A Step-by-Step Approach
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Chapter 1
Deploying SAS Enterprise BI Server

What Is Covered in This Document?

This document begins where you and your SAS representative have decided what software you need and on what machine you will install the software. This document covers all of the pre-installation, installation, and configuration tasks that you must perform to deploy the SAS 9.4 Enterprise BI Server offering on a single machine running Microsoft Windows. By the time you reach the end of this document, all of your SAS servers, middle-tier servers, and clients will be functional.

Installing the software is easier if you read the following documents:

• *SAS Intelligence Platform: Overview*
  
The overview guide helps you understand the architecture of the system.

• configuration documentation for any SAS solution licensed along with your SAS Enterprise BI Server offering.

If your SAS deployment plan includes a solution, then you might also be referred to additional solution-specific configuration information.

**TIP** When deploying SAS solutions, you follow many of the same steps that are described in this document. Toward the end of the SAS Deployment Wizard
configuration prompting, you should turn to your solution-specific configuration documentation to complete your deployment.

Note: If you have licensed SAS solutions, consult with your SAS representative for more information.

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**Deployment Process Overview**

The following list summarizes the steps required to install and configure SAS 9.4 Enterprise BI Server on a single machine running Microsoft Windows:

1. Create a SAS Software Depot.
2. Check for documentation updates.
4. Install and configure SAS.
5. Perform post-deployment steps.
6. Add SAS users to the system.

Subsequent sections in this guide provide the step-by-step instructions that you need to perform these steps.

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**Step 1: Create a SAS Software Depot**

The SAS Enterprise BI Server must be installed from a SAS Software Depot, which is a repository for your SAS software media. If you already have a SAS Software Depot, skip to “Step 3: Prepare Your Environment” on page 3.

**Note:** If you receive your SAS order by electronic software download, please refer to your software order email (SOE) for instructions on how to download your SAS order and create a software depot. If you have already downloaded your SAS order, your SAS Software Depot is automatically created for you. Proceed to “Step 2: Check for Documentation Updates” on page 3.

If your installation media is in DVD format, create a SAS Software Depot by following these steps:

1. Insert Disk 1 into your DVD drive.
2. If the SAS Deployment Wizard does not automatically launch, open the DVD in Windows Explorer, right-click setup.exe, and select Run as Administrator.
3. When prompted, select your language and click OK.
4. On the Select Deployment Task page of the SAS Deployment Wizard, select Create or Add to a SAS Software Depot.
5. On the Specify Order Details page, click Next.
6. On the Specify Order Options page, select Include complete order contents and click Next.
7. On the Specify SAS Software Depot Directory page, specify the location where you want to create your SAS Software Depot and click Next. The location can be on the local machine or it can be on a network drive.
Step 2: Check for Documentation Updates

It is very important to check for late-breaking installation information in SAS Notes and also to review the system requirements for your SAS software.

- **SAS Notes**
  
  Go to this web page and click **Outstanding Alert Status Installation Problems**: http://support.sas.com/notes/index.html.

- **system requirements**
  
  Refer to the system requirements for your SAS solution, available at http://support.sas.com/resources/sysreq/index.html.

Step 3: Prepare Your Environment

**Overview of Prepare Your Environment**

Before you can deploy your SAS software, you need to prepare your environment. This includes setting up operating system user and group accounts on the machines that are required by your SAS software deployment and installing third-party software that is used by the SAS deployment.

**Set Up User Accounts**

User accounts that are needed for your SAS deployment can be either local accounts on the machine on which you are deploying SAS or domain accounts that have access to the machine. Although you can use your own account names, SAS recommends using the names that are listed in the following table. If you choose to use different account names, be sure to record those names for future reference.

<table>
<thead>
<tr>
<th>Account</th>
<th>Required Operating System Rights</th>
<th>Recommended User IDs</th>
<th>Actual User ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAS Installer</td>
<td>Administrator</td>
<td>*my-domain:sas*</td>
<td><em>my-machine:sas</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAS Spawned Servers*</td>
<td>Log on as a batch job</td>
<td><em>my-domain:sassrv</em></td>
<td><em>my-machine:sassrv</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAS First User*</td>
<td>Log on as a batch job</td>
<td><em>my-domain:sasdemo</em></td>
<td><em>my-machine:sasdemo</em></td>
</tr>
</tbody>
</table>
The accounts that are listed in the preceding table have the following purposes:

- **SAS Installer** – This account is used to install SAS. After you create the account, log on to the machine with this account to perform the deployment. It is recommended that this account remain available for future SAS maintenance and updates.

- **SAS Spawned Servers** – This account is the process owner for stored processes and pooled workspace servers on the machine. During the SAS deployment, the SAS Deployment Wizard prompts you to enter the account name and password for this account.

- **SAS First User** – This account, which is often referred to as sasdemo, is used for demonstration purposes. During the SAS deployment, the SAS Deployment Wizard prompts you to specify the account name for this account. The SAS First User account is not a required account. However, it is used for the purposes of this installation guide.

- **SAS Client Users** – SAS client users are any users that connect to the SAS server to launch workspace servers via clients such as SAS Enterprise Guide or SAS Add-In for Microsoft Office. These users should be added to the SAS Server Users group, which is discussed in the next section, “Set Up the SAS Server Users Group” on page 4.

### Set Up the SAS Server Users Group

To run SAS under Windows, users must have the **Log on as a batch job** right on the machine that hosts the server. We recommend that you create a group on the server, add SAS users to the group, and then assign that group the **Log on as a batch job** right.

**Note:** The SAS Deployment Wizard automatically assigns the **Log on as a batch job** right for the SAS Spawned Servers and SAS First User accounts.

To create the SAS Server Users group and assign the **Log on as a batch job** right to it, do the following:

1. Follow the steps appropriate for your version of Microsoft Windows:
   - For Windows 7 and Windows Server 2008: Click **Start**. In the **Search programs and files** field, enter **Computer Management**, and select it from the **Start** menu when it appears.
   - For Windows Server 2003: Select **Start** ⇒ **Settings** ⇒ **Control Panel** ⇒ **Administrative Tools** ⇒ **Computer Management**.

2. Expand **Local Users and Groups**.

3. Right-click **Groups** and select **New Group**.

4. Name the group SAS Server Users and click **Create**.
5. Assign **Log on as a batch job** rights to the new SAS Server Users group.
   - For Windows 7 and Windows Server 2008: Click **Start**. In the Search programs and files field, enter **Local Security Policy**, and select it from the **Start** menu when it appears.
   - For Windows Server 2003: Select **Start** ⇔ **Settings** ⇔ **Control Panel** ⇔ **Administrative Tools** ⇔ **Local Security Policy**.

6. In the left pane of the Local Security Policy Settings window, expand **Local Policies** and click **User Rights Assignment**.

7. In the right-hand pane under the **Policy** column, double-click **Log on as a batch job**. This displays the Log on as a batch job Properties dialog box.

8. On the **Local Security Setting** tab, click **Add User or Group** to display the dialog box. In the **Enter the object names to select** field, enter **SAS Server Users** and click **Check Names** to select the SAS Server Users group. Then click **OK** to return to the Log on as a Batch Job Properties dialog box. Verify that the new group that you entered appears in the text box on the **Local Security Settings** tab.

9. Click **OK** to close the dialog box and return to the Local Security Policy window.

In the future, any new SAS users that you add to your SAS system can be granted **Log on as a batch job** rights by adding them to the SAS Server Users group in Windows. Because the SAS Server Users group was assigned the **Log on as a batch job** right, it is not necessary to explicitly assign this right to users in the Local Security Policy window.

### Download and Install JUnit

JUnit is an open-source software testing framework for Java, and the de facto standard for writing unit and regression tests. Some of the validation tests shipped with SAS products run under the SAS Deployment Tester framework and require JUnit. During SAS installation, the SAS Deployment Wizard prompts you to specify the location of the JUnit JAR file.

For more information about JUnit version requirements and a download link, go to [http://support.sas.com/resources/thirdpartysupport/v94/othersw.html](http://support.sas.com/resources/thirdpartysupport/v94/othersw.html).

**Table 1.2**  JUnit

<table>
<thead>
<tr>
<th>Description</th>
<th>Default Values</th>
<th>Actual Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>JUnit jar file location</td>
<td>\Program Files/Junit /usr/local/junit</td>
<td></td>
</tr>
<tr>
<td>Product version</td>
<td>4.8.1</td>
<td></td>
</tr>
</tbody>
</table>

---

### Step 4: Install and Configure SAS

To install and configure SAS 9.4 interactively on a single machine, follow these steps:
1. Log on to the machine with a user ID using the SAS Installer account that you created earlier, or using an account that is a member of the Windows Administrators group.

2. Temporarily disable all anti-virus, anti-malware, anti-spyware, and firewall software. These types of programs can interfere with the deployment process and block files as they are being copied and extracted.


4. Choose Language
   - From the drop-down list, select the language that you want the deployment wizard to use when it displays text, and click OK.
5. Select Deployment Task

- Select **Install SAS Software**, and click **Next**.

6. Specify SAS Home

- If you want to specify a different location where SAS is installed other than the default location, enter this path in **SAS Home**. Click **Next**.

  Although your SAS installation directory (which the wizard refers to as SAS Home) and SAS configuration directories can share the same parent directory, one directory *cannot* reside inside another. Also, the SAS installation directory should *not* be a directory within your SAS Software Depot.
7. Select Deployment Type
   - Confirm that **Perform a Planned Deployment, Install SAS Software**, and **Configure SAS Software** are all selected. Click Next.

8. Specify Deployment Plan
   - Choose **Select a standard deployment plan**.
   - From the drop-down menu, select **EBI Server, one machine**, and then click Next.
9. **Select Deployment Step and Products to Install**
   - In **Deployment Step**, make sure that **Step 1: Server, Middle Tier, and Clients** is selected. Click **Next**.

10. **Select SAS Enterprise Guide Mode**
    - You see this page when you are installing on a 64-bit machine and your order contains software for both 32-bit and 64-bit machines.
    - Select **64-bit Native Mode**, to take full advantage of your 64-bit machine.
    - Select **32-bit Compatibility Mode**, if you are concerned about compatibility with 32-bit software that you have installed or might eventually install.


Note: Note that some products have a dependency on 32-bit SAS Enterprise Guide. If one of those products is in the list of products to be installed and you choose to install the 64-bit version of SAS Enterprise Guide, the 32-bit version will be installed also.

11. Select SAS Add-In for Microsoft Office Mode

- This page appears when the deployment wizard is unable to detect the bit capacity of Microsoft Office. Specify which mode of SAS Add-In for Microsoft Office to install, and click Next.
- Select 32-bit Compatibility Mode if you are running 32-bit Microsoft Office.
  
  Note: The bit capacity of SAS Add-In for Microsoft Office must match the bit capacity of Microsoft Office.
- Select 64-bit Native Mode if you are running 64-bit Microsoft Office.
12. Specify SAS Installation Data File
   • Click **Browse**, locate your SAS installation data file, and then click **Next**.

13. Select Language Support
   • Click **Clear All**. (English remains selected as the default language.)
   • Add any additional languages that you want SAS software to support, and then click **Next**.
14. Select Regional Settings

- Accept the default value of English (United States), or select a different language, region, and locale in **Language (Region) [Locale]**. Click **Next**.

15. SAS Web Infrastructure Platform Database JDBC Driver Validation

- Do not change the default information that is displayed on this page. Click **Next**.
16. Select Microsoft Office Applications
   - Choose the Microsoft Office applications for which you want the SAS Add-In for Microsoft Office activated. Click Next.

17. SAS Environments URL
   - In SAS Environments URL, enter the URL to the file that defines SAS environments.
   
   The SAS environment file, named sas-environment.xml, defines a set of SAS deployments at your site. Your administrator makes this file available on your site network and can provide you with its URL. In order to log on to some client
applications, the URL must be specified in this dialog box. If the URL is not known at this time, you can continue and provide the URL later.

If you use SAS Web Server, then the URL should look as follows: \texttt{protocol://hostname:port/sas/sas-environment.xml}, where \textit{hostname} is the fully qualified host name of your machine, and \textit{port} is the default port for SAS Web Server. (unsecure: 80 on Windows, 7980 on UNIX; secure: 443 on Windows, 8343 on UNIX.)

If you use a different web server or no web server, leave this field blank. Follow the instructions for the sas-environment.xml file in the instructions.html document created by the SAS Deployment Wizard after your configuration is complete in order to find the file and deploy it to your web server.

For more information, see “Configuring the SAS Environment File” in \textit{SAS Intelligence Platform: Middle-Tier Administration Guide}.

18. Specify Remote Communication Configuration

\begin{itemize}
  \item Do not change the default information that is displayed on this page. Click \textbf{Next}.
\end{itemize}
19. Checking System

- Wait while the SAS Deployment Wizard checks your system. When it is finished, click Next.

20. Review Required Software

- Review the list of third-party software that is required for the SAS software that you are installing on the current machine. Click Next.
21. Specify Software Location
   - Do not change the default information that is displayed on this page. Click Next.

22. Select Configuration Prompting Level
   - Make sure that Typical is selected, and click Next.
23. Specify Configuration Information
   • Do not change the default information that is displayed on this page. Click Next.

24. Select Products to Configure
   • Do not change the default information that is displayed on this page. Click Next.
25. **Local Machine Name**

- In **Fully-qualified Local Host Name**, enter the complete name of the local host.
  
  The fully qualified local host name typically takes the form of the local host name plus the domain name server (for example, MyMachine.example.com).

  **Tip** If you do not know the domain name server used at your site, check with your system administrator.

- In **Short Local Host Name**, enter a short host name.
  
  The short local host name is the abbreviated, more common method of referring to the host, usually only a single word (for example, MyMachine).

26. **Migration Information**

Select this option if you want to migrate content and configuration from another SAS release to a SAS 9.4 deployment. Before choosing this option, you must have run the SAS Migration Utility on every machine in the old configuration to create a migration package. The SAS Deployment Wizard uses the migration package to migrate the old content and configuration to SAS 9.4. SAS 9.4 supports migration from SAS 9.2, SAS 9.3, and SAS 9.4.
Migration Information

- Do not select Perform migration. Click Next.

27. **Windows Options**

- Do not change any of the default values displayed on this page. Click Next.

28. **Windows Shortcuts**

- In Create Windows Shortcuts, make sure that For All Users is selected. Click Next.
29. Integrated Windows Authentication
   • Do not select **Use Integrated Windows authentication**. Click Next.

30. Token Based Authentication
   • Do not select **Use SAS token authentication**. Click Next.
SAS Metadata Server

- Do not change the default information that is displayed on this page. Click Next.

SAS Metadata Server: Override Backup Location

- Do not change the default information that is displayed on this page. Click Next.
33. SAS Metadata Server: Override Service Login Account
   • Do not change the default information that is displayed on this page. Click Next.

34. Deployment Accounts: Type of Accounts
   • Do not change the default information that is displayed on this page. Click Next.
35. **External Account: Installer**
   - In the relevant fields, enter the user ID and password for the Installer account that you are using to install and configure SAS. (This should be the user account under which you are currently logged on.) Prefix the user ID with either the domain or machine name (for example, `domain\user-ID` or `machine-name\user-ID`). Click **Next**.

36. **SAS Internal Account: Unrestricted Administrator**
   - Enter and confirm the password that will be used for an internal sasadm@saspw account. Click **Next**.

   **Note:** Remember this password because you will need it in the future.
Select **Set passwords using the Unrestricted Administrator password** if you want to reuse this password for the internal metadata server accounts and SAS Web Infrastructure Data Server accounts during this deployment. Selecting this option when running the deployment wizard with the Express prompting level reduces the number of configuration prompts.

37. SAS Internal Account: Trusted User

- Enter and confirm the password that will be used for the internal sastrust@saspw account. Click Next.

**Note:** Remember this password as you will need it in the future.
Anonymous Web Access

- Make sure that **Enable anonymous web access** is selected. Click **Next**.


- Enter and confirm the password that will be used for an internal webanon@saspw account. Click **Next**.

  *Note:* Remember this password as you will need it in the future.

40. **External Account: SAS Spawned Servers Account**

- In the relevant fields, enter the user ID and password for the SAS Spawned Servers account.
Note: Remember this password as you will need it in the future.
(For more information, see “Set Up User Accounts” on page 3.)
Prefix the user ID with either the domain or machine name (for example, <domain>\<user-ID> or <machine-name>\<user-ID>). Click Next.

41. Deployment Accounts: First User

• Select Set up a First User Identity. Click Next.

The SAS First User account, which is often referred to as sasdemo, is used for demonstration purposes. Although it is not required, the SAS First User account can be used to validate your deployment.

42.
External Account: First User

- In **External User ID**, enter the user ID for the SAS First User account.

  (For more information, see “Set Up User Accounts” on page 3.)

Prefix the user ID with either the domain or machine name (for example, `domain\user-ID` or `machine-name\user-ID`). Click **Next**.

43. **Server Encryption**

- Do not change the default information that is displayed on this page. Click **Next**.

44. **Estimated System Size**

- Do not change the default information that is displayed on this page. Click **Next**.
45. **E-mail Server**

- In **Host Name**, enter the host name for an SMTP e-mail server at your site. SAS uses this server to send e-mail alerts for system-related issues to an administrator. Click **Next**.

  **TIP** If you do not know the name of the SMTP e-mail server at your site, check with your system administrator.

46. **E-mail Addresses**

- In **Recipient E-mail Address**, enter a valid e-mail address that the SAS can use to send e-mail alerts for system-related issues. Click **Next**.

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**E-mail Server**

- **Host Name**: from@example.com
- **Port**: 25

**E-mail Addresses**

- **Sender E-mail Address**: from@example.com
- **Recipient E-mail Address**: admin@example.com

- **E-mail server requires authentication**
SAS Object Spawner

- Do not change the default information that is displayed on this page. Click Next.

Note: On this page and several pages that follow, any ports listed must be open within your site’s computing environment. For more information, see “Pre-installation Checklist for Ports for SAS” in SAS Intelligence Platform: Installation and Configuration Guide.

SAS Object Spawner: Port Bank

- Do not change the default information that is displayed on this page. Click Next.
49. SAS Application Server: Server Context
   • Do not change the default information that is displayed on this page. Click Next.

50. SAS Workspace Server
   • Do not change the default information that is displayed on this page. Click Next.
51. SAS Pooled Workspace Server
   • Do not change the default information that is displayed on this page. Click Next.

52. SAS Stored Process Server
   • Do not change the default information that is displayed on this page. Click Next.
53. SAS Stored Process Server: Multibrige Connections
   • Do not change the default information that is displayed on this page. Click Next.

54. SAS OLAP Server
   • Do not change the default information that is displayed on this page. Click Next.
SAS/CONNECT Server

- Do not change the default information that is displayed on this page. Click Next.

SAS/CONNECT Spawner

- Do not change the default information that is displayed on this page. Click Next.
SAS Web Infrastructure Platform Data Server

- Enter and confirm a password that SAS will create for the dbmsowner user ID. Click Next.

  Note: Remember this password as you will need it in the future.

- Do not change the default information that is displayed on this page.

SAS DATA Step Batch Server

- Do not change the default information that is displayed on this page. Click Next.
Operating System Services Scheduling Server
• Do not change the default information that is displayed on this page. Click **Next**.

SAS Deployment Tester Server
• Do not change the default port information that is displayed on this page.
• In **JUnit JAR File**, enter the JAR file path (for example, `C:\junit\junit-4.8.1.jar`) or click **Browse** to select it. Click **Next**.

For more information, see “Download and Install JUnit” on page 5.
61. **SAS Web Server: Automated or Manual Configuration Option**
   - Do not change the default information that is displayed on this page. Click **Next**.

62. **SAS Web Server: Configuration**
   - Do not change the default information that is displayed on this page. Click **Next**.
SAS Web Application Server: JMS Configuration

- Do not change the default information that is displayed on this page. Click Next.

SAS Web Application Server: Cache Locator Configuration

- Do not change the default information that is displayed on this page. Click Next.
65. SAS Web Application Server: First Server Configuration

- Do not change the default information that is displayed on this page. Click **Next**.

66. SAS Web Application Server: Server Ports

- Do not change the default information that is displayed on this page. Click **Next**.
67. SAS Web Application Server: Second Server Configuration
   • Do not change the default information that is displayed on this page. Click Next.

68. SAS Web Application Server: Server Ports
   • Do not change the default information that is displayed on this page. Click Next.
SAS Web Application Server: Twelfth Server Configuration

• Do not change the default information that is displayed on this page. Click Next.

SAS Web Application Server: Server Ports

• Do not change the default information that is displayed on this page. Click Next.
71. SAS Web Application Server: Thirteenth Server Configuration
   - Do not change the default information that is displayed on this page. Click Next.

72. SAS Web Application Server: Server Ports
   - Do not change the default information that is displayed on this page. Click Next.
Web Applications: Automatic Deployment

- Do not change the default information that is displayed on this page. Click **Next**.

Scheduling Services Cache Locator

- Do not change the default information that is displayed on this page. Click **Next**.
75. Scheduling Services DIP JobRunner
   • Do not change the default information that is displayed on this page. Click Next.

76. Web Applications: White List of Sites Allowed to Link to this SAS Installation
   • Do not change the default information that is displayed on this page. Click Next.
77. **SAS Web Application Themes**

- Do not change the default information that is displayed on this page. Click **Next**.

78. **IP Multicast**

- Do not change the default information that is displayed on this page. Click **Next**.
SAS Web Report Studio: Clustering Support

- Do not change the default information that is displayed on this page. Click Next.

SAS Web Report Studio: Scheduling

- Do not change the default information that is displayed on this page. Click Next.
81. SAS Web Report Studio: In-Process Scheduling Ports
   - Do not change the default information that is displayed on this page. Click **Next**.

82. SAS Content Server: Repository Directory
   - Do not change the default information that is displayed on this page. Click **Next**.
83. SAS Information Delivery Portal: Samples
   • Do not change the default information that is displayed on this page. Click Next.

84. SAS Web Infrastructure Platform Database: JDBC Properties
   • Enter and confirm a password that SAS will create for the SharedServices user ID. Click Next.

   Note: Remember this password as you will need it in the future.
85. **SAS Web Infrastructure Platform Database JDBC Driver Validation**
   - Do not change the default information that is displayed on this page. Click **Next**.

86. **SAS Environment Manager: Administration Database Configuration**
   - Enter and confirm a password that SAS will create for the adminowner user ID. Click **Next**.
     
     **Note:** Remember this password as you will need it in the future.
   - Do not change the default user ID information that is displayed on this page.
87. **SAS Internal Account: SAS Environment Manager Service Account**

- Enter and confirm a password that SAS will create for the SAS Environment Manager service account (sasevs@saspw). Click **Next**.

  *Note:* Remember this password as you will need it in the future.

  The password must contain at least six characters. Make sure that you supply the same password that was specified in any previous SAS Environment Manager configuration prompts.

88. **SAS Environment Manager: Configuration**

- Do not change the default information that is displayed on this page. Click **Next**.
SAS Environment Manager: Database Configuration

- Enter and confirm a password and an encryption passphrase that the deployment wizard will use when creating credentials for the EVManager user ID. Click Next.

  *Note:* Remember this password and passphrase as you will need them in the future.

  The password must contain at least six characters.
  The passphrase must be at least eight characters long and can contain letters and numbers only.

- Do not change the user ID information that is displayed on this page.
SAS Environment Manager Agent Configuration

- Do not change the default information that is displayed on this page. Click **Next**.

SAS Environment Manager Enablement Kit Database Credentials

- Enter and confirm a password that SAS will create for the default SAS Environment Manager Enablement Kit user ID. Click **Next**.
  
  **Note:** Remember this password as you will need it in the future.

- Do not change the user ID information that is displayed on this page.
92. SAS Flex Application Themes
   • Do not change the default information that is displayed on this page. Click Next.

93. DataFlux Data Management Server
   • Do not change any of the default values displayed on this page. Click Next.
DataFlux Data Management Server: Server Component Name page

- Do not change any of the default values displayed on this page. Click Next.

SAS Visual Analytics Services Database Credentials

- Enter and confirm the password to be used for the vatadm account. Click Next.
  
  Note: Remember this password as you will need it in the future.

- Do not change the user ID information that is displayed on this page.
96. **SAS Visual Analytics Transport Service: Whitelist Mobile Devices**
   - Do not change any of the default values displayed on this page. Click **Next**.

97. **SAS Deployment Backup and Recovery Tool: Enable Central Vault**
   - Do not change the default information that is displayed on this page. Click **Next**.

   **TIP** If you are deploying a SAS solution, you should refer to your solution-specific documentation to complete your deployment.
Deployment Summary

- Make one of the following choices:
  - Click **Start** to begin installing SAS files and writing the configuration to the current machine.
    
The deployment wizard launches the installation and configuration process and provides an ongoing status update.
  - Click **Back** to navigate to earlier wizard pages to change installation and configuration information previously entered.
  - Click **Cancel** to terminate the wizard session. Note that you will lose installation and configuration information previously entered.

**CAUTION:**

If you encounter a situation in which the deployment wizard reports a configuration failure, leave the error message displayed and do not continue. Consult additional documentation and, if necessary, contact SAS Technical Support. Moving past an error most often results in having to delete your deployment and start over.

On Windows, the deployment wizard checks to make sure that your machine contains the minimum system requirements necessary to run SAS 9.4. Sometimes it is necessary to reboot your machine after the wizard has installed certain system components. When this occurs, the wizard prompts you to log back on to the machine and continues to the next configuration step in your SAS deployment process.
Deployment Complete

- Green check marks next to every item on this page indicate that your deployment completed successfully. Click Next.

- If your deployment was successful, then you are ready to perform the post-deployment steps that are documented in “Step 5: Perform Post-Deployment Steps” on page 58.

- If you received errors during your deployment, then contact SAS Technical Support at mailto:support@sas.com. Attach to your e-mail the files listed in “Review SAS Deployment Tool Documents, Reports, and Logs” in SAS Intelligence Platform: Installation and Configuration Guide.
Additional Resources

- Click **Finish** to close the SAS Deployment Wizard.

Configuration Guidelines and Details for "myserver"

**Overview**

1. Warnings and Notices
2. SAS Management Console
3. SAS Application Servers
4. SAS Servers
5. SAS Web Infrastructure Platform Data Server
6. SAS Deployment Test Server
7. Operating System Services Scheduling Server
8. SAS BI Lineage Scheduling Server
9. SAS Web Infrastructure Platform Scheduling Services
10. Remote Services
11. SAS Environment Manager Configuration
12. SAS Environment Manager Agent Configuration
13. SAS Web Server Configuration

Configuration Guidelines and Details

- To complete your SAS deployment, review Configuration Guidelines and Details and perform the steps listed.

Configuration Guidelines and Details (Instructions.html) is automatically generated by the deployment wizard and has post-installation steps specific to your SAS order that you must perform.
Step 5: Perform Post-Deployment Steps

After your deployment has completed, there are some post-deployment steps specific for your SAS order that are documented in your Instructions.html file. Located in `SAS-configuration-directory\Lev\Documents`, Instructions.html provides the steps for checking that your SAS servers are running and that your web applications were properly deployed.

**Figure 1.1 Configuration Guidelines and Details (Instructions.html)**

If you have not already done so, use Instructions.html and perform all the post-deployment steps that it contains.

Remember to restart any anti-virus, anti-malware, anti-spyware, and firewall software that you disabled to deploy SAS.

For more information, refer to “What to Do Next: Administration Tasks” in SAS Intelligence Platform: Installation and Configuration Guide.

Step 6: Add SAS Users

Now that you have deployed SAS and have successfully validated that your software is working properly, it is now time to add your SAS users to the SAS system. Adding host or domain accounts for SAS users to the SAS metadata gives the user a SAS metadata identity. This enables the SAS users to use the software and access SAS metadata objects.
Perform the following steps to add SAS users to SAS metadata:

1. Grant the host or domain accounts for each user the required **Log on as a batch job** permission. You can do this by adding the user accounts to the SAS Servers Group that was created in the section “Set Up the SAS Server Users Group” on page 4.

2. Create a metadata identity for each user. Follow these steps using SAS Management Console:
   a. From the Windows Start menu, select All Programs ⇒ SAS ⇒ SAS Management Console.
   b. In the Log On dialog box, enter the credentials for the SAS Unrestricted User (sasadm@saspw) and the password specified when you deployed SAS.
   c. Select User Manager.
   d. Select Actions ⇒ New ⇒ User.
   e. In the Name text box, enter the name of the user.
   f. Click the Accounts tab, and then click New.
   g. In the dialog box that appears, enter the fully qualified user ID (for example, domain\user-ID or machine\user-ID). Leave the Password field blank and keep the default value DefaultAuth for the Authentication Domain field.
   h. Click OK.
   i. Then, click OK again.

Now that you have granted users the required host and SAS system access, the users are ready to begin using the SAS client software.
Recommended Reading

Here is the recommended reading list for this title:

• *SAS Guide to Software Updates.*


• *SAS Intelligence Platform: Data Administration Guide.*

• *SAS Intelligence Platform: Desktop Application Administration Guide.*

• *SAS Intelligence Platform: Installation and Configuration Guide.*

• *SAS Intelligence Platform: Middle-Tier Administration Guide.*

• *SAS Intelligence Platform: Overview.*

• *SAS Intelligence Platform: Security Administration Guide.*

• *SAS Intelligence Platform: System Administration Guide.*

• *SAS Intelligence Platform: Web Application Administration Guide.*

• *SAS Web Applications: Tuning for Performance and Scalability.*

• SAS offers instructor-led training and self-paced e-learning courses to help you administer the SAS Intelligence Platform. For more information about the courses available, see support.sas.com/admintraining.

For a complete list of SAS publications, go to [sas.com/store/books](http://sas.com/store/books). If you have questions about which titles you need, please contact a SAS Representative:

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