary** dialog; press Start.

Deployment of the Mid-Tier

Configure the Mid-Tier using the instructions in the Mid-Tier section “Installation on 3-Tiers (Data Tier, Mid-Tier and Client Tier)” on page 6 with these notes:

1. SAS OLAP Data and Compute Server will have a secondary server so make this adjustment to the 3-tier Mid-Tier instructions:

SAS OLAP Data and Compute Server: Deployment Instance Name dialog; enter a unique instance name such as the short hostname of this server.

2. SAS Operational Planning Data Tier on a separate tier so make this adjustment to the 3-tier Mid-Tier instructions:

MySQL / SASOP database Installation dialog; enter the host name and port number of MySQL on your SAS Operational Planning Data Tier server. The default port is *3306*.

3. SAS Financial Management Web Data Entry will have an additional deployment instance on the secondary ODCS Server.

SAS Financial Management Web Data Entry: Deployment Instance Name dialog; enter a unique instance name such as the short hostname of this server.

Deployment of the SAS OLAP Data and Compute Server (ODCS) Secondary Mid-Tier

Before You Begin the SAS ODCS Secondary Mid-Tier, Verify Third Party Products

1. Verify that the following third party products are installed:
 - Oracle WebLogic Server 10.3gR3 (10.3.0)
 - Sun Java Development Kit 6 with required update level
 - MySQL Database Server 5.0.80
 - MySQL Connector J 5.0.8
 - Internet Explorer 6 with SP2 or Internet Explorer 7
2. Verify that the path to MySQL Database Server's bin directory is in your PATH environment variable. The default is C:\mysql\bin.
3. Verify that Sun JDK 1.6_0 with required update level is in your path and that the JAVA_HOME environment variable is set to that version of the JDK.
4. On Windows, if the Web Application server is WebLogic, stop the Oracle Weblogic NodeManager service before configuring your software.

```
net stop "Oracle Weblogic NodeManager (C_bea_wlserver_10.3)"
The Oracle WebLogic NodeManager (C_bea_wlserver_10.3) service is
stopping.
The Oracle WebLogic NodeManager (C_bea_wlserver_10.3) service was
stopped successfully.
net start
```

Software Deployment Wizard for the SAS ODCS Secondary Mid-Tier

1. 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 5.0.8: C:\Program Files\SAS\MySQLConnectorJ

MySQL Database Server Configuration 5.0.80: C:\mysql

BEA WebLogic Server 9.2: C:\bea\wlserver_10.3

Note: The system requirement is for WebLogic Server 10.3.0. WebLogic 9.2 is not supported for these solutions.

Java Development Kit JAVA 5 UPDATE 15: C:\Program Files\Java\jdk1.6.0_XX

Note: WebLogic 10.3.0 requires Java Development Kit 1.6.0 with an update level. Click "Yes" at the warning dialog.

2. 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.
3. In the **SAS Metadata Server** dialog, enter or change the server name to the fully qualified hostname of the data tier server.
4. When prompted for the "**SAS Internal Account: Solutions Administrator,**" enter a password for the slnadm user. This is not an operating system user.
5. In the **WebLogic Web Application Server: Node Manager** dialog, enter the hostname of the ODCS secondary server is being configured.

6. In the **Web Application Server: Administration Server** dialog, enter the hostname of the midtier server.
7. For the following solution-specific dialogs, the following information supplements the help screens:
 - A. When prompted for the **“Web Application Server: Fourth Managed Server,”** enter a unique name such as `SASServer4ODCS2`.
 - B. When prompted for the **“Web Application Server: Fifth Managed Server,”** enter a unique name such as `SASServer5WDE`.
 - C. **MySQL Database Host** dialog; enter the hostname and port of this server. The default port is `3306`.
 - D. **MySQL Database** dialog; enter a unique instance name such as the short hostname of this server.
 - E. **SAS OLAP Data and Compute Server Mid Tier for Solutions Dependencies - MySQL Database server**; select the MySQL on this server.
 - F. **SAS OLAP Data and Compute Server: Deployment Instance Name** dialog; enter a unique instance name such as the short hostname of this server.
 - G. **SAS OLAP Data and Compute Server: Installation Type** dialog; select secondary installation.
 - H. **SAS OLAP Data and Compute Server: Installation MySQL host**; enter the host and port of the primary MySQL instance. This typically is the name of the data tier server.
 - I. **Database Account: Database Administrator** dialog; the default user name is `sqladmin`. This is not an operating system account but is used to secure and administer the MySQL database server.
 - J. **Database Account: SASSDM Database Administrator** dialog; the default database account identity is `sasdmdbadm`. This is not an operating system account but is used to secure and administer the MySQL SASSDM database.
 - K. **SAS Financial Management Web Data Entry Dependencies - SAS OLAP Data and Compute Server Mid-Tier** dialog; select the ODCS secondary deployment instance name you chose above.
 - L. **SAS Financial Management Web Data Entry: Deployment Instance Name** dialog; enter a unique instance name such as the short hostname of this server.
8. At the **Deployment Summary** dialog, press **Start**.
9. The “Configuration Guidelines and Details” file (`instructions.html`) will contain a warning which can be safely ignored:

```
SAS OLAP Data and Compute Server Mid-Tier for Solutions
encountered warnings while creating the metadata folder
/System/Applications/SAS OLAP Data and Compute Server for
Solutions.
```

Installation and Configuration Notes

Installation and Configuration Notes for the Data Tier

When SAS programs are run to register metadata, warnings like the following ones will be displayed in logs located in the `/SAS/Config/Levl/Logs/Configure` directory. These can be safely ignored. The warnings were written with the assumption that your configuration directory is SAS:

```
register_common.log, register_odcs.log, register_stagedds_and_dds.log
WARNING:
/SAS/Config/Levl/Applications/SASSolutionsServices5.1/SASCode/SASEnvironment/SASMacro is missing from concatenation.

register_fm.log and register_opplan.log
WARNING:
/SAS/Config/Levl/Applications/SASFinancialManagement5.1/SASCode/SASEnvironment/SASMacro is missing from concatenation.

register_hcm.log
WARNING:
/SAS/Config/Levl/Applications/SASHumanCapitalManagement5.1/SASCode/SASEnvironment/SASMacro is missing from concatenation.
```

Installation and Configuration Notes for the Mid-Tier

If the Mid-Tier or ODCS Secondary Tier Web application deployment step for the ODCS ear fails with a bind error, this could be because port 9876 is in use. To set the ODCS RMI port to another value, open the Weblogic Administration console and set the JVM arguments for the ODCS managed server:

1. Open the Configuration tab for that server (default SASServer4).
2. On the "Server Start" tab in the "Arguments:" area, make sure there is only white space and not a line break at the end of current arguments and add the following argument. Change the port number to a port that is not in use:
"-Dodcs.dispatcher.port=9877"
3. Restart the ODCS server and the FM Server.

Configuration Guidelines and Details

Open the `Instructions.html` file found in the configuration directory in a browser. For example, if `/SAS/Config` is the path to your configuration directory, then open `/SAS/Config/Levl/Documents/Instructions.html`.

Perform the manual configuration and validation steps outlined in the *Configuration Guidelines and Details for 'Server Name'* document. Then follow any solutions specific post-configuration steps in "Chapter 4 – Post-Configuration Guide" on the following page.

Chapter 4 — Post-Configuration Guide

After you complete the installation and configuration of your software, follow these post-configuration steps. The *SAS Solutions Services 5.1 System Administration Guide* can be found here:

<http://support.sas.com/documentation/solutions/admin/index.html>

The *SAS 9.2 Intelligence Platform: System Administration Guide* provides additional general information on System Administration and can be found here:

<http://www.support.sas.com/92administration>

Post-Configuration Steps for Data Tier

Permissions must be set to full control on the following locations for the SAS Spawnd Servers Account (sassrv) and for the Account to access SAS Datasets by JDBC (slnhost).

- If your configuration directory is SAS and your application server context is SASApp, then the location is SAS\Config\Lev1\SASApp\Data.
- If you are performing a migration, then the location is SAS\Config\Lev1\SASMain\Data.

Post-Configuration Steps for SAS Human Capital Management

Update or Create LocalProperties.xml file for SAS Web Report Studio and SAS Web Report Viewer

The following SAS Note contains instructions for updating or creating the LocalProperties.xml to increase the maximum rendering size of a ROLAP dataset.

<http://support.sas.com/kb/12/424.html>

Post-Configuration Steps for SAS Financial Management Add-on to 9.2 Platform

Manual Setup of SAS Operational Planning Data Source

For SAS Operational Planning to work correctly with SAS Financial Management, the SAS OP Data Source must be setup manually on the Mid-Tier server for WebLogic.

WebLogic Administration Console

1. Expand Services
 - A. Click on **JDBC and Data Sources**.
 - B. Click **SASOP Data Source**.
 - C. Lock & Edit in the Change Center.
 - D. Click the "Targets" tab.
 - E. Add a check next to the ODCS managed server(s). The default name for the ODCS server is SASServer4. You will have chosen the names for additional ODCS servers.
 - F. Click **Save**.
2. Activate Changes.

3. Restart the Solutions Server (`SASServer3`), ODCS Server (`SASServer4`) and the secondary ODCS and WDE servers. The default names for these servers are listed above. If you have selected different names, then restart the corresponding servers.

Chapter 5 — Add-on to 9.2 Platform before Maintenance 2 - Additional Instructions

If the site is adding a product to an existing 9.2 deployment that has been setup before 9.2 Maintenance 2, there are additional steps to be performed.

Manual Setup of JMS Queues

For alerts to work correctly, JMS queues must be setup manually on the Mid-Tier server for WebLogic.

WebLogic Administration Console

1. Expand Services
 - A. Click **Foreign JNDI Providers**.
 - B. Lock & Edit in the Change Center.
 - C. New
 - D. Name is WIPJNDIProvider.
 - E. Click **OK**.
2. Click on WIPJNDIProvider
 - A. Initial Context Factory is `weblogic.jndi.WLInitialContextFactory`
 - B. Provider URL is `t3://**wipservername**:**wipserverport**` (make substitutions for your deployment).
 - C. Leave User and Password blank.
 - D. Click **Save**.
3. Click **Links** (near the top of window).
 - A. New
 - B. Name is WIPAlertQueueLink
 - C. Local JNDI Name is `sas/jms/SharedServicesAlertQueue`.
 - D. Remote JNDI Name is `sas/jms/AlertQueue`.
 - E. Click **OK**.
4. Click **Links** (near the top of window).
 - A. New
 - B. Name is WIPQueueConnectionFactoryLink.
 - C. Local JNDI Name is `sas/jms/ShardServicesQueueConnectionFactory`.
 - D. Remote JNDI Name is `sas/jms/QueueConnectionFactory`.
 - E. Click **OK**.
5. Activate Changes.

Manual Setup of SAS Operational Planning Data Source

For SAS Operational Planning to work correctly with SAS Financial Management, the SAS OP Data Source must be setup manually on the Mid-Tier server for WebLogic.

WebLogic Administration Console

1. Expand Services
 - A. Click on **JDBC** and **Data Sources**.
 - B. Click **SASOP Data Source**.
 - C. Lock & Edit in the Change Center.
 - D. Click the "Targets" tab.
 - E. Add a check next to the ODCS managed server(s). The default name for the ODCS server is `SASServer4`. You will have chosen the names for additional ODCS servers.
 - F. Click **Save**.
2. Activate Changes.
3. Restart the Solutions Server (`SASServer3`), ODCS Server (`SASServer4`) and the secondary ODCS and WDE servers. The default names for these servers are listed above. If you have selected different names, then restart the corresponding servers.

Install and Configure Themes

On the Mid-Tier during the SAS Deployment Wizard, be sure to select install and configure SAS Web Application Themes.

Then SDW will then install, configure and deploy all the dependent software.

If this product is not configured, themes will not be updated and the solutions will not function correctly.

When the SDW completes deployment, you will see `themes_deployment_complete`.

Rebuilding and Redeploying Web Applications

Solutions update content in the following web applications:

- SAS Web Infrastructure Platform
- BI Dashboard
- SAS Web Application Themes

Refer to the *SAS 9.2 Intelligence Platform Web Application Administration Guide* at the following location for these instructions:

<http://www.support.sas.com/92administration>

After the SAS Deployment Wizard is complete, launch the SAS Deployment Manager. Rebuild the Web application listed above as documented in the section "Rebuilding Web Applications" of the referenced document. Redeploy the Web applications with the appropriate Web application server console.



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