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SAS[®] Visual Analytics 7.1

Installation and Configuration Guide

(Non-distributed SAS[®] LASR[™])

Also applies to SAS[®] Visual Statistics

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SAS® Visual Analytics 7.1: Installation and Configuration Guide (Non-distributed SAS® LASR™)

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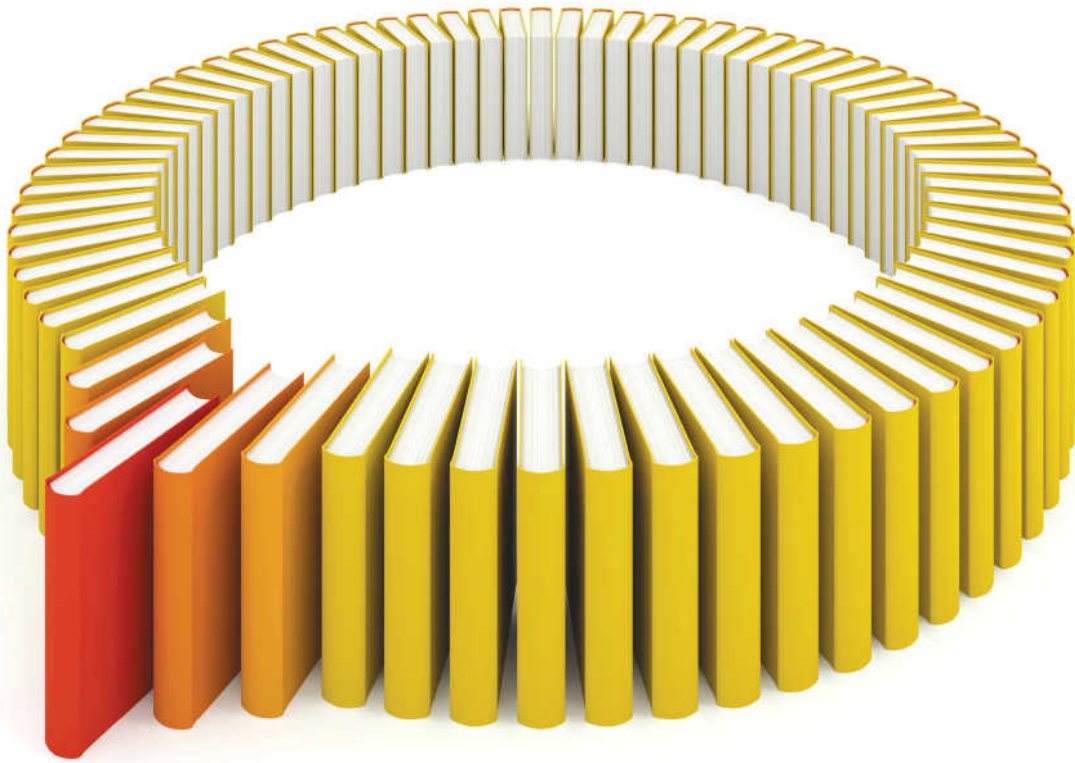
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Using This Book

Audience

This guide documents the installation and initial configuration of SAS Visual Analytics for a non-distributed SAS LASR Analytic Server for a traditional, on-premises deployment. This guide does not include deploying any other SAS product beyond SAS Visual Analytics for non-distributed SAS LASR Analytic Server. If you are upgrading, see the *SAS Guide to Software Updates*, available at <http://support.sas.com/documentation/cdl/en/whatsdiff/66129/PDF/default/whatsdiff.pdf>.

Although the majority of figures in this guide are from a Microsoft Windows deployment, the experience is, for the most part, identical on Linux. Differences in the deployment between operating systems are noted.

For documentation about:

- deploying SAS Visual Analytics for a distributed SAS LASR Analytic Server on an analytics cluster
- converting your SAS LASR Analytic Servers to run in distributed mode

see the *SAS Visual Analytics: Installation and Configuration Guide (Distributed SAS LASR)*, available at <http://support.sas.com/documentation/solutions/va/index.html>.

Documentation Conventions

SAS Installation Directory

The phrase *SAS installation directory* refers to a host path. (The SAS installation directory is sometimes referred to as SAS Home.) For example: `C:\Program Files\SASHome`.

SAS Configuration Directory

The phrase *SAS configuration directory* refers to a host path that includes a configuration name and level. For example: `C:\SAS\Config\Lev1`.

For more information, see the topic, “Overview of the Configuration Directory Structure,” in the *SAS Intelligence Platform: System Administration Guide*, available at <http://support.sas.com/documentation/cdl/en/bisag/67481/HTML/default/viewer.htm#n0v5rampodzajbn1w825qtg5lzi1.htm>.

Recommended Reading

Here is the recommended reading list for this title:

- *SAS Guide to Software Updates*
- *SAS LASR Analytic Server: Reference Guide*
- *SAS Visual Analytics: User's Guide*
- *System Requirements—SAS Visual Analytics (Non-distributed Mode)*, available at <http://support.sas.com/documentation/installcenter/en/ikvisanalytofrndmsr/68018/HTML/default/>
- SAS offers instructor-led training and self-paced e-learning courses to help you administer SAS Visual Analytics. For more information about the courses available, see support.sas.com/admintraining.

For a complete list of SAS books, go to support.sas.com/bookstore. If you have questions about which titles you need, please contact a SAS Book Sales Representative:

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Deploying SAS Visual Analytics (Non-distributed LASR)

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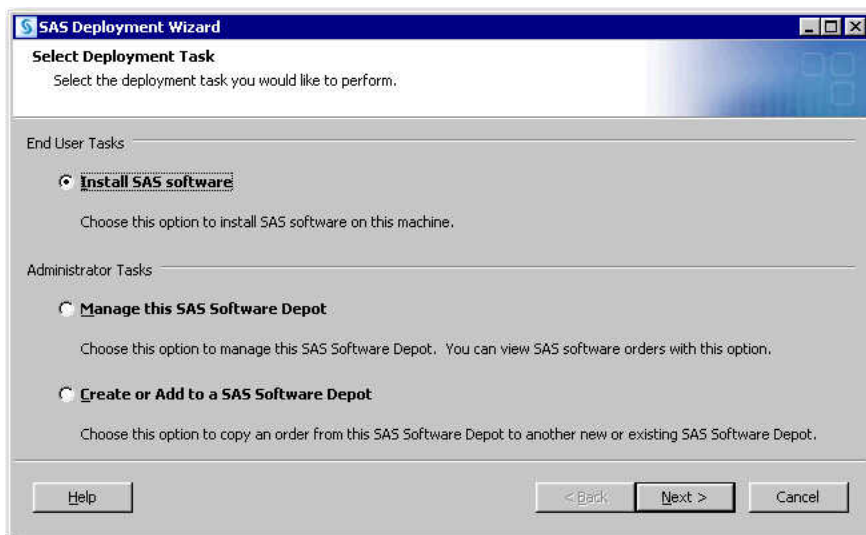
What Is Covered in This Document?

This document is designed to help you quickly and efficiently deploy SAS Visual Analytics with a non-distributed SAS LASR Analytic Server on a single machine.

You use a program provided by SAS called the *SAS Deployment Wizard* to perform the actual installation and initial configuration of SAS Visual Analytics. The deployment wizard is an easy-to-use program that prompts you for the necessary information to automatically install and configure SAS Visual Analytics.

The deployment wizard prompts you for information that might require input from your site's IT team. Some of the answers that you provide (such as user names and passwords) should be recorded because you (or someone at your site) will need this information later to use and administer SAS Visual Analytics.

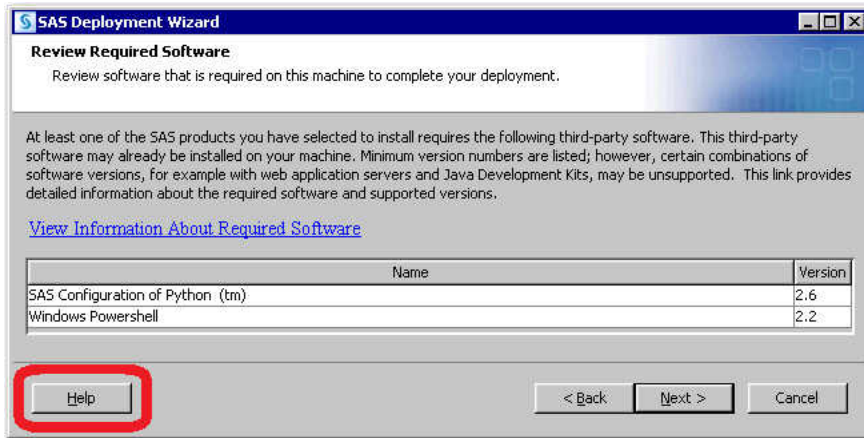
Figure 1.1 Example of a SAS Deployment Wizard Page



This document gives you step-by-step instructions to successfully deploy SAS Visual Analytics. If you find that you require more information about the deployment wizard configuration prompts, you can do the following:

- Click the **Help** button on the wizard page for the prompt in question.

Figure 1.2 Location of the Help Button on a SAS Deployment Wizard Page



- See the *SAS Visual Analytics: Installation and Configuration Guide (Distributed SAS LASR)*, available at <http://support.sas.com/documentation/solutions/va/index.html>.

If you find that you need more information about using the deployment wizard itself, see the *SAS Deployment Wizard and SAS Deployment Manager: User's Guide*, available at <http://support.sas.com/documentation/installcenter/en/ikdeploywizug/66034/PDF/default/user.pdf>.

SAS Visual Statistics Installation Instructions

If SAS Visual Statistics is part of your order, then when you perform the steps in this document for installing and configuring SAS Visual Analytics, you are also installing and configuring SAS Visual Statistics.

Deployment Process Overview

The following list summarizes the steps required to install and configure SAS Visual Analytics on a single machine:

- 1 [Create a SAS Software Depot.](#)
- 2 [Check for documentation updates.](#)
- 3 [Prepare your environment.](#)
- 4 [Install and configure SAS Visual Analytics.](#)
- 5 [Perform post-deployment steps.](#)
- 6 [Add SAS Visual Analytics users to the system.](#)
- 7 [Validate your SAS Visual Analytics deployment.](#)

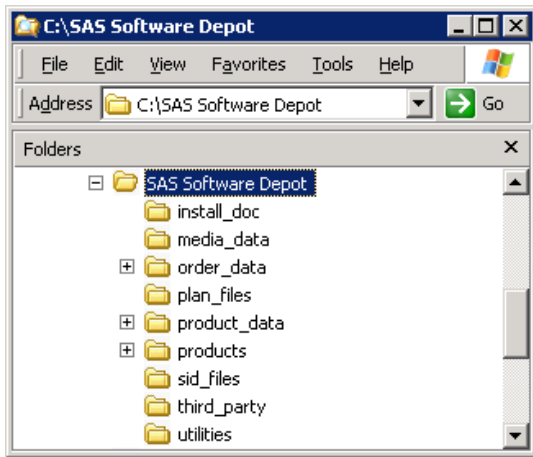
Subsequent sections in this guide provide the step-by-step instructions that you need to complete these tasks.

Although the majority of figures in this guide are from a Microsoft Windows deployment, the experience is, for the most part, identical on Linux. Differences in the deployment between operating systems are noted.

Step 1: Create a SAS Software Depot

SAS Visual Analytics 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 11.](#)

Figure 1.3 Windows Explorer Displaying a SAS Software Depot

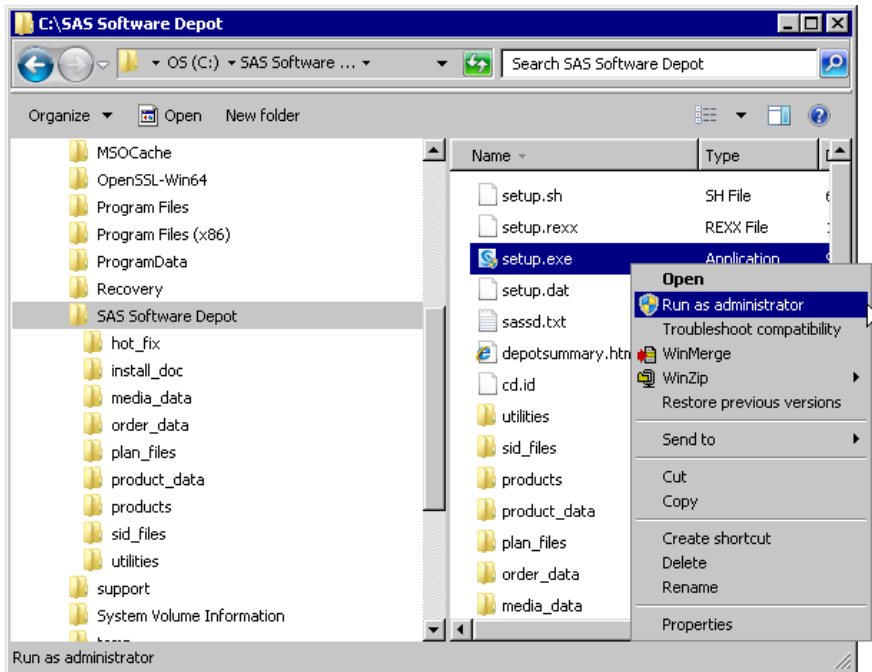


Note: If you receive your SAS Visual Analytics order by electronic software download (ESD), refer to your software order e-mail (SOE) for instructions on how to download your SAS order and create a SAS Software Depot. If you have already downloaded your SAS order, your SAS Software Depot is automatically created for you. Proceed to [“Step 2: Check for Documentation Updates” on page 10](#).

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**.

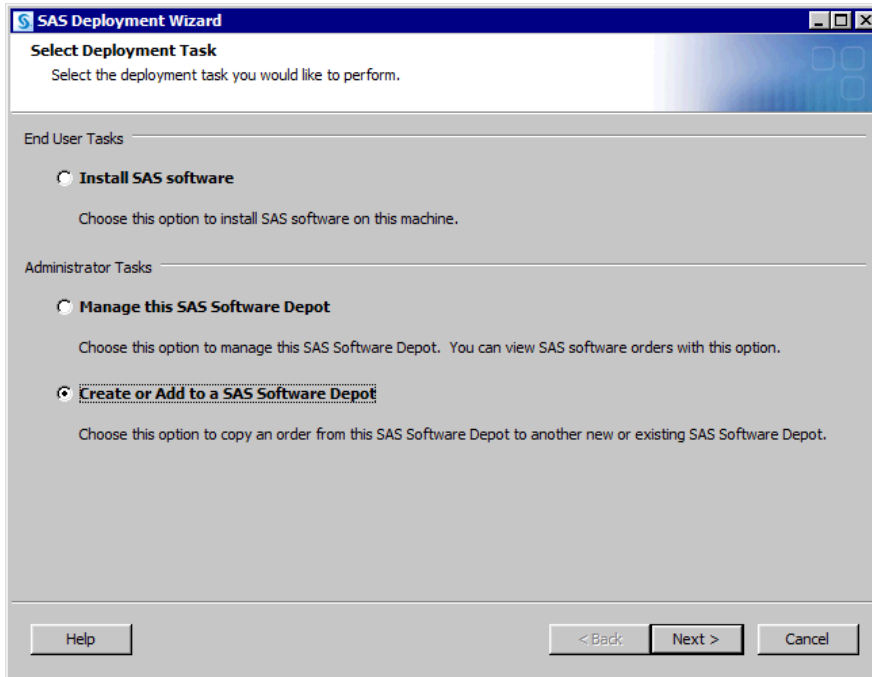
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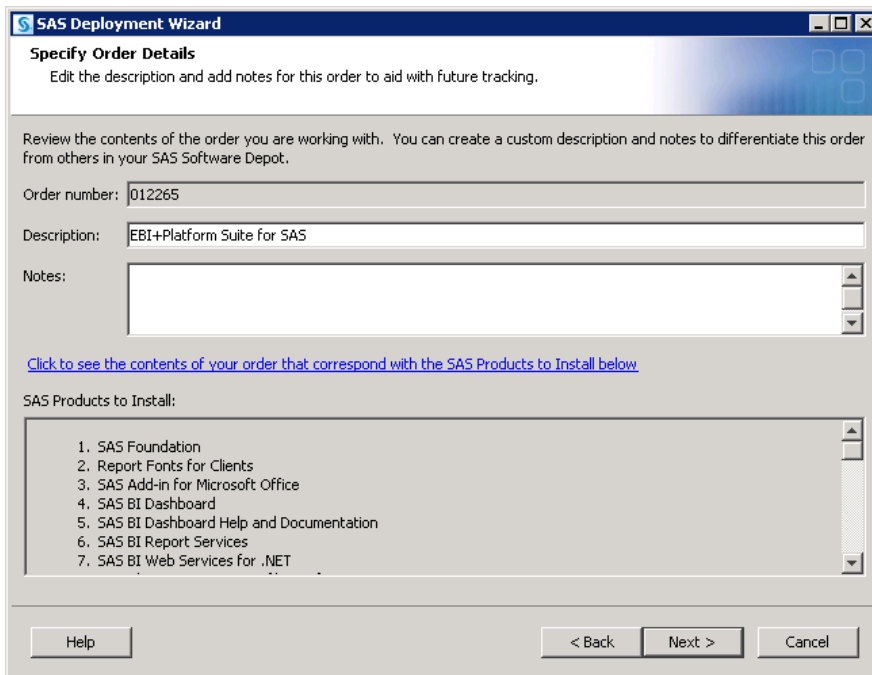
3 When prompted, select your language, and click **OK**.



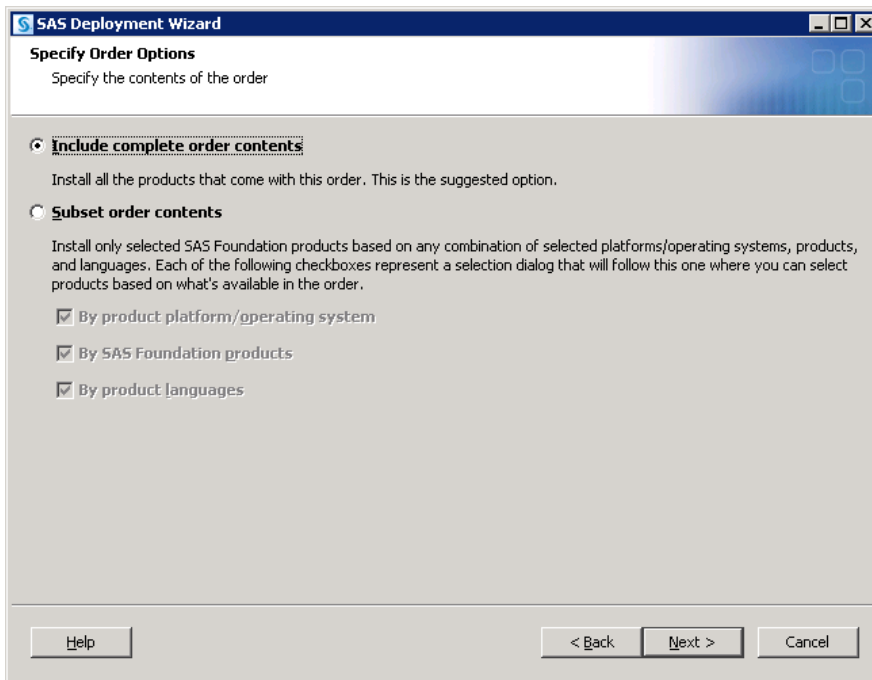
4 On the Select Deployment Task page of the SAS Deployment Wizard, select **Create or Add to a SAS Software Depot**.



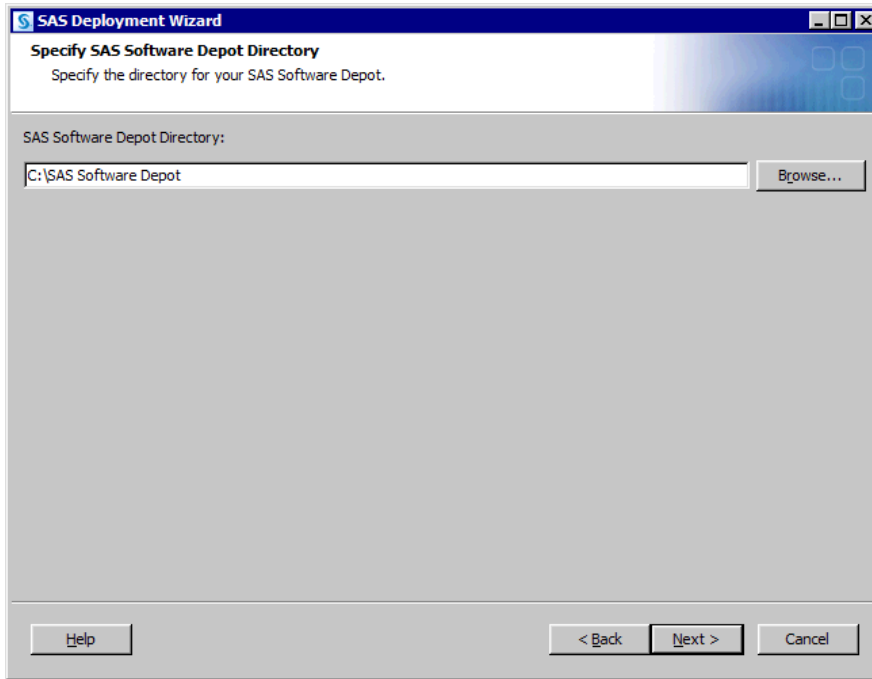
5 On the Specify Order Details page, click **Next**.



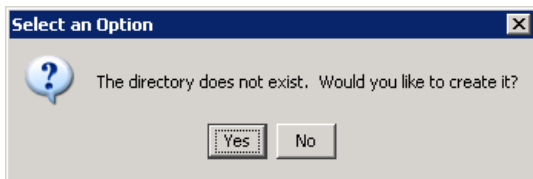
- 6 On the Specify Order Options page, select **Include complete order contents**, and click **Next**.



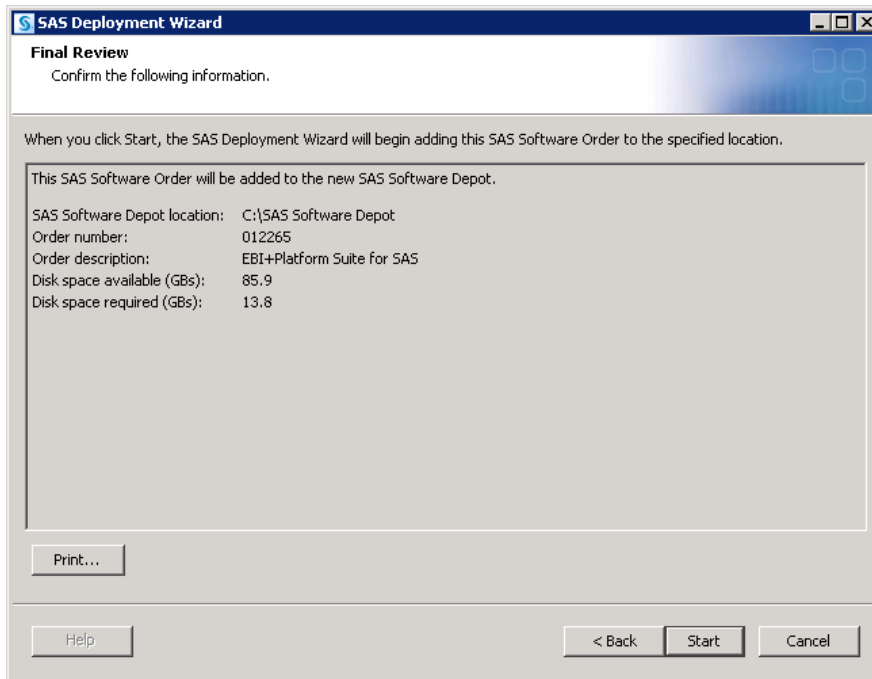
- 7 On the Specify SAS Software Depot Directory page, specify the location where you want to create your SAS Software Depot, and click **Next**. The location can be on the local machine or it can be on a network drive.



- 8 If the directory that you specify does not exist, the wizard prompts you. If you want it to create the directory for you, click **Yes**.



- 9 On the Final Review page, click **Start** to create the SAS Software Depot.



Step 2: Check for Documentation Updates

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

- [SAS Notes](#)
- system requirements

See the system requirements for SAS Visual Analytics (non-distributed), available at <http://support.sas.com/documentation/installcenter/en/ikvisanalytofrsr/68017/HTML/default/>.

Step 3: Prepare Your Environment

Overview of Prepare Your Environment

Before you can deploy your SAS software, you need to prepare your *server* machine. This includes:

- [Review your pre-installation checklist.](#)
- [Set up required operating system user accounts.](#)
- [Create the required operating system group.](#)
- [Install third-party software required by SAS Visual Analytics.](#)

Review Your Pre-Installation Checklist

Your SAS software order contains a pre-installation checklist that gives a comprehensive list of actions that you must do to prepare your system before deploying SAS Visual Analytics.

The checklist is located in your SAS Software Depot in the `plan_files` directory. Checklists are bundled with deployment plans, topology diagrams, and other documents. All of these are available on support.sas.com.

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 the names for future reference.

Table 1.1 Pre-installation Checklist for User Accounts

User Account	Operating System	Recommended User ID User Rights Needed
SAS Installer	Both	<i>my-domain\sas</i> or <i>my-machine\sas</i>
	Windows	Log on as a batch job
	Linux	The group that you designate as the <i>primary</i> group for the SAS installer must contain the SAS Spawnd Servers account.
SAS Spawnd Servers*	Both	<i>my-domain\sassrv</i> or <i>my-machine\sassrv</i>
	Windows	Log on as a batch job
	Linux	Member of a group that is the <i>primary</i> group for the SAS installer. (This group does not have to be the primary group for the SAS Spawnd Servers account.)
SAS First User*	Both	<i>my-domain\sasdemo</i> or <i>my-machine\sasdemo</i>
	Windows	Log on as a batch job
	Linux	

* The SAS Deployment Wizard automatically assigns the *Log on as a batch job* right to the SAS Spawnd Servers account and SAS First User account.

The accounts that are listed in the preceding table have the following purposes:

- SAS Installer 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 is the process owner for SAS Stored Process Servers and SAS 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 is used for demonstration purposes. This account is often referred to as sasdmo. 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.

Set Up an Operating System Group

Set Up the SAS Server Users Group (Windows)

To run SAS on 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 account and SAS First User account.

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

- 1 Click **Start**. In the **Search programs and files** field, enter `Computer Management`, and select it from the **Start** menu when it appears.
- 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 the **Log on as a batch job** right to the new SAS Server Users group.
Click **Start**. In the **Search programs and files** field, enter `Local Security Policy`, and select it from the **Start** menu when it appears.

- 6 In the left pane of the Local Security Policy window, expand **Local Policies**, and click **User Rights Assignment**.
- 7 In the right 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**. 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 created appears in the text box on the **Local Security Setting** 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 the **Log on as a batch job** right 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.

Set Up the sas Group (Linux)

To run SAS on Linux, you should create an operating system group (sas) and make it the *primary* group for the Linux SAS installer user. The SAS Spawnd Servers account should be made a member of the sas group. (Members of this group are given access to certain directories and files created by the SAS Deployment Wizard.)

For information about creating groups and adding user accounts, see your Linux documentation.

Download and Install Required Third-Party Software

SAS Visual Analytics requires that your machine have the following third-party software installed:

- Windows PowerShell

Windows PowerShell is a configuration management and task automation framework from Microsoft that is required by SAS Visual Analytics.

Later, you are prompted for the Windows PowerShell installation path here: [Step 18 on page 32](#).

■ Python

Python is a general-purpose programming language required by SAS Information Retrieval Studio.

Later, you are prompted for the Python installation path here: [Step 17 on page 31](#).

■ JUnit

To run certain test suites, the SAS Deployment Tester requires JUnit, which is an open-source framework for writing and running tests in the Java programming language.

Later, you are prompted for the JUnit installation path here: [Step 55 on page 69](#).

If you need any of this software, you can download it from [SAS Support for Additional Software Products](#).

If your machine does not have this third-party software, note the location where you installed it. (See the following table.)

Table 1.2 *Pre-installation Checklist for Third-Party Software*

Third-Party Software	Default Installation Path	Actual Installation Path
Windows PowerShell	C:\Windows \System32\WindowsPowerShell\v1.0	
Python	C:\Python27	
JUnit	C:\junit\junit-4.8.1.jar	

Step 4: Install and Configure SAS

To install and configure SAS Visual Analytics, you use a standard *deployment plan*. A deployment plan is similar to a recipe that tells the SAS Deployment Wizard how to install your software order.

Later in this topic, you are asked to choose between two standard deployment plans that are labeled **SAS Visual Analytics, two machines**. The first machine contains the SAS Visual Analytics server tier, middle tier, and administrative clients. The second machine contains administrative clients. These two plans differ only in that one plan is used for a Windows server and middle tier, and the other plan is used for a Linux server and middle tier.

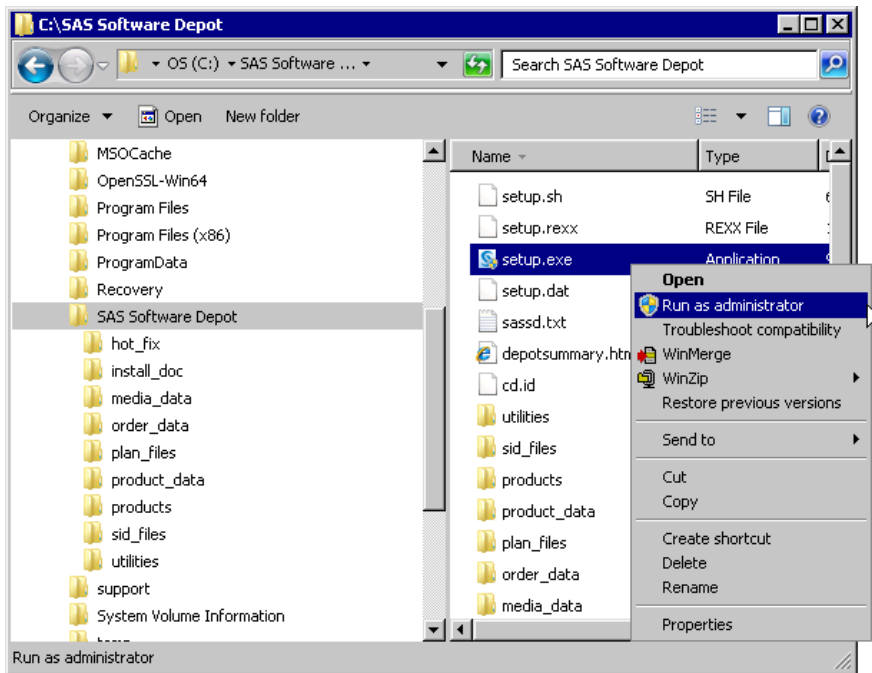
This topic describes how to deploy SAS Visual Analytics on the server and middle tier machine. If you want to deploy on additional *client* machines, then rerun the deployment wizard on one or more additional machines, making sure to select **Step 4: Clients** on the [Select Deployment Step and Products to Install page on page 23](#).

Note: Actually, these deployment plans can accommodate additional machines if you want to cluster your SAS Metadata Server (Step 2) or your middle tier (Step 3). For more information, see [SAS Visual Analytics: Installation and Configuration Guide \(Distributed SAS LASR\)](#).

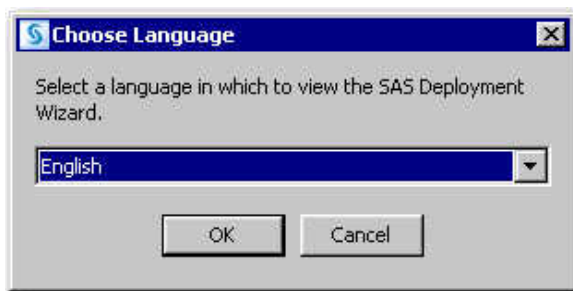
To install and configure SAS Visual Analytics on a single machine, follow these steps:

- 1 Log on to the machine 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.
- 3 On Windows, start Windows Explorer, and navigate to the highest-level directory in your SAS Software Depot. Right-click setup.exe, and select **Run as administrator**.

On Linux, navigate to the highest-level directory in your SAS Software Depot, and run setup.sh.



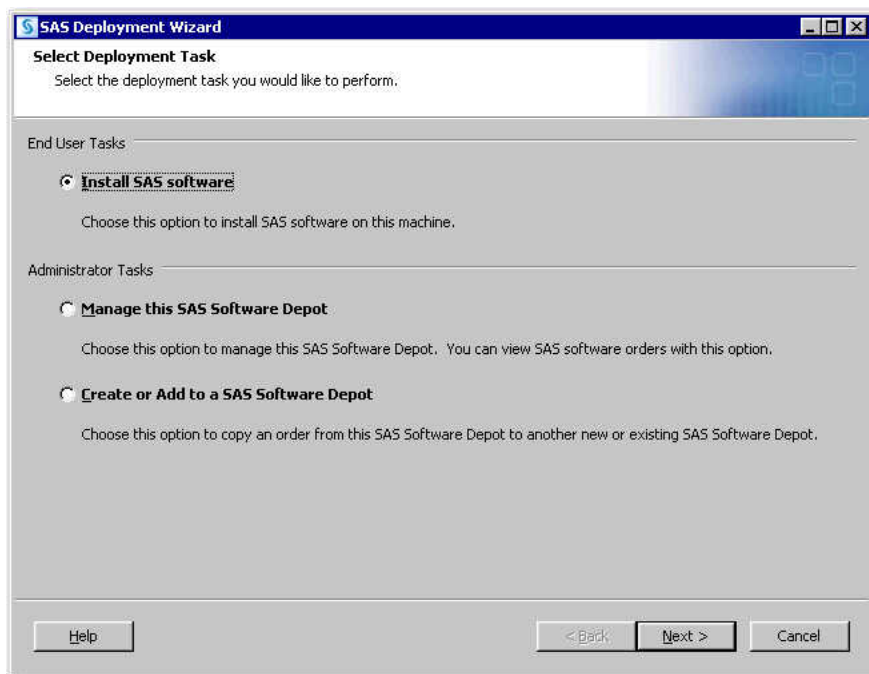
4



Choose Language

- From the drop-down list, select the language that you want the SAS Deployment Wizard to use when it displays text, and click **OK**.

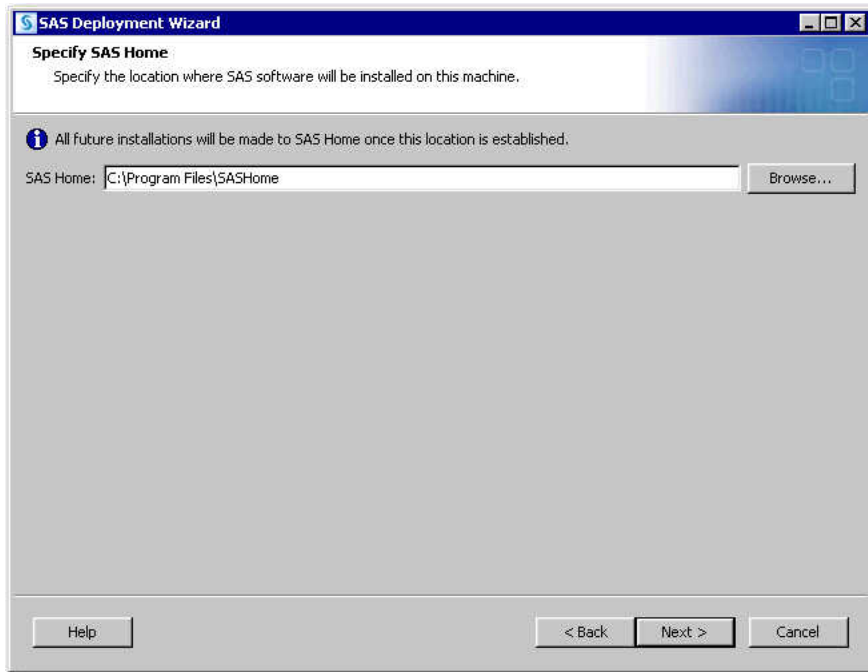
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Select Deployment Task

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

6

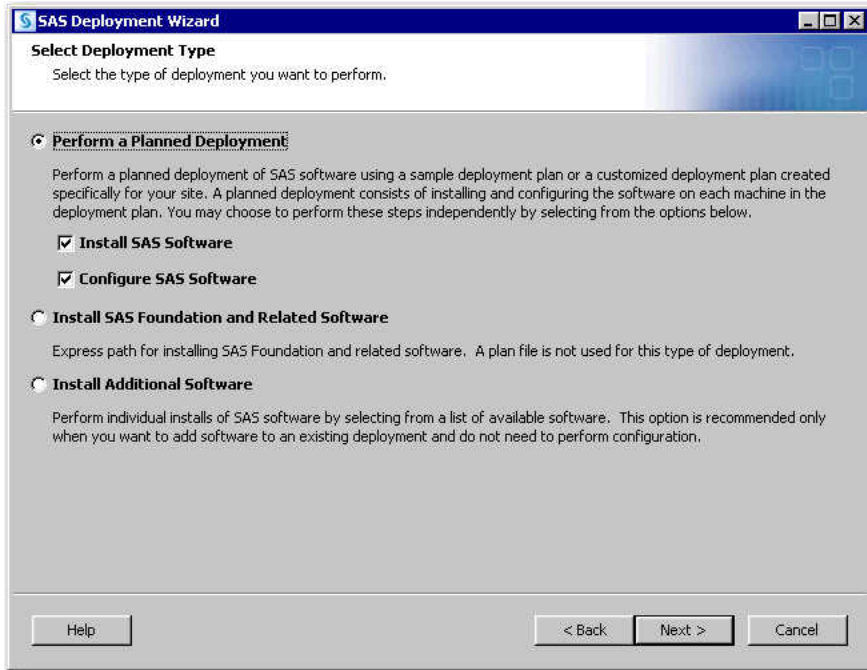


Specify SAS Home

- If you want to specify a different location where SAS is installed other than the default, 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.

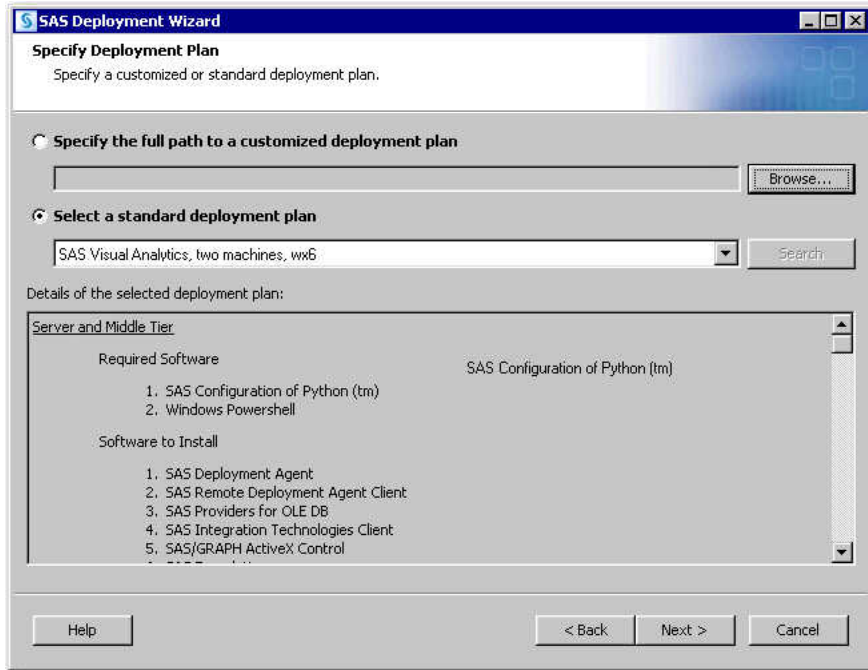
7



Select Deployment Type

- Confirm that **Perform a Planned Deployment**, **Install SAS Software**, and **Configure SAS Software** are all selected. Click **Next**.

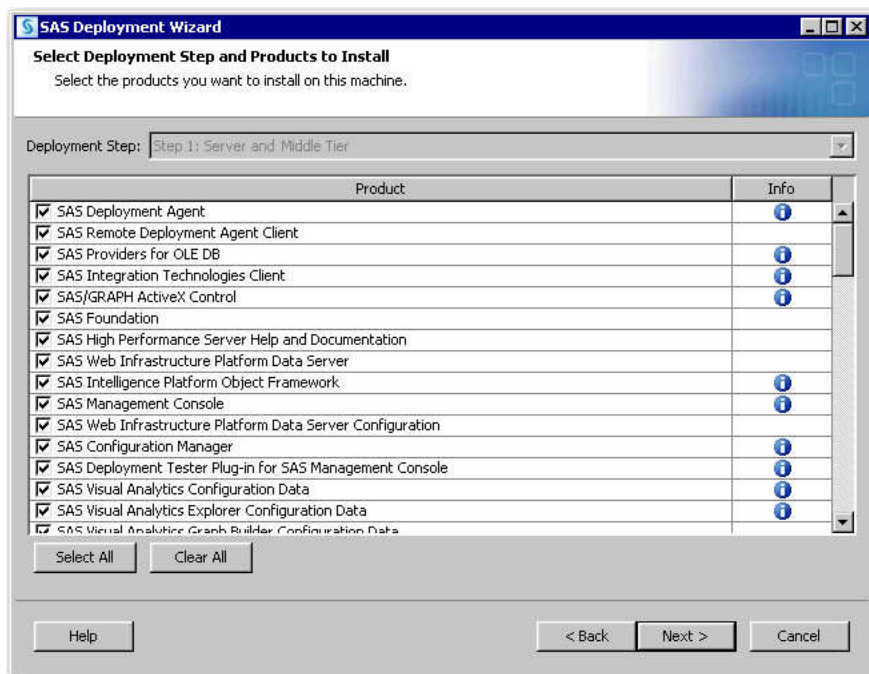
8



Specify Deployment Plan

- Select **Select a standard deployment plan**.
- On Windows, from the drop-down menu, select **SAS Visual Analytics, two machines, wx6**.
- On Linux, from the drop-down menu, select **SAS Visual Analytics, two machines, lax and wx6**. Click **Next**.

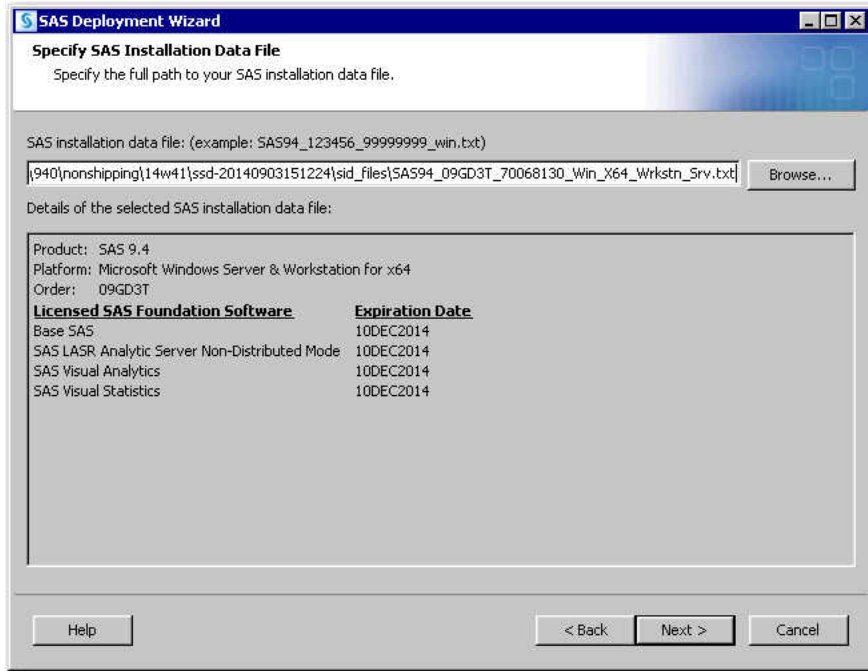
9



Select Deployment Step and Products to Install

- In **Deployment Step**, make sure that **Step 1: Server and Middle Tier** is selected. Click **Next**.

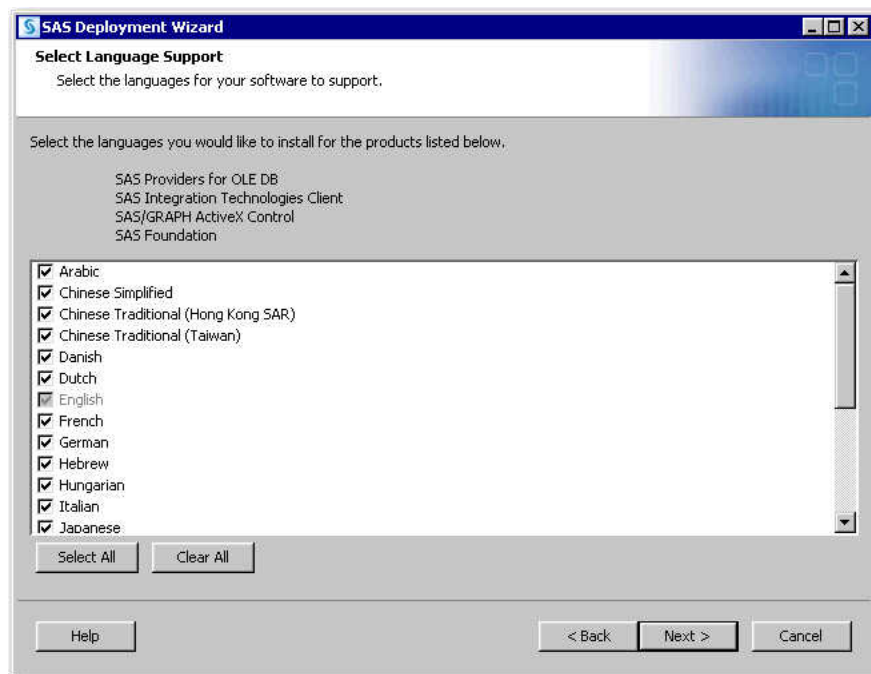
10



Specify SAS Installation Data File

- Click **Browse**, locate your SAS installation data file, and then click **Next**.

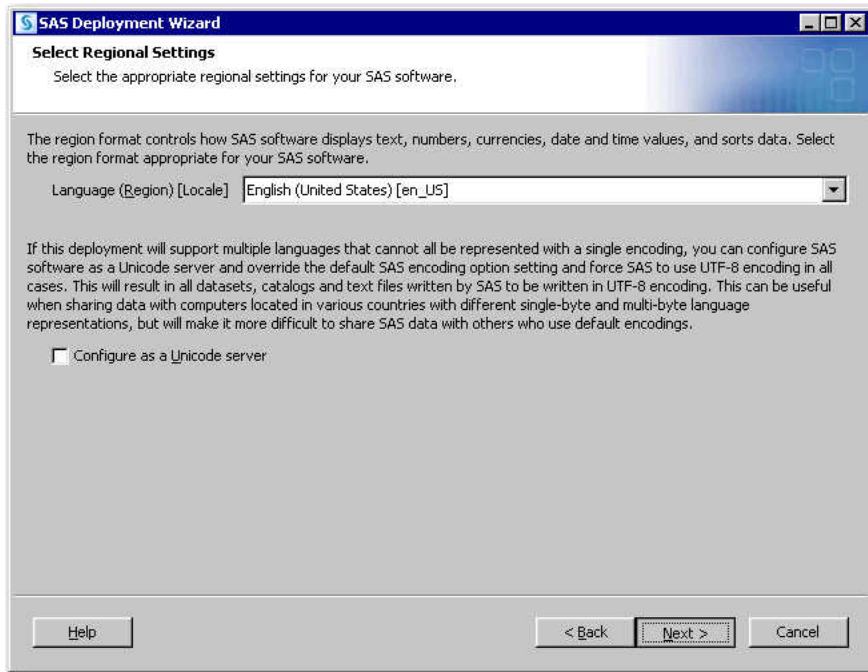
11



Select Language Support

- Click **Clear All**. (English remains selected as the default language.)
- Add any additional languages that you want SAS to support, and then click **Next**.

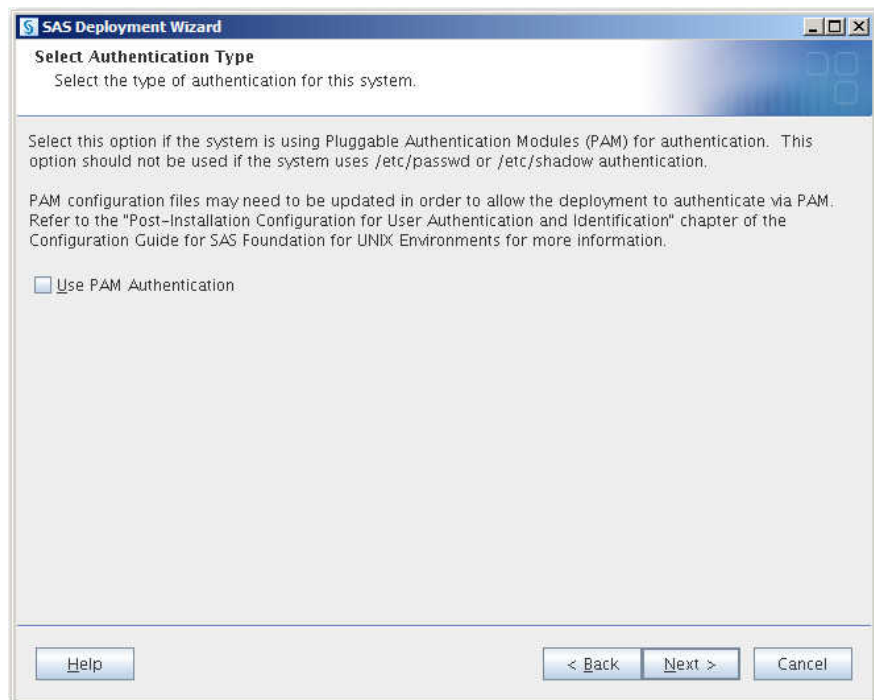
12



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**.

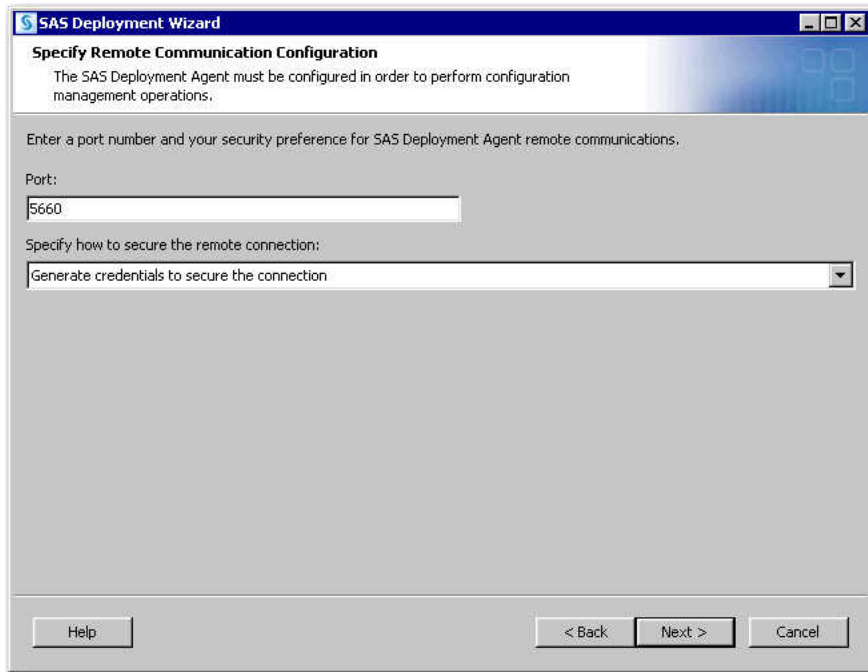
13



Select Authentication Type (Linux only)

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

14

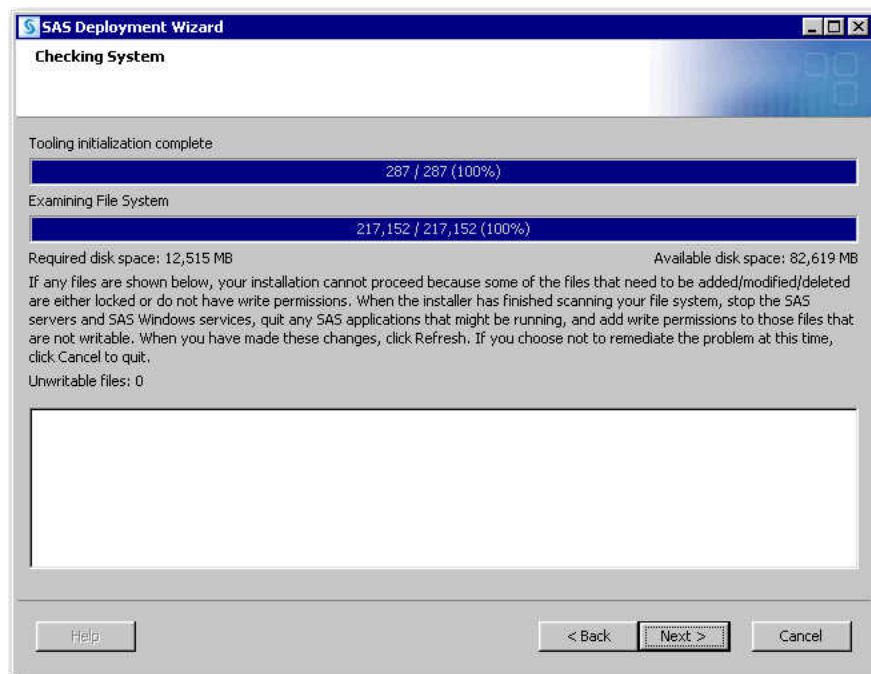


Note: Generally speaking, you should not change any port values unless a port is already used by another application. See your pre-installation checklist for the complete list of ports that SAS Visual Analytics requires. For more information, see [“Review Your Pre-Installation Checklist” on page 11](#).

Specify Remote Communication Configuration

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

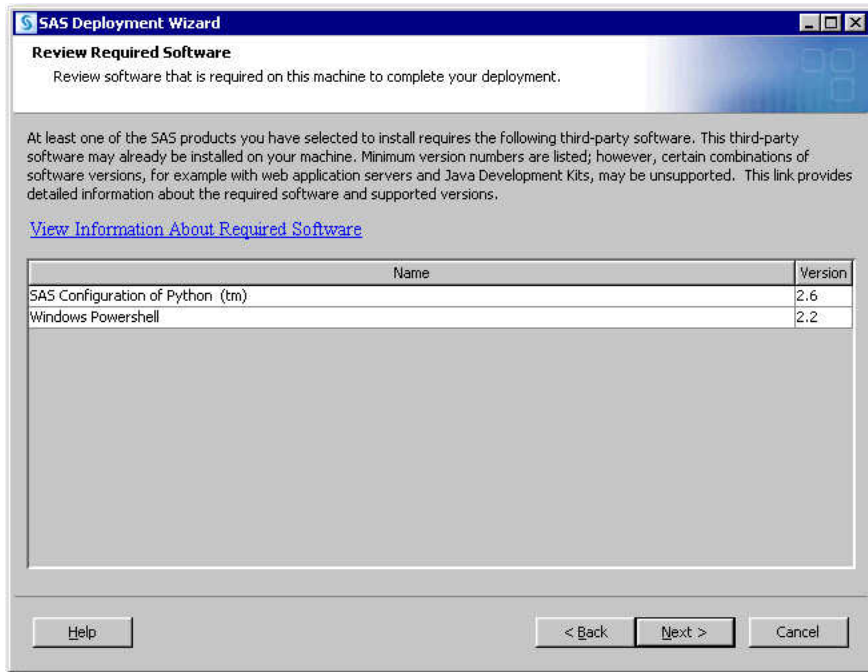
15



Checking System

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

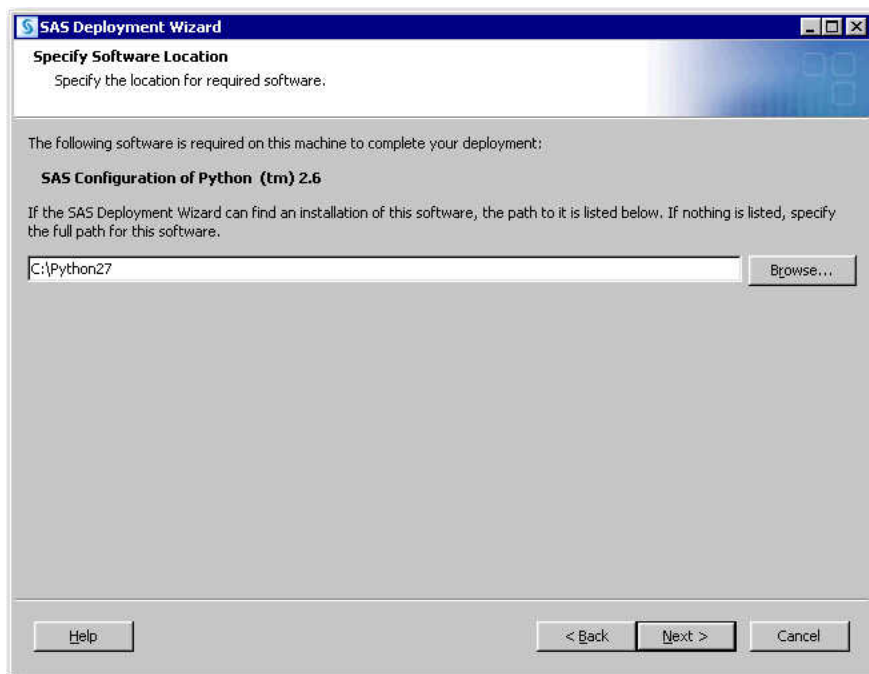
16



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**.

17

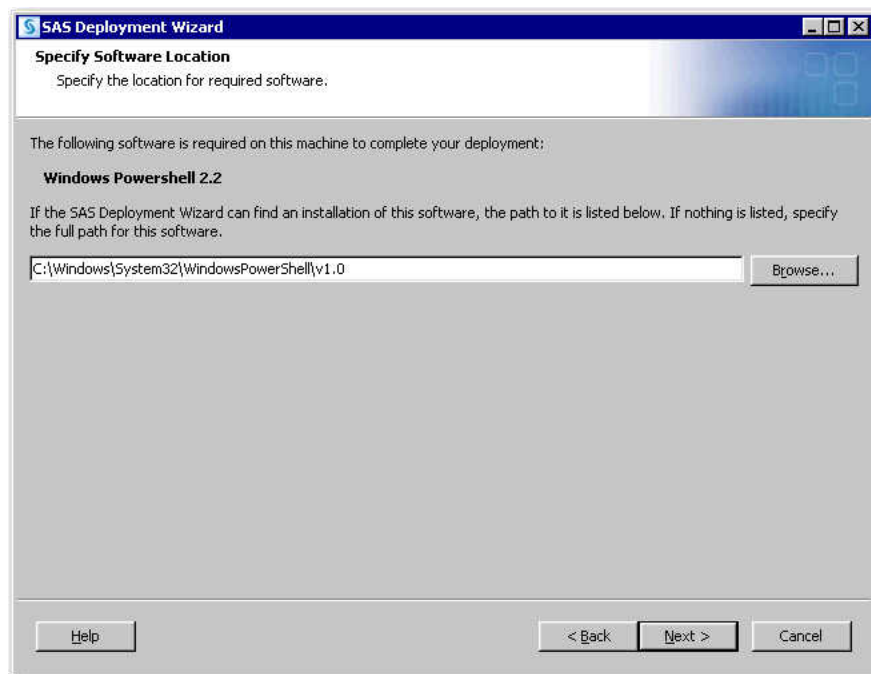


Specify Software Location

- Click **Next**.

If the path is incorrect, the wizard does not proceed. In this case, enter the correct path where the third-party software is installed that you recorded in [Table 1.2 on page 15](#). Click **Next**.

18

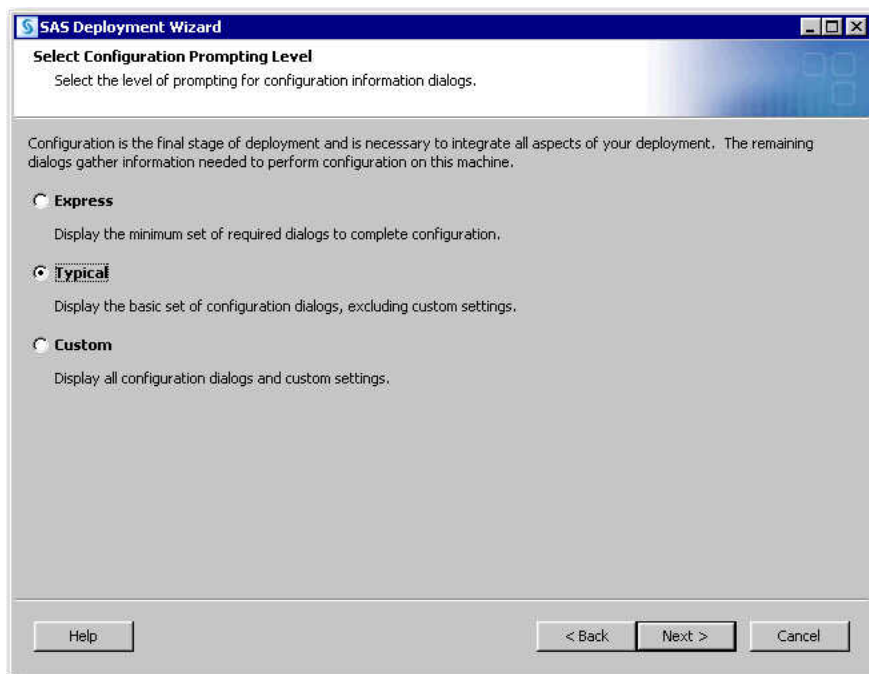


Specify Software Location

- Click **Next**.

If the path is incorrect, the wizard does not proceed. In this case, enter the correct path where the third-party software is installed that you recorded in [Table 1.2 on page 15](#). Click **Next**.

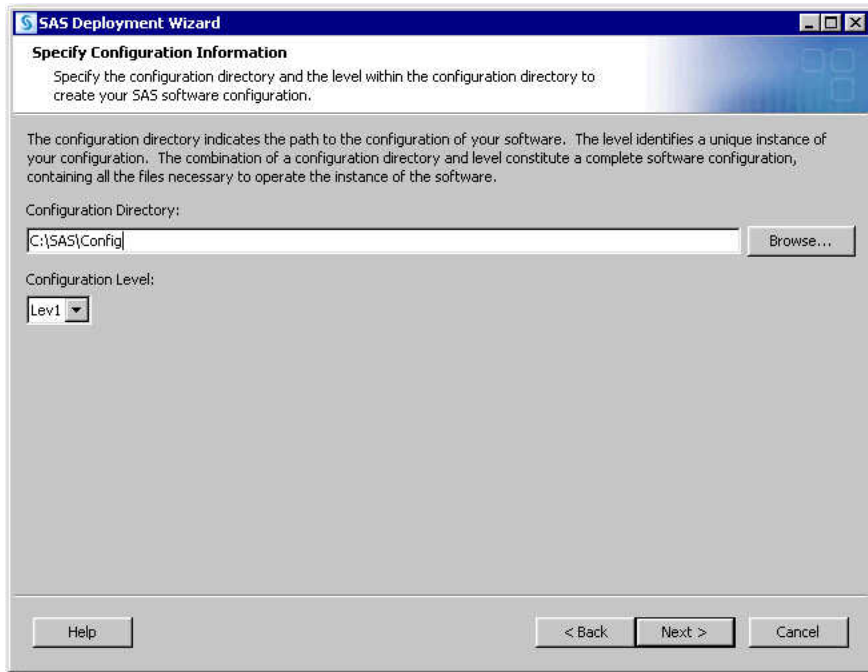
19



Select Configuration Prompting Level

- Make sure that **Typical** is selected, and click **Next**.

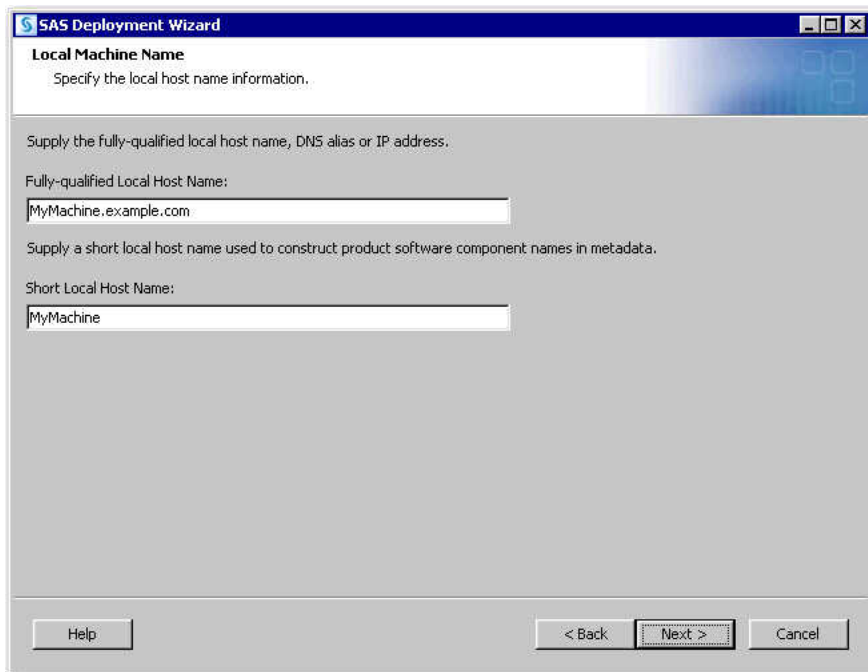
20



Specify Configuration Information

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

21



The screenshot shows the 'SAS Deployment Wizard' window with the 'Local Machine Name' step selected. The window has a blue title bar and a grey main area. The title bar contains the text 'SAS Deployment Wizard' and standard window control buttons. The main area has a blue header with the text 'Local Machine Name' and 'Specify the local host name information.' Below this, there is a text box for 'Fully-qualified Local Host Name' containing 'MyMachine.example.com' and a text box for 'Short Local Host Name' containing 'MyMachine'. At the bottom, there are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button.

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 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).

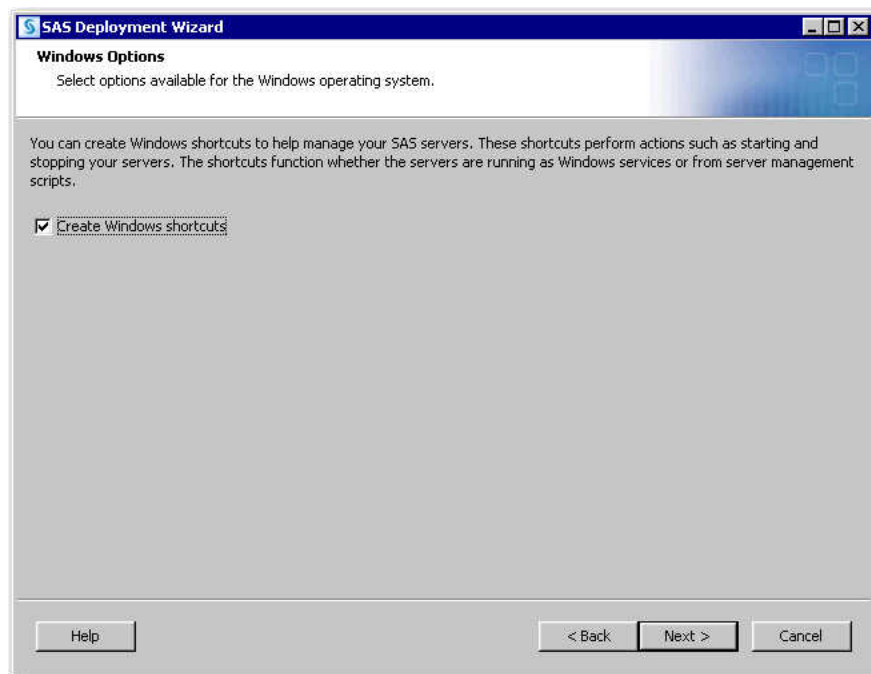
22



Migration Information

- Do *not* select **Perform migration**. Click **Next**.

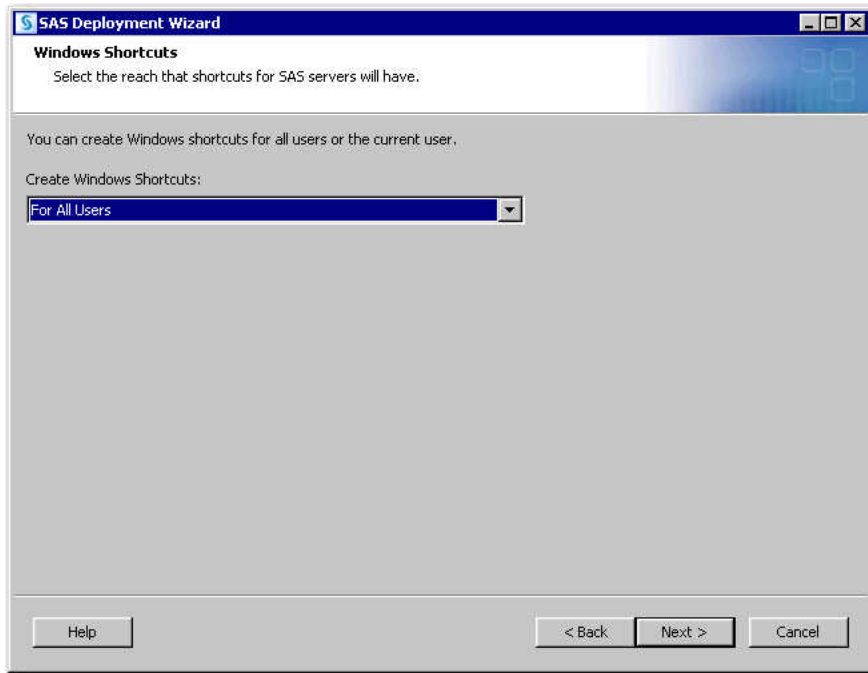
23



Windows Options (Windows only)

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

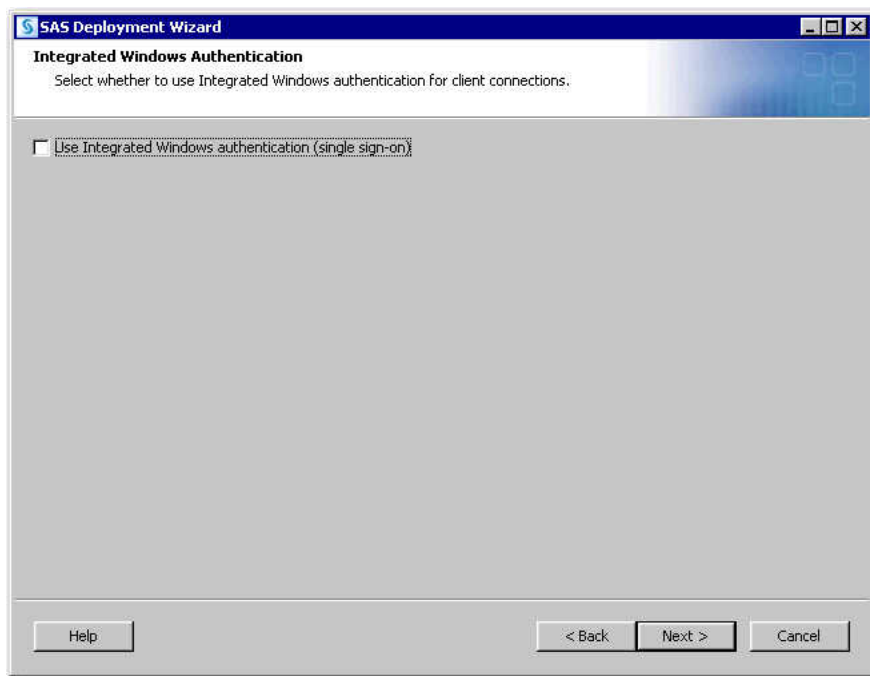
24



Windows Shortcuts (Windows only)

- In **Create Windows Shortcuts**, make sure that **For All Users** is selected. Click **Next**.

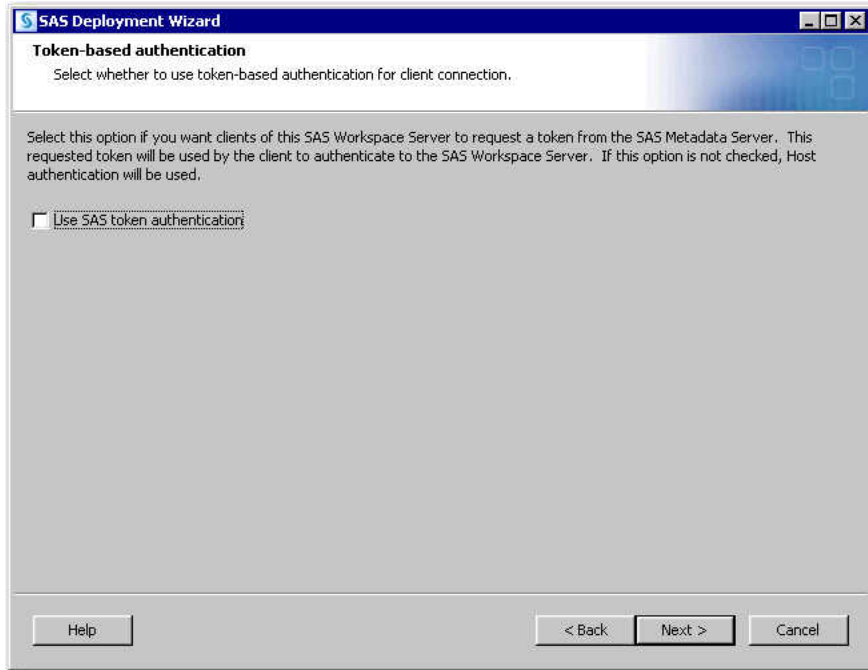
25



Integrated Windows Authentication

- Do *not* select **Use Integrated Windows authentication**. Click **Next**.

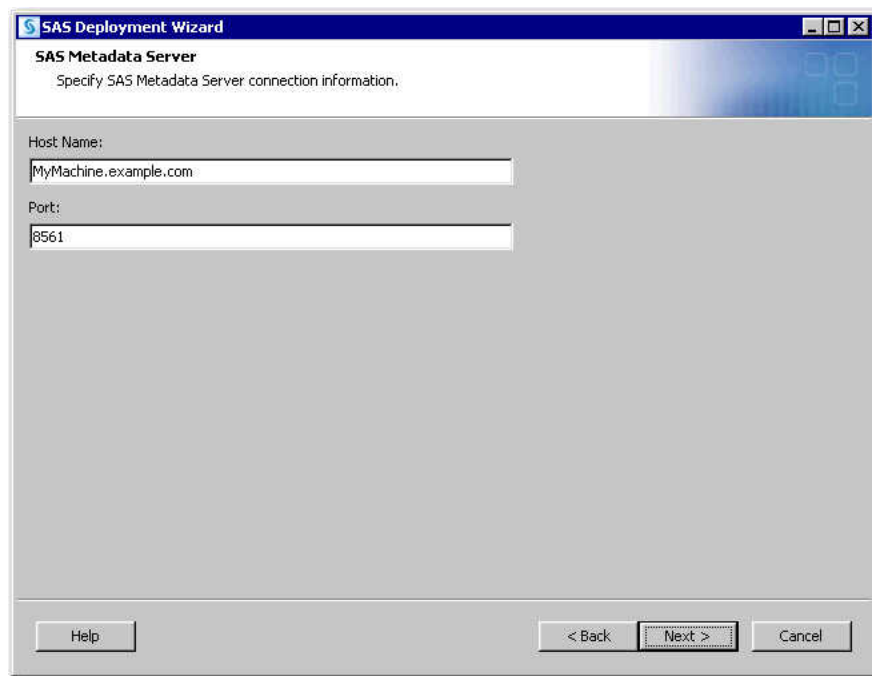
26



Token Based Authentication

- Do *not* select **Use SAS token authentication**. Click **Next**.

27

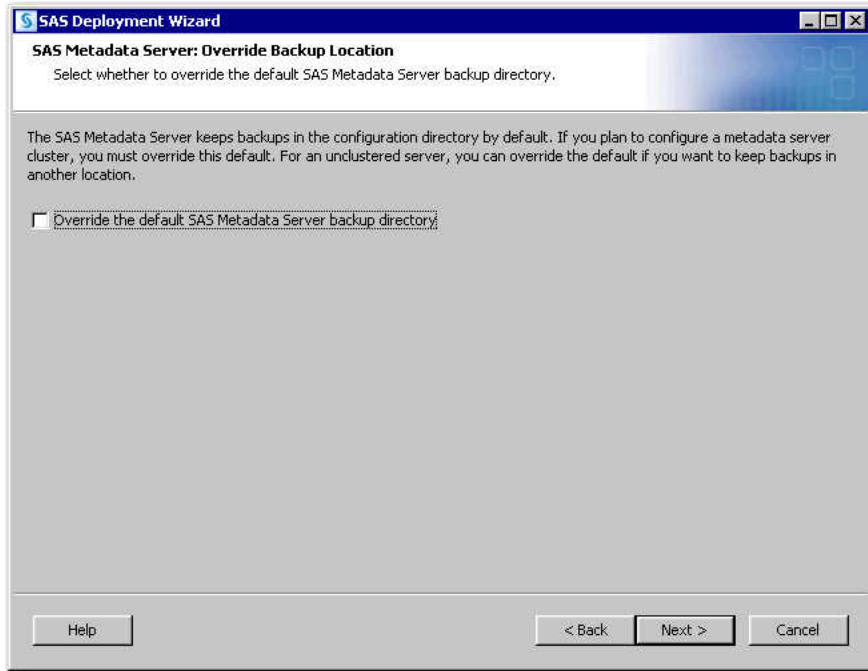


The screenshot shows a window titled "SAS Deployment Wizard" with a sub-header "SAS Metadata Server". Below the sub-header is the instruction "Specify SAS Metadata Server connection information." There are two input fields: "Host Name:" with the text "MyMachine.example.com" and "Port:" with the text "8561". At the bottom of the window are three buttons: "Help", "< Back", and "Next >", with a "Cancel" button to the right of "Next >".

SAS Metadata Server

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

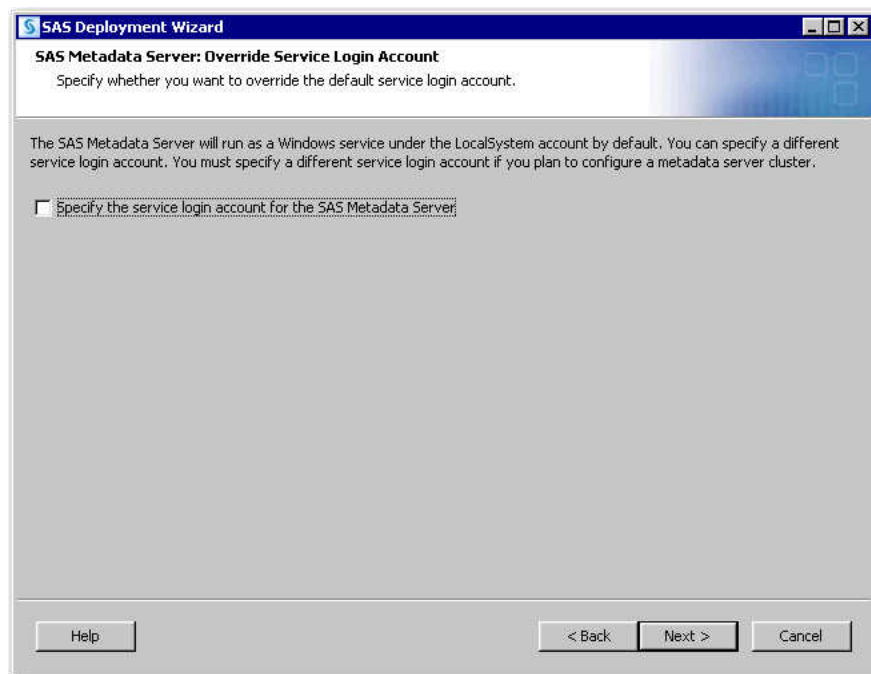
28



SAS Metadata Server: Override Backup Location

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

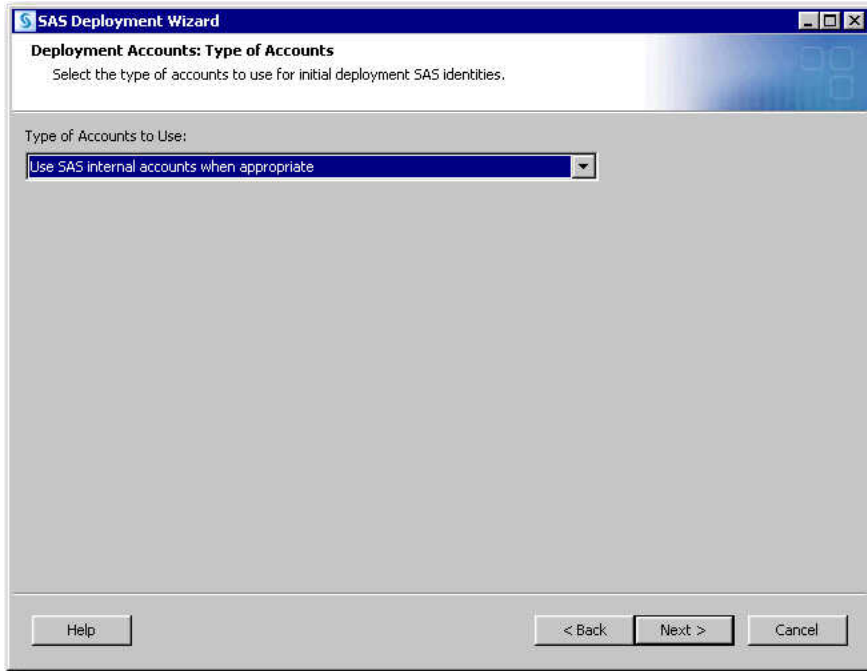
29



SAS Metadata Server: Override Service Login Account (Windows only)

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

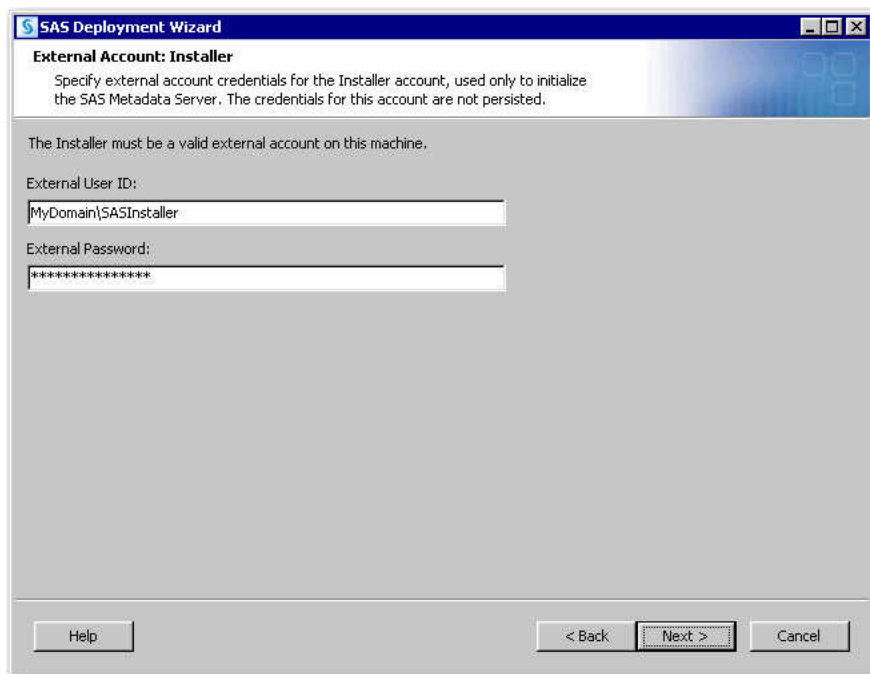
30



Deployment Accounts: Type of Accounts

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

31



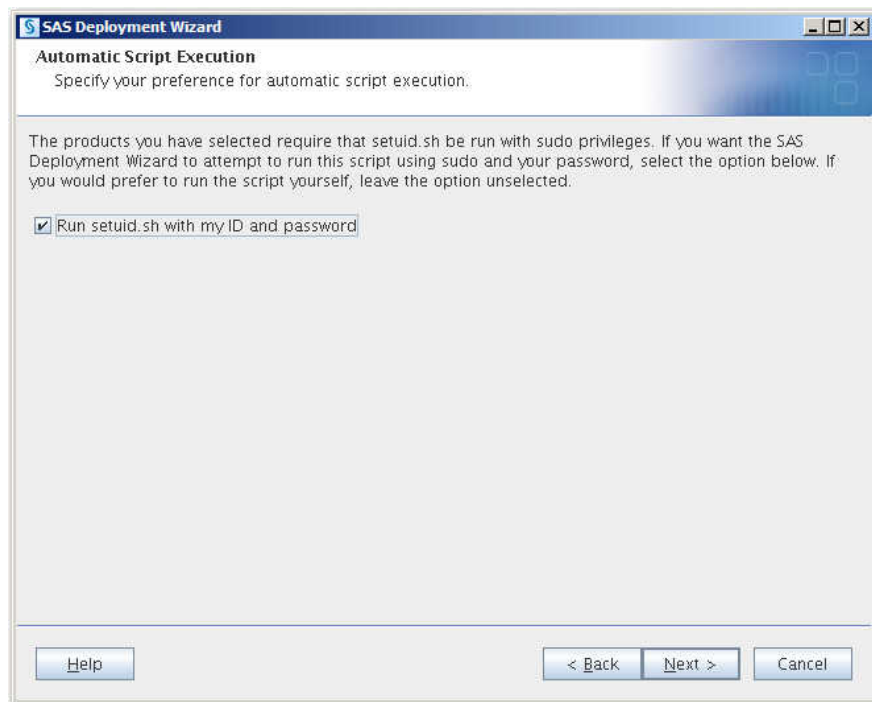
The screenshot shows a Windows-style dialog box titled "SAS Deployment Wizard". The main heading is "External Account: Installer". Below this, a note states: "Specify external account credentials for the Installer account; used only to initialize the SAS Metadata Server. The credentials for this account are not persisted." A message below reads: "The Installer must be a valid external account on this machine." There are two input fields: "External User ID:" containing the text "MyDomain\SASInstaller" and "External Password:" containing a series of asterisks. At the bottom, there are three buttons: "Help", "< Back", and "Next >", with a "Cancel" button to the right of "Next >".

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**.

32



Automatic Script Execution (Linux only)

- Select **Run setuid.sh with my ID and password** for the deployment wizard to attempt to run the script with the credentials that you provide.

You see this page on Linux for SAS products that require you run the `setuid.sh` script with `sudo` privileges. If you select this option, you will be asked on a subsequent page for the `sudo` password (if you are deploying a metadata server, you have already provided this information), and as it installs your software, the deployment wizard attempts to run the script with the credentials you provided.

If you do not select this option, you will have to run `setuid.sh` manually during installation (and configuration if you have chosen to configure) is complete. Note that `setuid.sh` must be run as root in order to complete successfully. If you have any concerns with the SAS Deployment Wizard running as root or you do not know the `sudo` information for the machine that you are installing on, you should not select this option. For more information, see [Step 87 on page 102](#).

33

SAS Internal Account: Unrestricted Administrator

Specify the metadata password for the first Unrestricted Administrator identity. The Unrestricted Administrator has unrestricted administrative access to metadata.

The Unrestricted Administrator is a SAS internal account stored in metadata.

Display Name:

Name:

Internal User ID:

New Internal Password:

Confirm New Internal Password:

Help < Back Next > Cancel

SAS Internal Account: Unrestricted Administrator

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

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

34

SAS Internal Account: Trusted User

Specify the metadata password for the Trusted User identity. The Trusted User is a privileged service account that can act on behalf of other users on a connection to the metadata server.

The Trusted User is a SAS internal account stored in metadata.

Display Name:

Name:

Internal User ID:

New Internal Password:

Confirm New Internal Password:

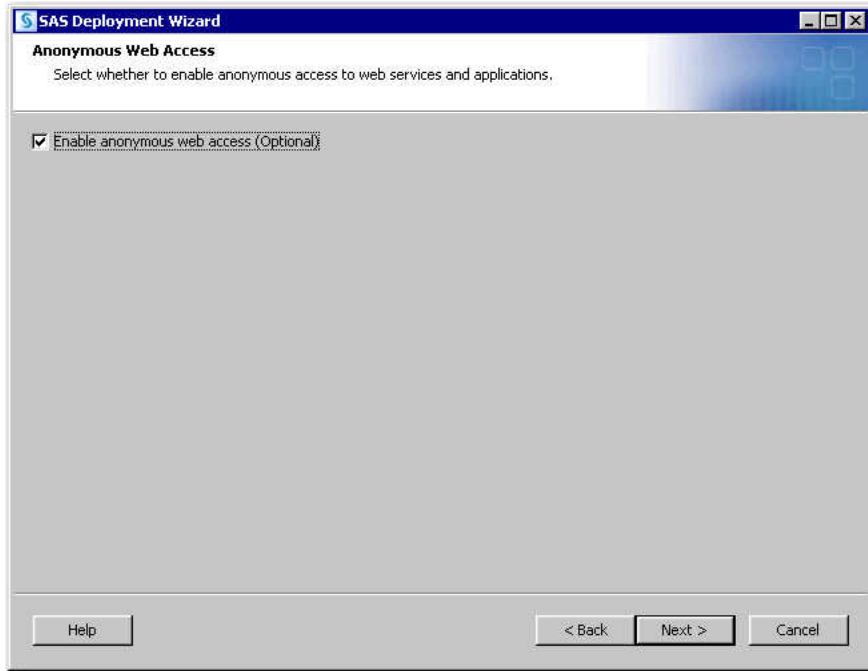
Buttons: Help, < Back, Next >, Cancel

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.

35



Anonymous Web Access

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

36

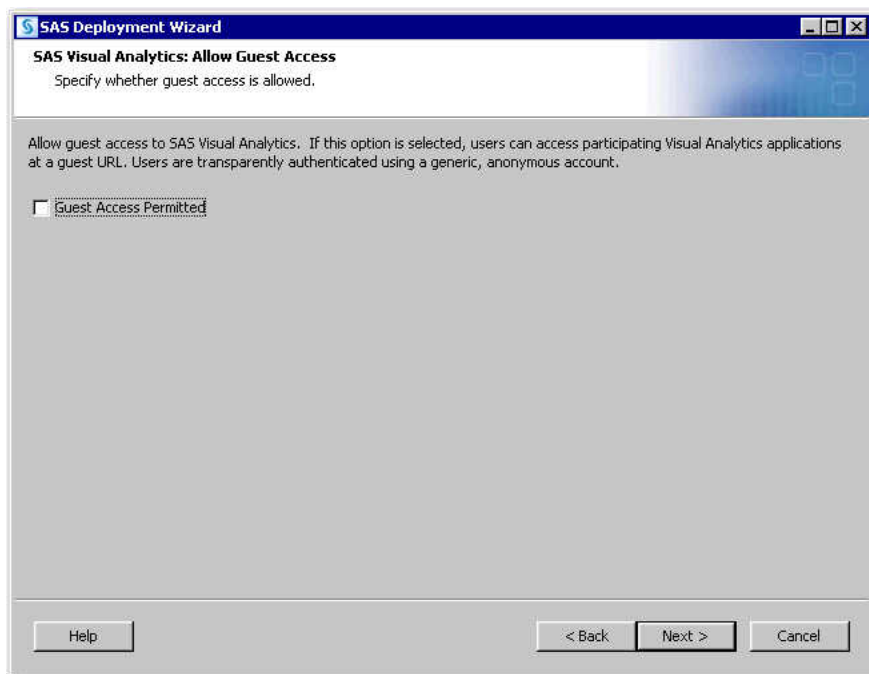
The screenshot shows the 'SAS Deployment Wizard' window. The title bar reads 'SAS Deployment Wizard'. The main heading is 'SAS Internal Account: Anonymous Web User'. Below the heading, it says 'Specify the metadata password for the anonymous web user identity.' A note states: 'The anonymous web user is a SAS internal account stored in metadata.' There are five input fields: 'Display Name:' with the value 'SAS Anonymous Web User', 'Name:' with the value 'webanon', 'Internal User ID:' with the value 'webanon@saspw', 'New Internal Password:' with masked characters '*****', and 'Confirm New Internal Password:' with masked characters '*****'. At the bottom, there are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button on the far right.

SAS Internal Account: Anonymous Web User

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

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

37



SAS Visual Analytics: Allow Guest Access

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

38

SAS Deployment Wizard

External Account: SAS Spawned Servers Account
Specify credentials for the SAS Spawned Servers account, used to launch back-end stored process and pooled workspace servers.

The SAS Spawned Servers account must be a valid external account on this machine.

External User ID:
MyMachine\sassrv

External Password:

Help < Back Next > Cancel

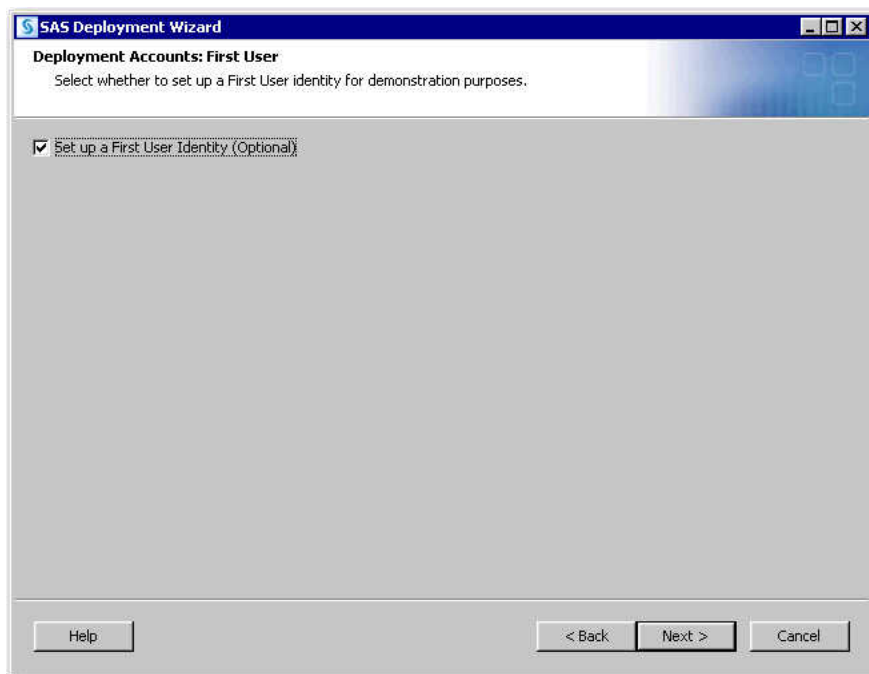
External Account: SAS Spawned Servers Account

- 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.

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

39

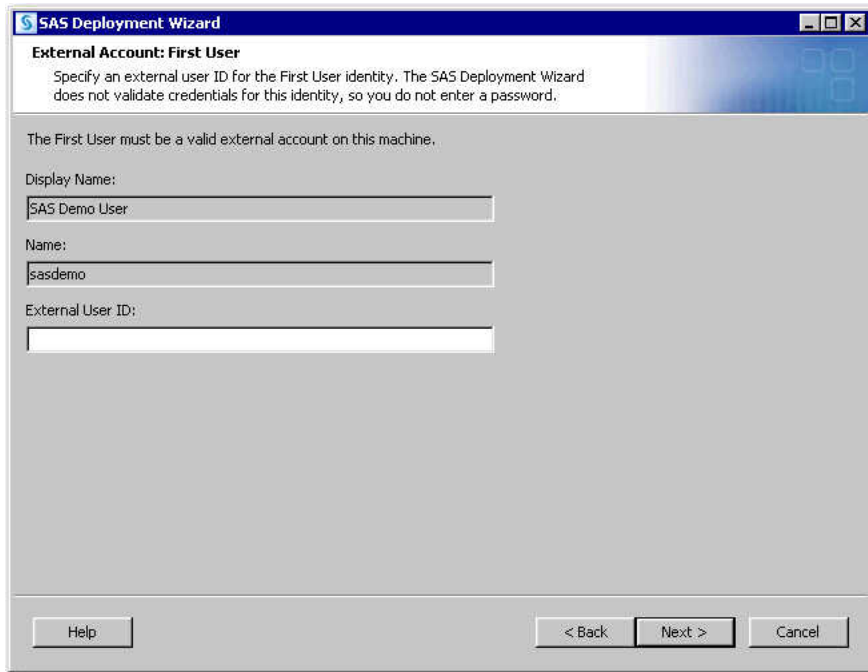


Deployment Accounts: First User

- 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.

40

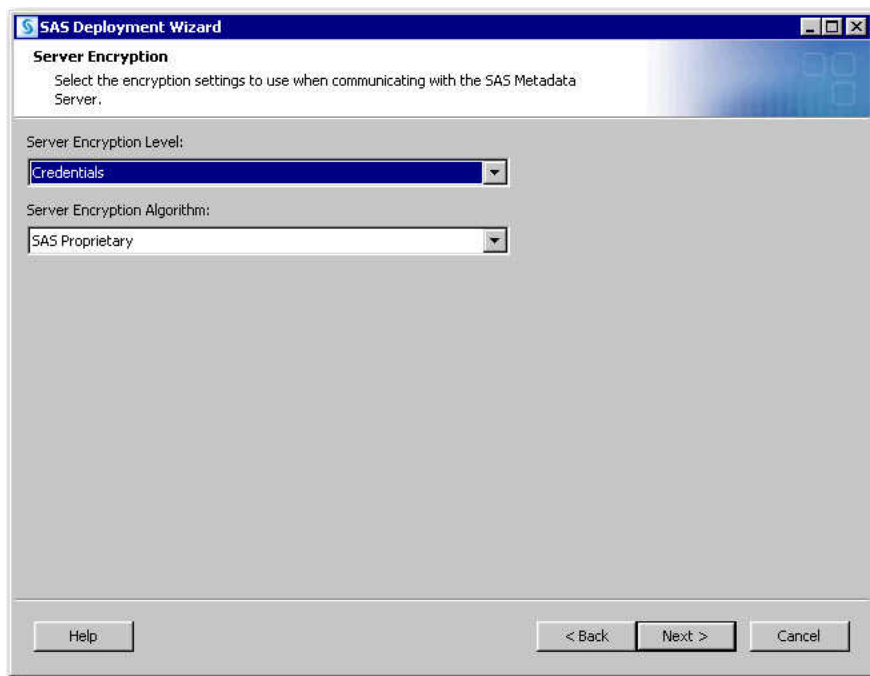


The screenshot shows the 'SAS Deployment Wizard' window with the 'External Account: First User' step. The title bar reads 'SAS Deployment Wizard'. The main heading is 'External Account: First User'. Below it, a message states: 'Specify an external user ID for the First User identity. The SAS Deployment Wizard does not validate credentials for this identity, so you do not enter a password.' A note below that says: 'The First User must be a valid external account on this machine.' There are three text input fields: 'Display Name:' with the value 'SAS Demo User', 'Name:' with the value 'sasdemo', and 'External User ID:' which is empty. At the bottom, there are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button on the far right.

External Account: First User

- In **External User ID**, enter the user ID for the SAS First User account.
Prefix the user ID with either the domain or machine name (for example, *domain \user-ID* or *machine-name \user-ID*). Click **Next**.

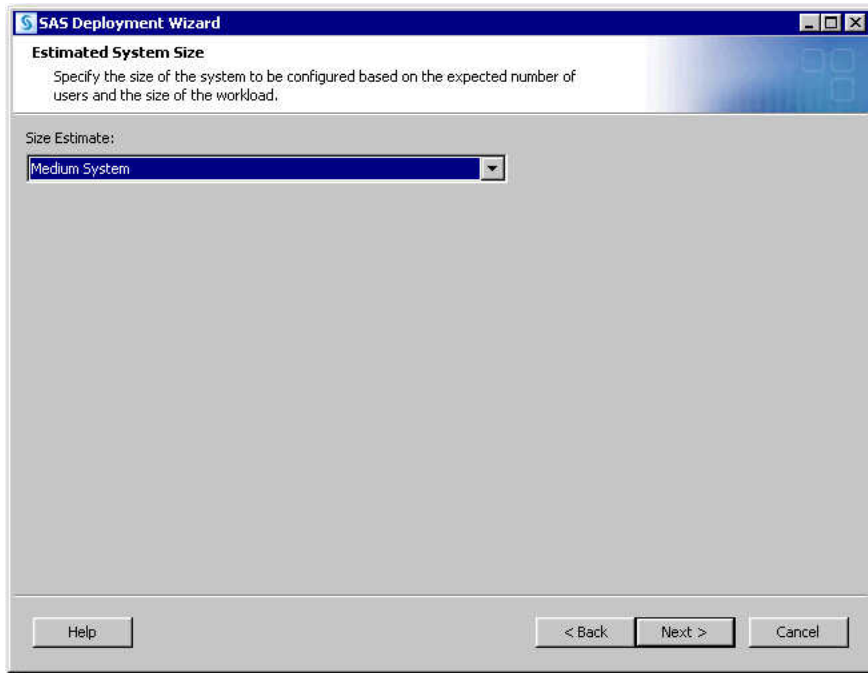
41



Server Encryption

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

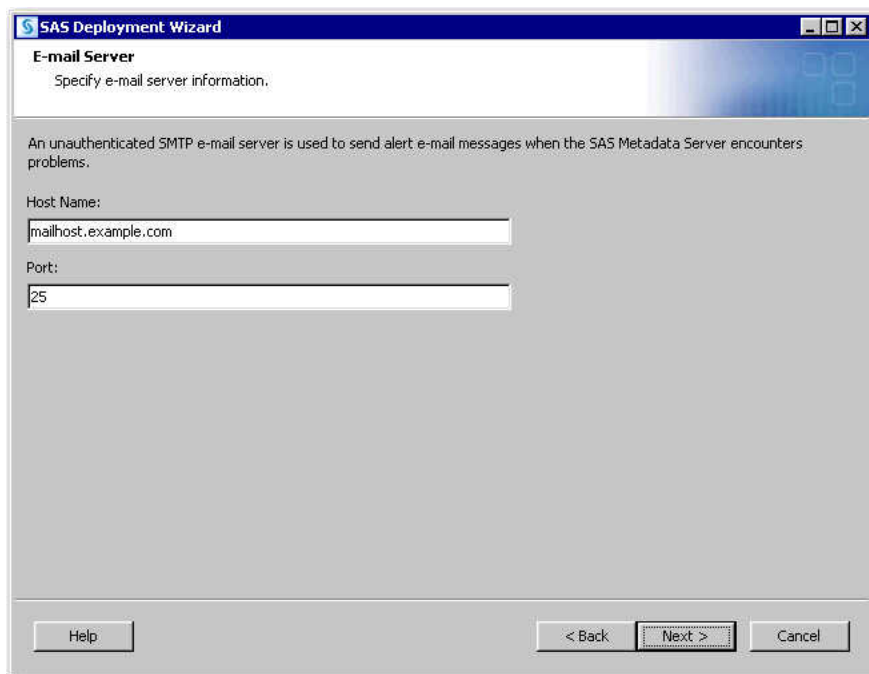
42



Estimated System Size

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

43



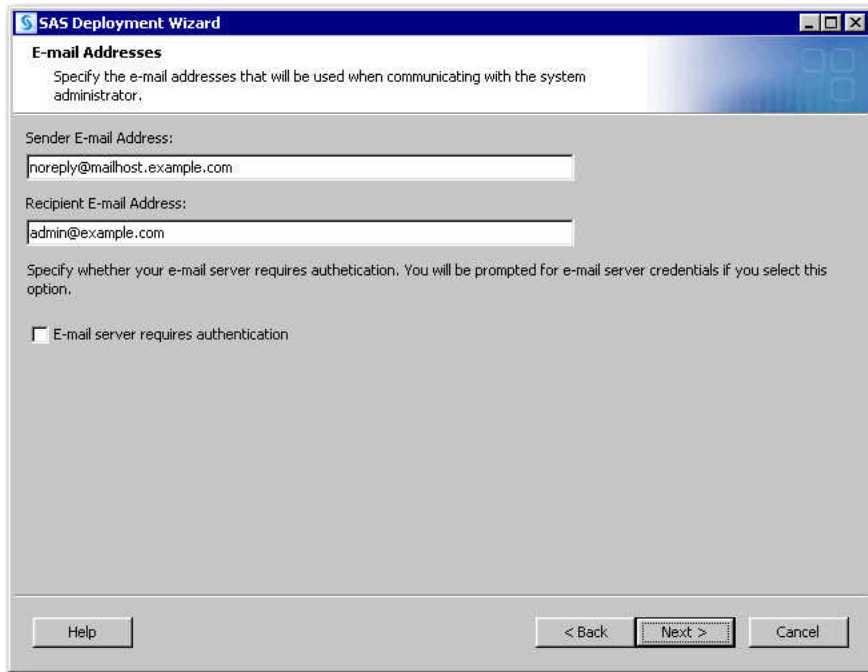
The screenshot shows the 'E-mail Server' step of the SAS Deployment Wizard. The window title is 'SAS Deployment Wizard'. The main heading is 'E-mail Server' with the instruction 'Specify e-mail server information.' Below this, a note states: 'An unauthenticated SMTP e-mail server is used to send alert e-mail messages when the SAS Metadata Server encounters problems.' There are two input fields: 'Host Name:' with the value 'mailhost.example.com' and 'Port:' with the value '25'. At the bottom, there are three buttons: 'Help', '< Back', and 'Next >', with a 'Cancel' button to the right of 'Next >'.

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.

44

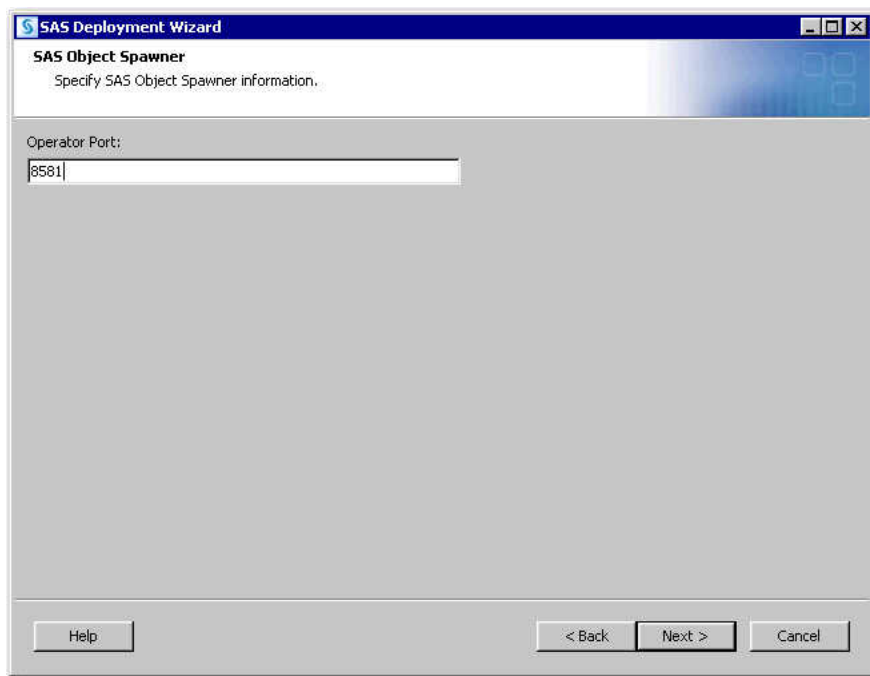


The screenshot shows the 'E-mail Addresses' step of the SAS Deployment Wizard. The window title is 'SAS Deployment Wizard'. The section title is 'E-mail Addresses'. Below the title, there is a descriptive text: 'Specify the e-mail addresses that will be used when communicating with the system administrator.' There are two text input fields: 'Sender E-mail Address:' with the value 'noreply@mailhost.example.com' and 'Recipient E-mail Address:' with the value 'admin@example.com'. Below these fields, there is a text block: 'Specify whether your e-mail server requires authentication. You will be prompted for e-mail server credentials if you select this option.' followed by a checkbox labeled 'E-mail server requires authentication' which is currently unchecked. At the bottom of the window, there are three buttons: 'Help', '< Back', and 'Next >', with a 'Cancel' button to the right of 'Next >'.

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**.

45



SAS Object Spawner

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

46

SAS Deployment Wizard

SAS Object Spawner: Port Bank
Specify SAS Object Spawner port bank ports.

Port Bank Port 1:
8801

Port Bank Port 2:
8811

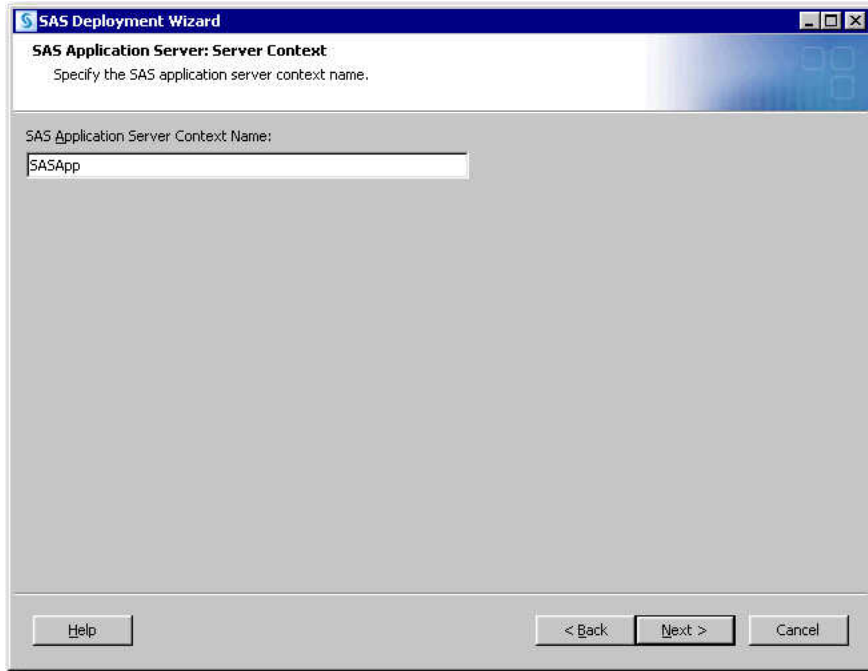
Port Bank Port 3:
8821

Help < Back Next > Cancel

SAS Object Spawner: Port Bank

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

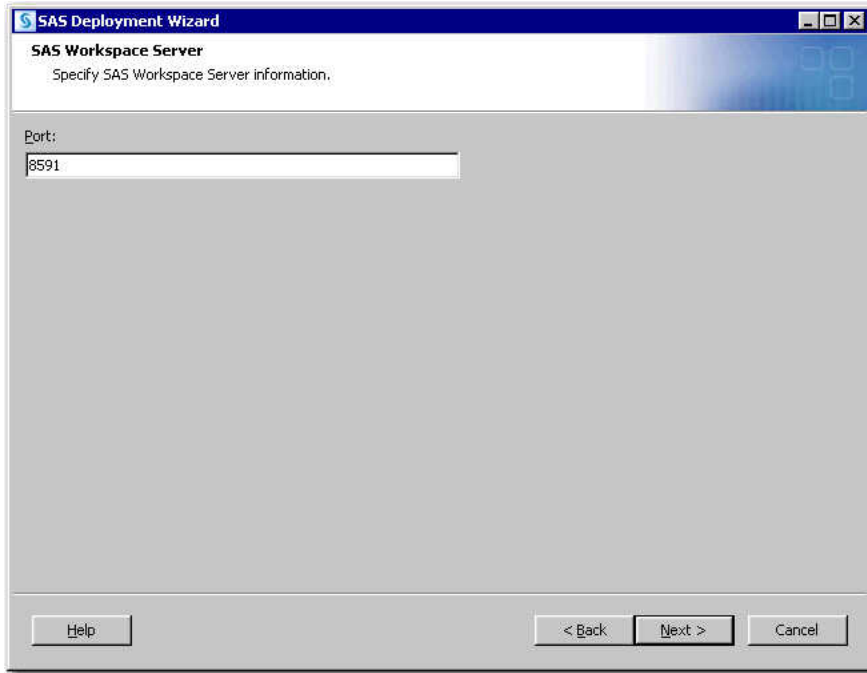
47



SAS Application Server: Server Context

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

48



SAS Workspace Server

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

49

SAS Deployment Wizard

SAS Pooled Workspace Server
Specify SAS Pooled Workspace Server information.

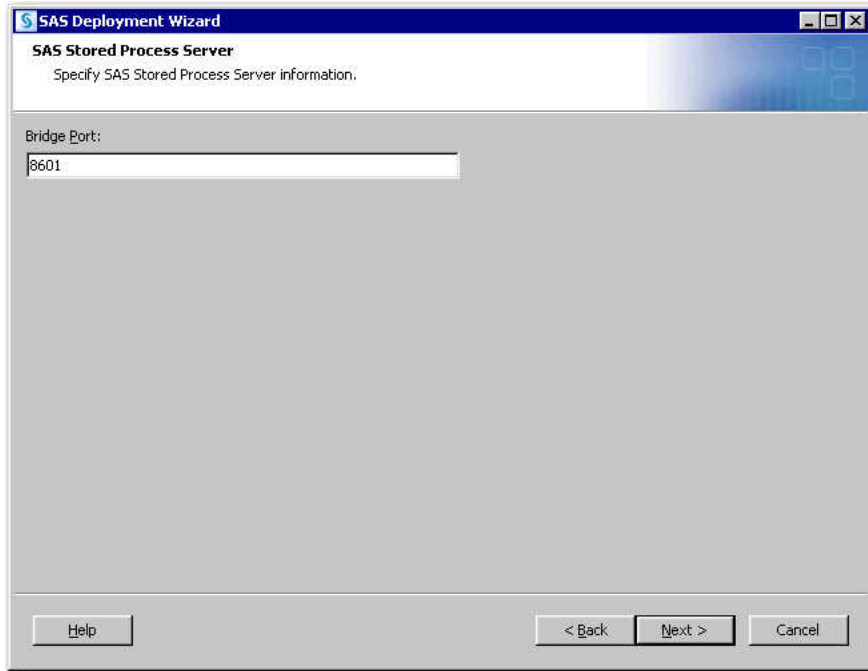
Port:
8701

Help < Back Next > Cancel

SAS Pooled Workspace Server

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

50



SAS Stored Process Server

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

51

SAS Deployment Wizard

Stored Process Server: Multibridge Connections

Specify multibridge connection information for the SAS Stored Process Server.

Multibridge Port 1:
8611

Multibridge Port 2:
8621

Multibridge Port 3:
8631

Help < Back Next > Cancel

SAS Stored Process Server: Multibridge Connections

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

52

SAS Deployment Wizard

SAS Web Infrastructure Platform Data Server

Specify information for SAS Web Infrastructure Platform Data Server.

Host Name:
MyMachine.example.com

Port:
9432

Data Server Administrator:
dbmsowner

Data Server Administrator Password:

Confirm Password:

Help < Back Next > Cancel

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.

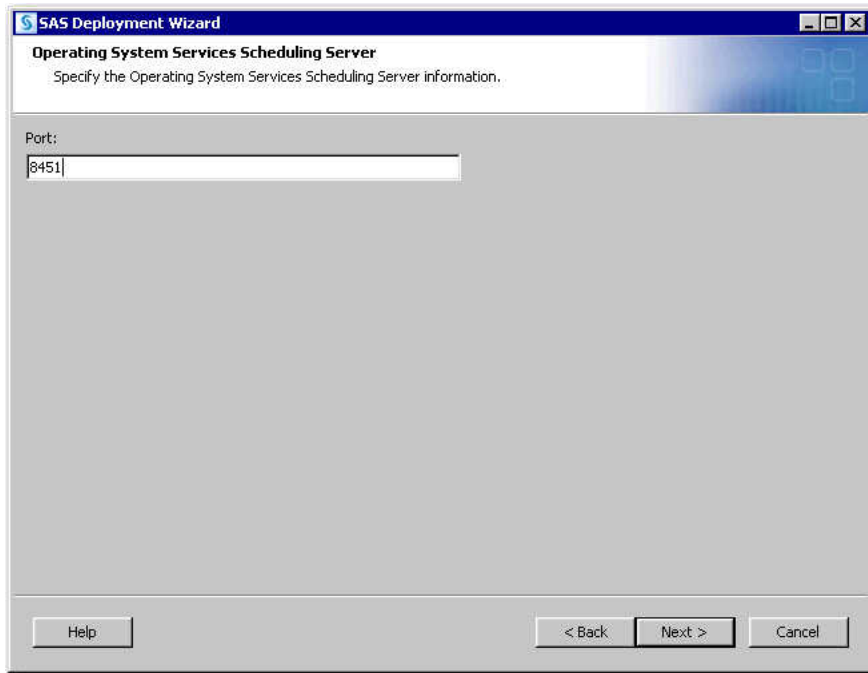
53

The screenshot shows the 'SAS Deployment Wizard' window with the title 'SAS DATA Step Batch Server'. The subtitle is 'Specify SAS DATA Step Batch Server information.' The window contains two text input fields. The first is labeled 'Deployed Jobs Directory:' and contains the path 'C:\SAS\Config\Lev1\SASApp\SASEnvironment\SASCode\Jobs'. To the right of this field is a 'Browse...' button. The second is labeled 'Deployed Jobs Directory Name:' and contains the text 'Batch Jobs'. At the bottom of the window, there are three buttons: 'Help', '< Back', and 'Next >', followed by a 'Cancel' button.

SAS DATA Step Batch Server

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

54



Operating System Services Scheduling Server

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

55

The screenshot shows a Windows-style dialog box titled "SAS Deployment Wizard". Inside, the subtitle is "SAS Deployment Tester Server" and the instruction is "Specify SAS Deployment Tester Server connection information." There are two input fields: "Port:" with the value "10021" and "JUnit JAR File:" which is empty. To the right of the "JUnit JAR File:" field is a "Browse..." button. At the bottom of the window are three buttons: "Help", "< Back", and "Next >", and a "Cancel" button on the far right.

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**.

56



SAS Web Server: Automated or Manual Configuration Option

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

57

The screenshot shows the 'SAS Deployment Wizard' window with the 'SAS Web Server: Configuration' tab selected. The window title bar includes standard Windows window controls. The main content area has a blue header with the title and a subtitle 'Specify SAS Web Server configuration options.' Below this, a note states: 'If you are using a UNIX system and you specify ports lower than 1024 in the fields below, you must restart your server manually outside of the SAS Deployment Wizard as root.' There are four input fields: 'HTTP Port:' with the value '80', 'HTTPS Port:' with the value '443', 'Configured Protocol:' with a dropdown menu showing 'HTTP Protocol', and 'Administrator Mail Address:' with the value 'admin@example.com'. At the bottom, there are three buttons: 'Help', '< Back', and 'Next >', with a 'Cancel' button to the right of 'Next >'.

SAS Deployment Wizard

SAS Web Server: Configuration
Specify SAS Web Server configuration options.

If you are using a UNIX system and you specify ports lower than 1024 in the fields below, you must restart your server manually outside of the SAS Deployment Wizard as root.

HTTP Port:
80

HTTPS Port:
443

Configured Protocol:
HTTP Protocol

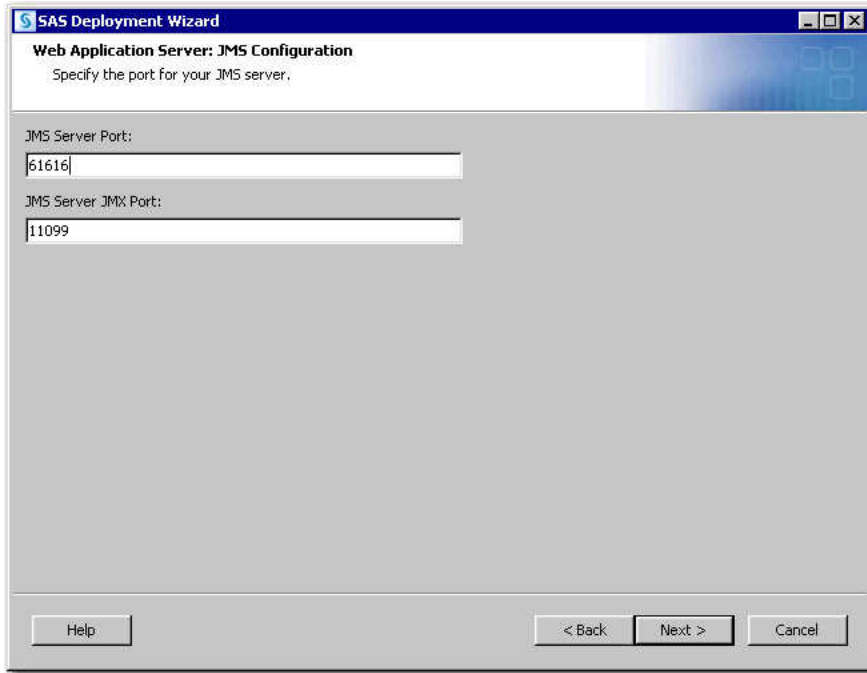
Administrator Mail Address:
admin@example.com

Help < Back Next > Cancel

SAS Web Server: Configuration

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

58

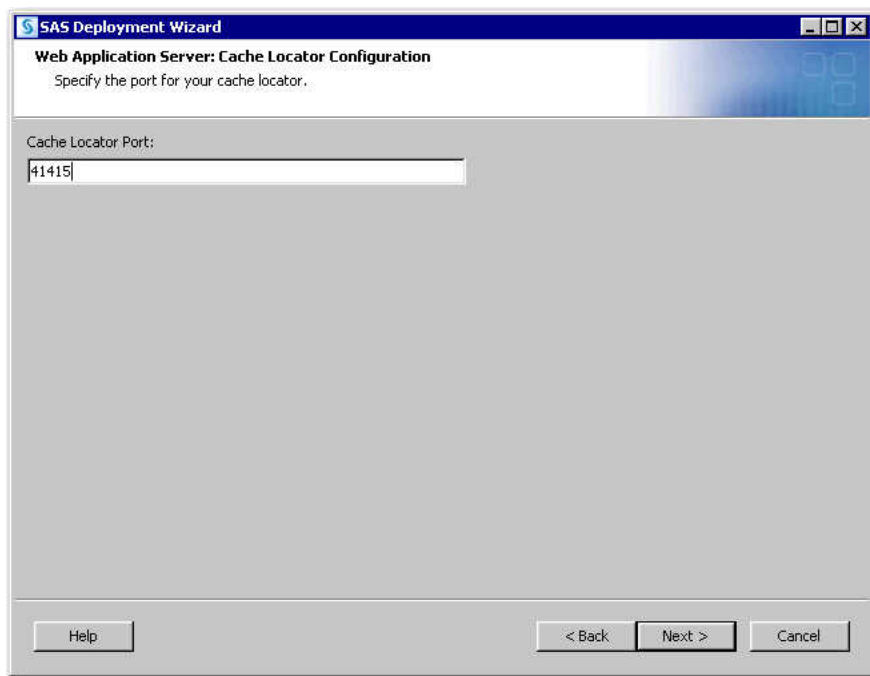


The screenshot shows a window titled "SAS Deployment Wizard" with a sub-header "Web Application Server: JMS Configuration". Below the sub-header is the instruction "Specify the port for your JMS server." There are two text input fields: "JMS Server Port:" with the value "61616" and "JMS Server JMX Port:" with the value "11099". At the bottom of the window are three buttons: "Help", "< Back", and "Next >", and a "Cancel" button.

SAS Web Application Server: JMS Configuration

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

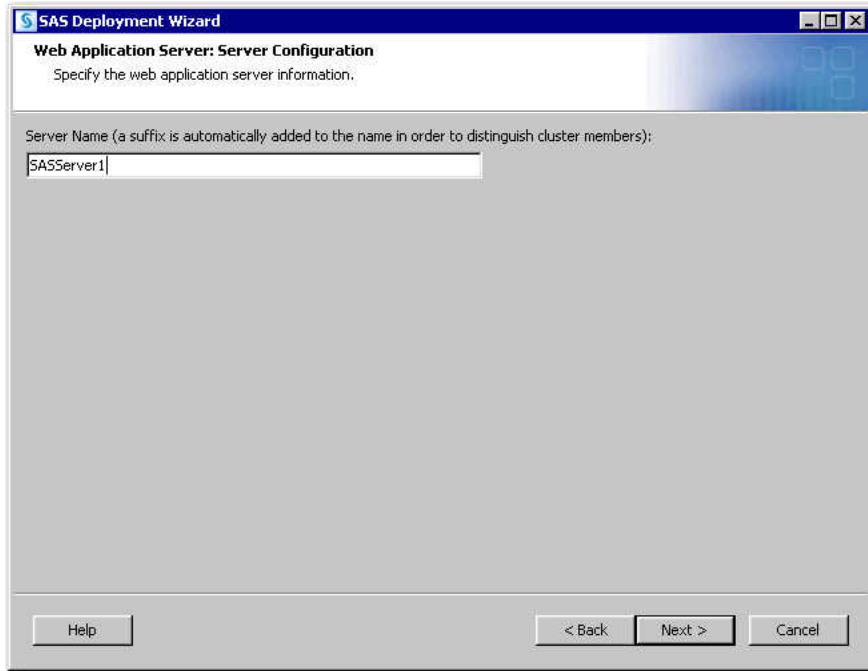
59



SAS Web Application Server: Cache Locator Configuration

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

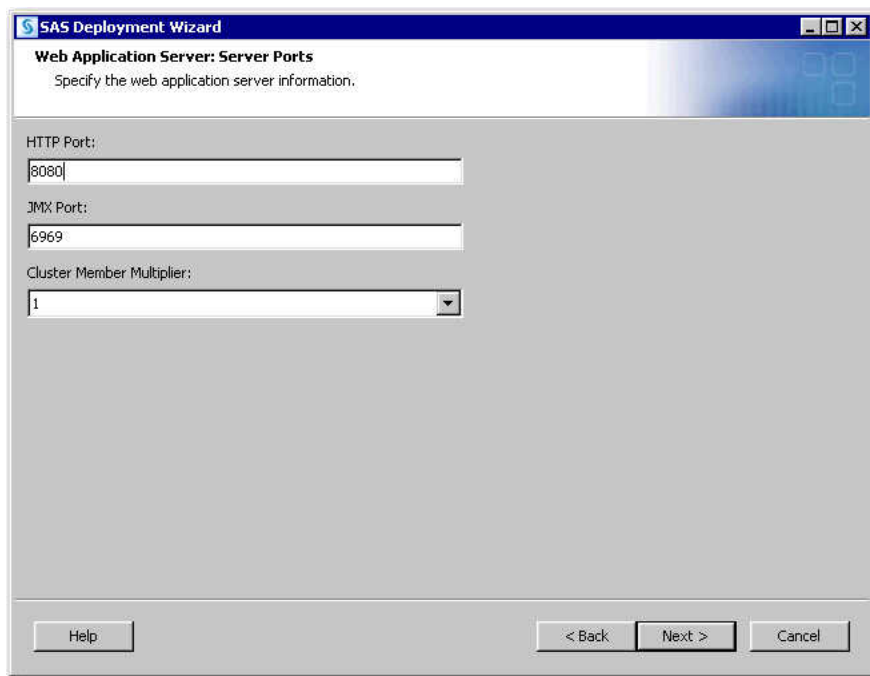
60



SAS Web Application Server: Server Configuration

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

61

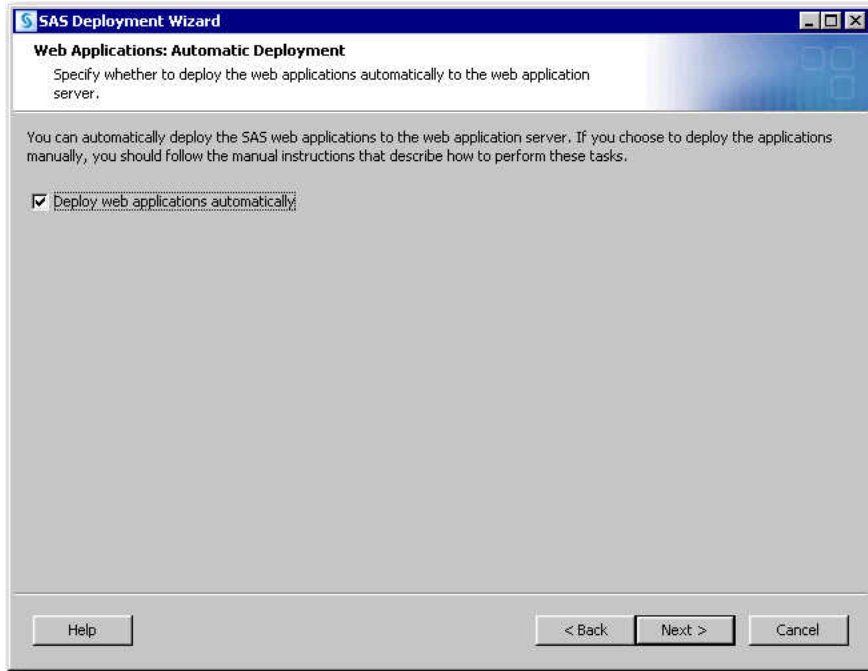


The screenshot shows a Windows-style dialog box titled "SAS Deployment Wizard". The main heading is "Web Application Server: Server Ports" with a subtitle "Specify the web application server information." Below this, there are three input fields: "HTTP Port:" with the value "8080", "JMX Port:" with the value "6969", and "Cluster Member Multiplier:" with a dropdown menu showing "1". At the bottom, there are three buttons: "Help", "< Back", and "Next >", and a "Cancel" button to the right of "Next >".

SAS Web Application Server: Server Ports

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

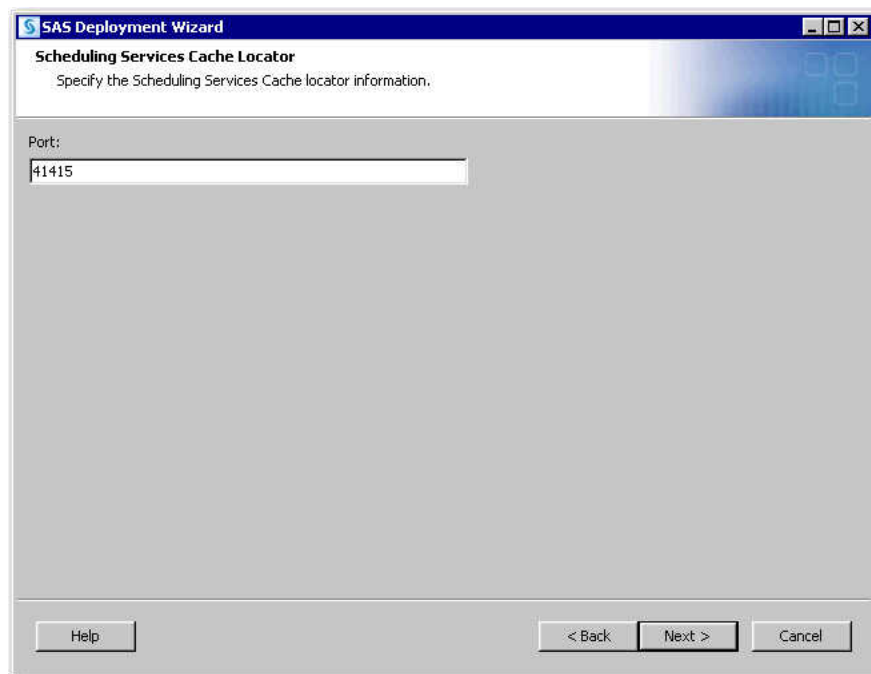
62



Web Applications: Automatic Deployment

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

63

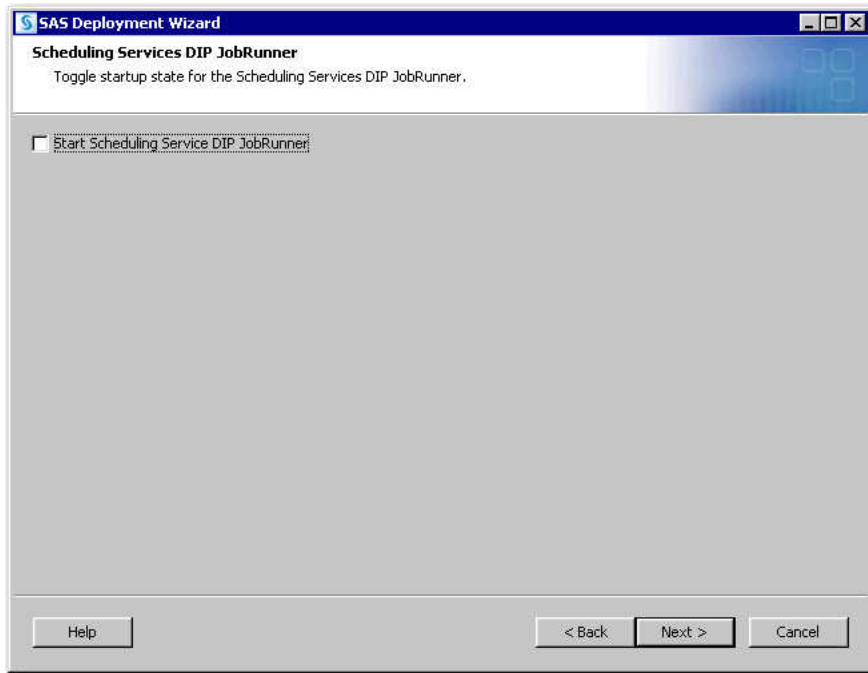


The screenshot shows a window titled "SAS Deployment Wizard" with a sub-header "Scheduling Services Cache Locator". Below the sub-header is the instruction "Specify the Scheduling Services Cache locator information." A text box labeled "Port:" contains the value "41415". At the bottom of the window are three buttons: "Help", "< Back", and "Next >", followed by a "Cancel" button.

Scheduling Services Cache Locator

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

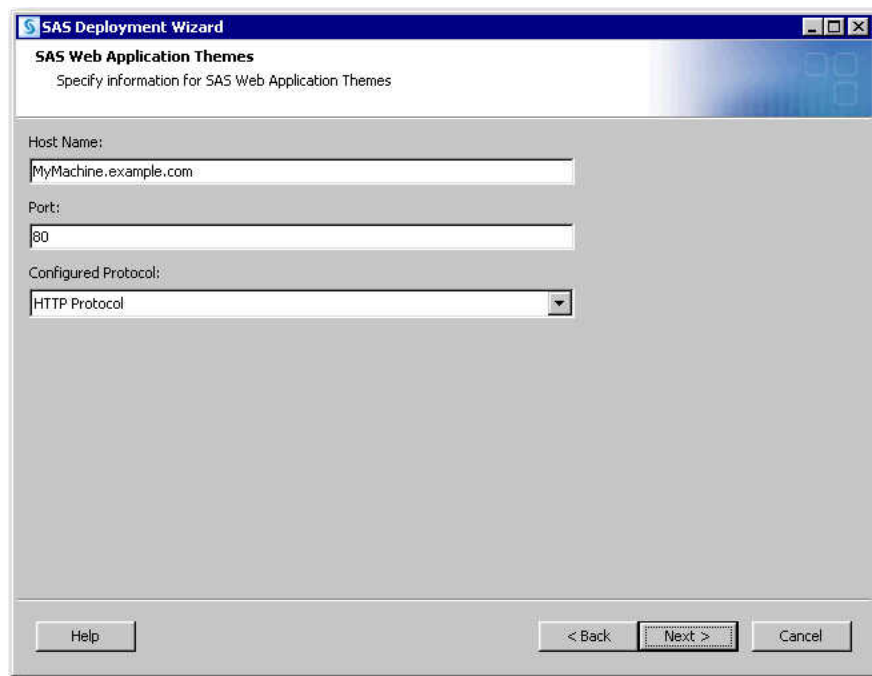
64



Scheduling Services DIP JobRunner

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

65

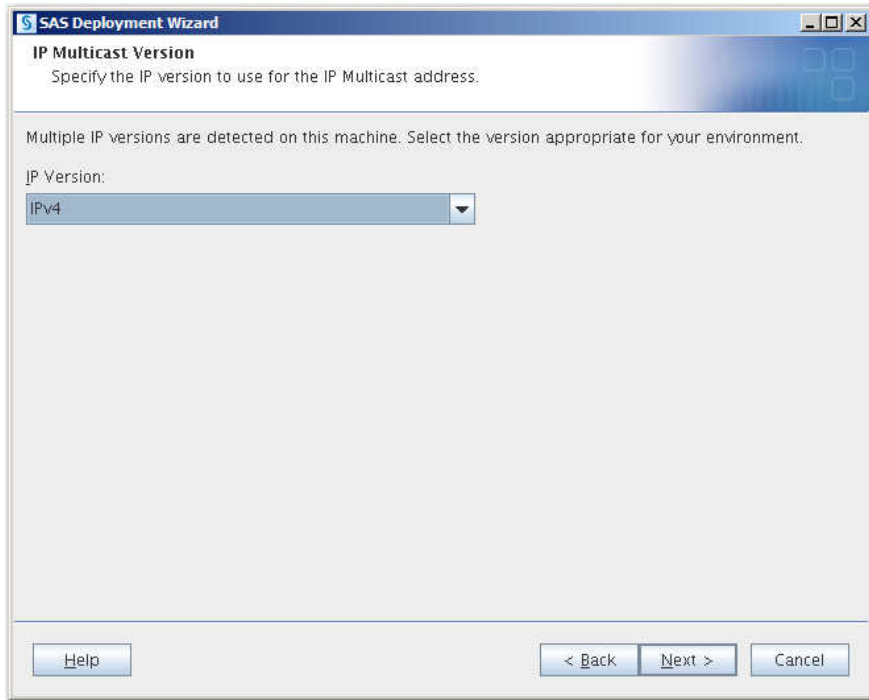


The screenshot shows a Windows-style dialog box titled "SAS Deployment Wizard". The main heading is "SAS Web Application Themes" with a subtitle "Specify information for SAS Web Application Themes". The dialog contains three input fields: "Host Name:" with the text "MyMachine.example.com", "Port:" with the text "80", and "Configured Protocol:" with a dropdown menu showing "HTTP Protocol". At the bottom, there are three buttons: "Help", "< Back", and "Next >" (which is highlighted with a dashed border), and a "Cancel" button.

SAS Web Application Themes

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

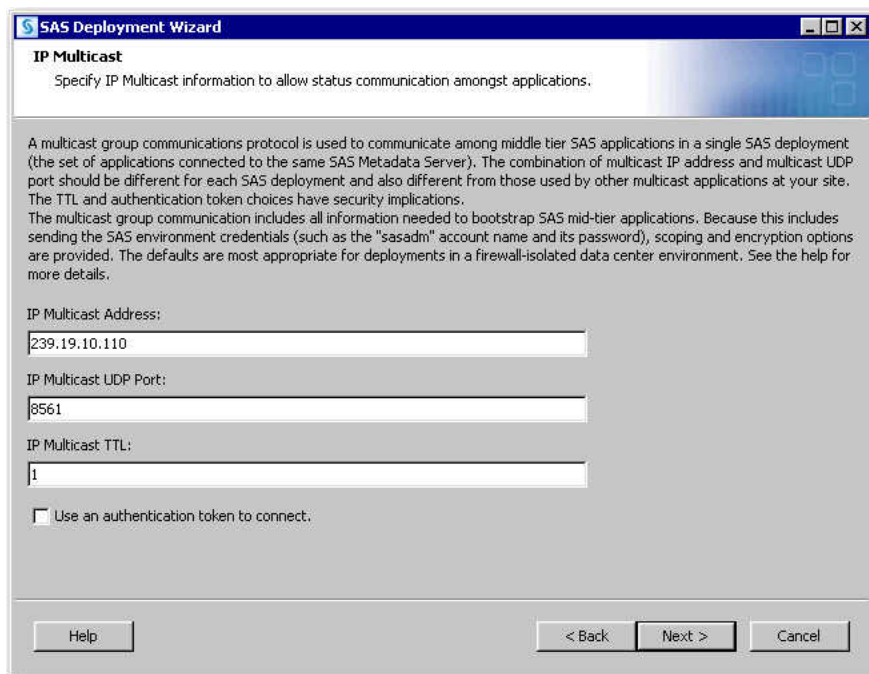
66



IP Multicast Version (Linux only)

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

67



SAS Deployment Wizard

IP Multicast
Specify IP Multicast information to allow status communication amongst applications.

A multicast group communications protocol is used to communicate among middle tier SAS applications in a single SAS deployment (the set of applications connected to the same SAS Metadata Server). The combination of multicast IP address and multicast UDP port should be different for each SAS deployment and also different from those used by other multicast applications at your site. The TTL and authentication token choices have security implications. The multicast group communication includes all information needed to bootstrap SAS mid-tier applications. Because this includes sending the SAS environment credentials (such as the "sasadm" account name and its password), scoping and encryption options are provided. The defaults are most appropriate for deployments in a firewall-isolated data center environment. See the help for more details.

IP Multicast Address:
239.19.10.110

IP Multicast UDP Port:
8561

IP Multicast TTL:
1

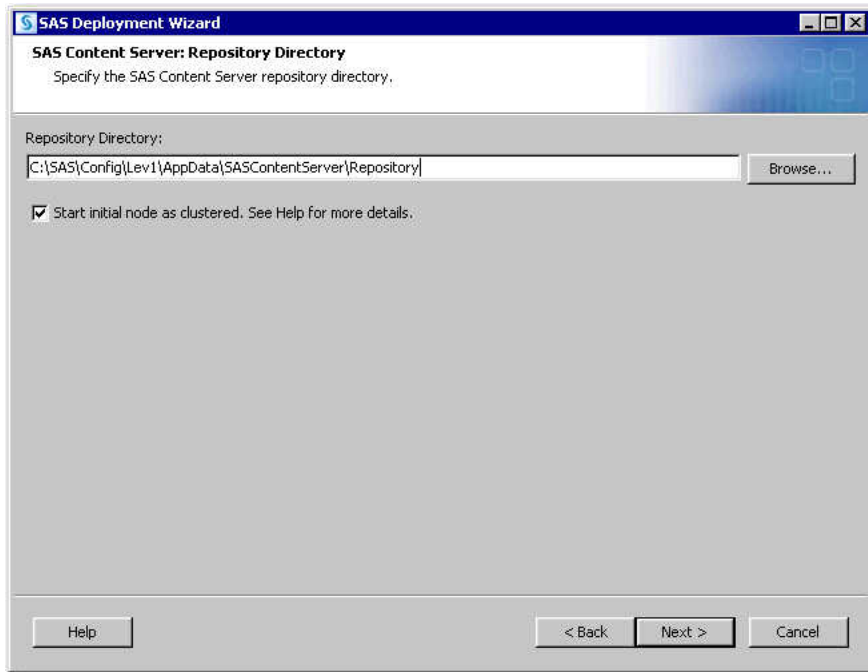
☐ Use an authentication token to connect.

Help < Back Next > Cancel

IP Multicast

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

68



SAS Content Server: Repository Directory

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

69

SAS Deployment Wizard

SAS Web Infrastructure Platform Database: JDBC Properties

Specify the connection information for the SAS Web Infrastructure Database JDBC connection.

Database Name:
SharedServices

User ID:
SharedServices

Password:

Confirm Password:

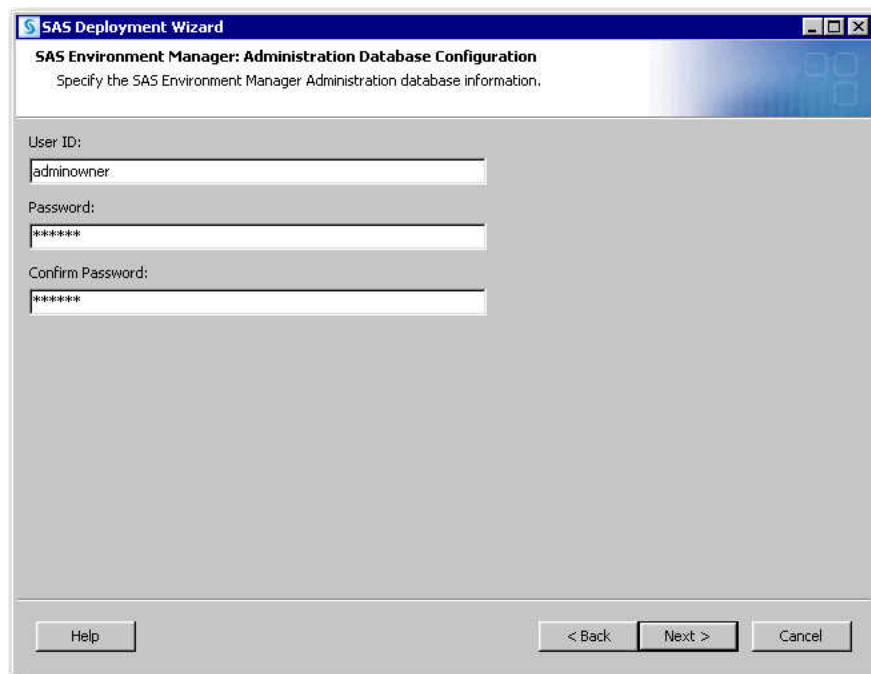
Help < Back Next > Cancel

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.

70



The screenshot shows a Windows-style dialog box titled "SAS Deployment Wizard". Inside, the title bar reads "SAS Environment Manager: Administration Database Configuration". Below the title bar, a subtitle says "Specify the SAS Environment Manager Administration database information." The main area contains three input fields: "User ID:" with the text "adminowner" entered, "Password:" with "*****" entered, and "Confirm Password:" with "*****" entered. At the bottom, there are three buttons: "Help", "< Back", and "Next >", and a "Cancel" button to the right of "Next >".

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.

71

SAS Internal Account: SAS Environment Manager Service Account
Specify the metadata password for the service identity for SAS Environment Manager Service.

The SAS Environment Manager Service Account is a SAS internal account stored in metadata.

Display Name:

Name:

Internal User ID:

SAS Environment Manager Service Account Password:

Confirm Password:

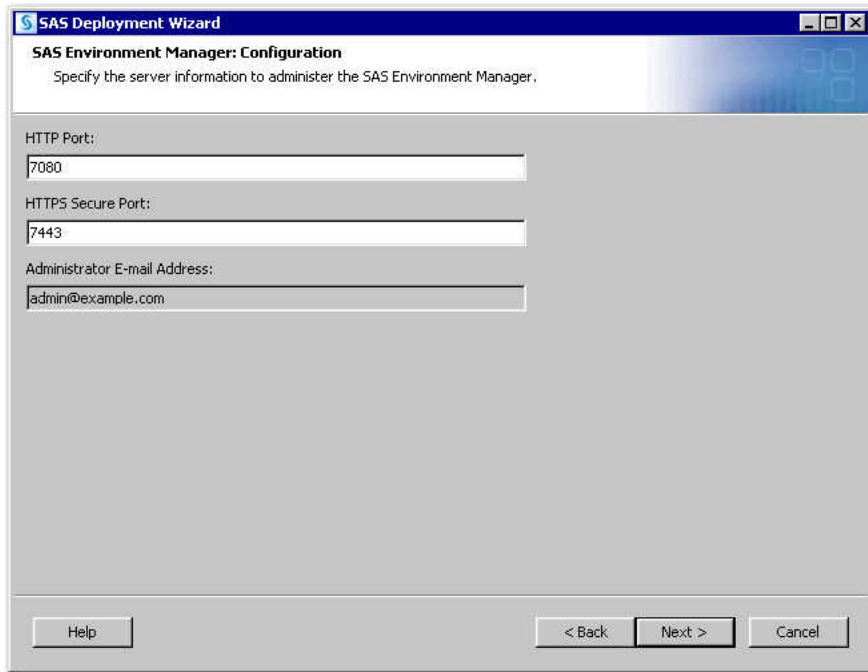
SAS Internal Account: SAS Environment Manager Service Account

- 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.

72



The screenshot shows a Windows-style dialog box titled "SAS Deployment Wizard". Inside, the sub-header is "SAS Environment Manager: Configuration". Below this, a instruction reads: "Specify the server information to administer the SAS Environment Manager." There are three text input fields: "HTTP Port:" with the value "7080", "HTTPS Secure Port:" with the value "7443", and "Administrator E-mail Address:" with the value "admin@example.com". At the bottom of the window, there are three buttons: "Help", "< Back", and "Next >", followed by a "Cancel" button.

SAS Environment Manager: Configuration

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

73

The screenshot shows a window titled "SAS Deployment Wizard" with a sub-header "SAS Environment Manager: Database Configuration". Below the sub-header is the instruction "Specify the SAS Environment Manager database information." The window contains several input fields: "Database Name:" with the value "EVManager"; "Database User:" with the value "EVManager"; "Database User Password:" with masked characters "*****"; "Confirm Password:" with masked characters "*****"; "Database Encryption Passphrase:" with masked characters "*****"; and "Confirm Database Encryption Passphrase:" with masked characters "*****". At the bottom of the window are three buttons: "Help", "< Back", and "Next >" (which is highlighted), and a "Cancel" button.

SAS Environment Manager: Database Configuration

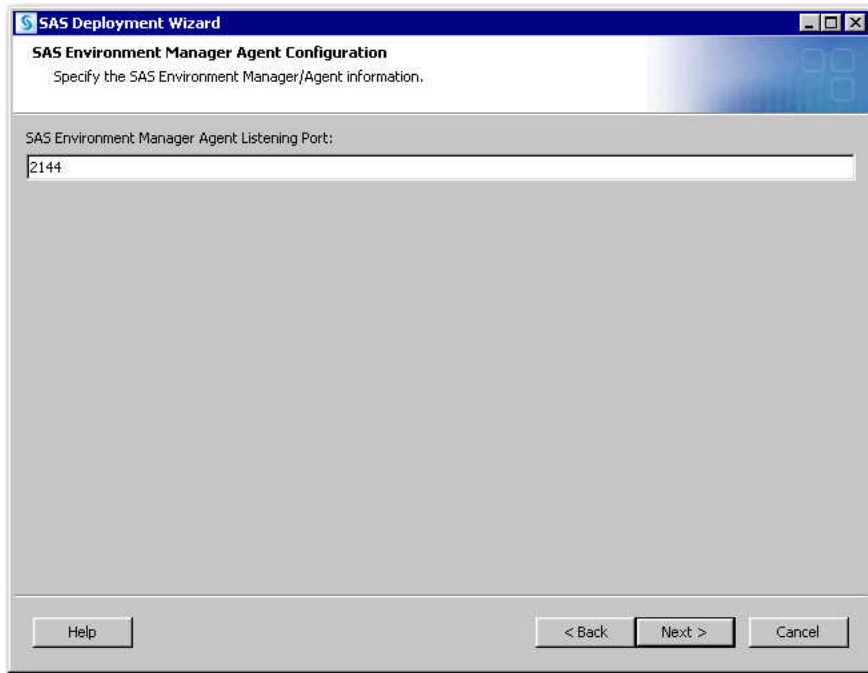
- Enter and confirm a password and an encryption passphrase that the deployment wizard will use when creating credentials for the EVManager user ID. Click **Next**.

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.

74



SAS Environment Manager Agent Configuration

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

75

SAS Deployment Wizard

SAS Environment Manager Enablement Kit Database Credentials

User ID:
sasevdb

Password:

Confirm Password:

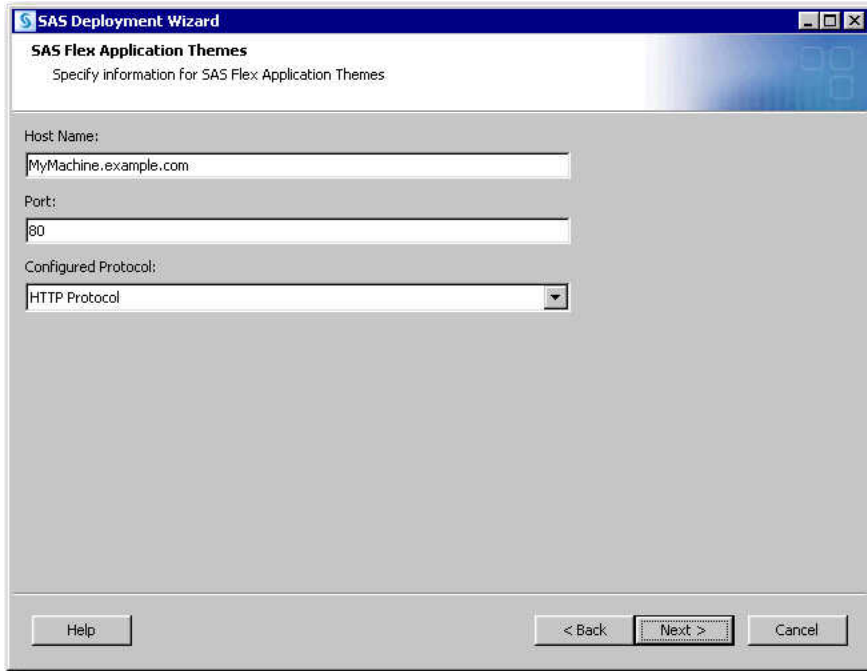
Help < Back Next > Cancel

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**. Do not change the user ID information that is displayed on this page.

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

76



The screenshot shows a Windows-style dialog box titled "SAS Deployment Wizard". Inside the window, the title "SAS Flex Application Themes" is displayed above the instruction "Specify information for SAS Flex Application Themes". There are three input fields: "Host Name:" with the text "MyMachine.example.com", "Port:" with the text "80", and "Configured Protocol:" with a dropdown menu showing "HTTP Protocol". At the bottom of the window, there are three buttons: "Help", "< Back", and "Next >", with a "Cancel" button to the right of "Next >".

SAS Flex Application Themes

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

77

The screenshot shows the 'SAS Deployment Wizard' window. The title bar reads 'SAS Deployment Wizard'. The main content area is titled 'SAS Visual Analytics High-Performance Configuration Information'. Below the title, a message states: 'SAS Visual Analytics High-Performance Configuration requires information about the SAS High-Performance Analytics environment. Specify the requested information.' There are three input fields: 'SAS High-Performance Analytics Environment Host:' with the value 'MyMachine.example.com', 'SAS High-Performance Analytics Environment Port:' with the value '10010', and 'Signature files location:' with the value 'C:\SAS\Config\Lev1\AppData\SASVisualAnalytics\VisualAnalyticsAdministrator\sigfiles'. At the bottom, there are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button.

SAS Visual Analytics High-Performance Configuration Information

SAS Visual Analytics High-Performance Configuration requires information about the SAS High-Performance Analytics environment. Specify the requested information.

SAS High-Performance Analytics Environment Host:
MyMachine.example.com

SAS High-Performance Analytics Environment Port:
10010

Signature files location:
C:\SAS\Config\Lev1\AppData\SASVisualAnalytics\VisualAnalyticsAdministrator\sigfiles

Help < Back Next > Cancel

SAS Visual Analytics High-Performance Configuration Information

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

78

The screenshot shows the 'SAS Deployment Wizard' window. The title bar reads 'SAS Deployment Wizard'. The main heading is 'SAS Visual Analytics Public Data Provider'. Below this, a subtitle states: 'SAS Visual Analytics library definition for public non-distributed data provider.' The window contains three text input fields with the following labels and values:

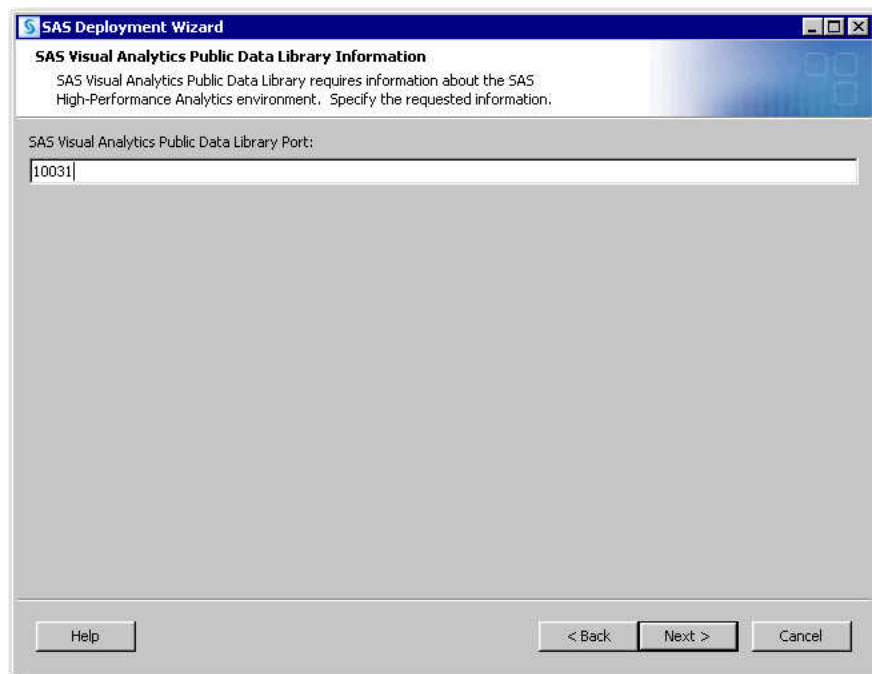
- Data Reload Library Name:** Visual Analytics Public Data Provider
- Data Reload Libref:** DPPUBLIC
- Data Reload Path:** C:\SAS\Config\Lev1\AppData\SASVisualAnalytics\VisualAnalyticsAdministrator\PublicDataProvider

At the bottom of the window, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

SAS Visual Analytics Public Data Provider

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

79

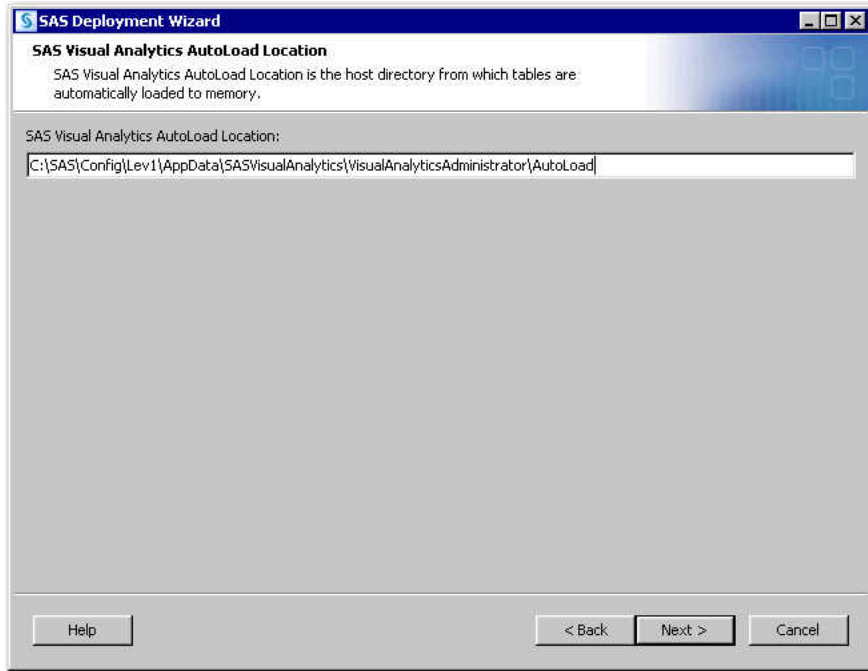


The screenshot shows a window titled "SAS Deployment Wizard". Inside, the section "SAS Visual Analytics Public Data Library Information" is active. It contains the text: "SAS Visual Analytics Public Data Library requires information about the SAS High-Performance Analytics environment. Specify the requested information." Below this, a label "SAS Visual Analytics Public Data Library Port:" is followed by a text input field containing the value "10031". At the bottom of the window, there are three buttons: "Help", "< Back", and "Next >", and a "Cancel" button to the right of "Next >".

SAS Visual Analytics Public Data Library Information

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

80



SAS Visual Analytics AutoLoad Location

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

81

The screenshot shows a window titled "SAS Deployment Wizard" with a sub-header "SAS Visual Analytics: SAS LASR Analytic Server Library". Below the sub-header is the instruction "Specify the library information." There are two text input fields: "Library Name:" with the value "Visual Analytics LASR" and "Libref:" with the value "VALIBLA". At the bottom of the window are three buttons: "Help", "< Back", and "Next >", and a "Cancel" button.

SAS Visual Analytics: SAS LASR Analytic Server Library

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

82

SAS Deployment Wizard

SAS Visual Analytics: Public LASR Libraries

Specify the SAS Library information.

Public LASR Library Name:
Visual Analytics Public LASR

Public LASR Libref:
LASRLIB

Help < Back Next > Cancel

SAS Visual Analytics: Public LASR Libraries

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

83

SAS Deployment Wizard

SAS Visual Analytics Services Database Credentials

Specify the connection information for the SAS Visual Analytics Services Database JDBC connection.

User ID:
vatadm

Password:

Confirm Password:

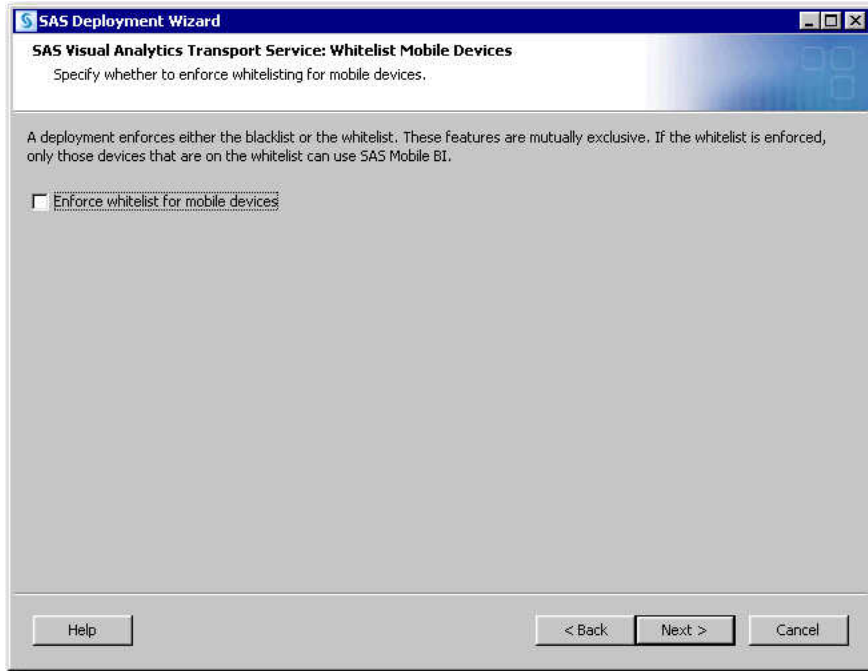
Help < Back Next > Cancel

SAS Visual Analytics Services Database Credentials

- Enter and confirm the password to be used for the vatadm account. Click **Next**. Do not change the user ID information that is displayed on this page.

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

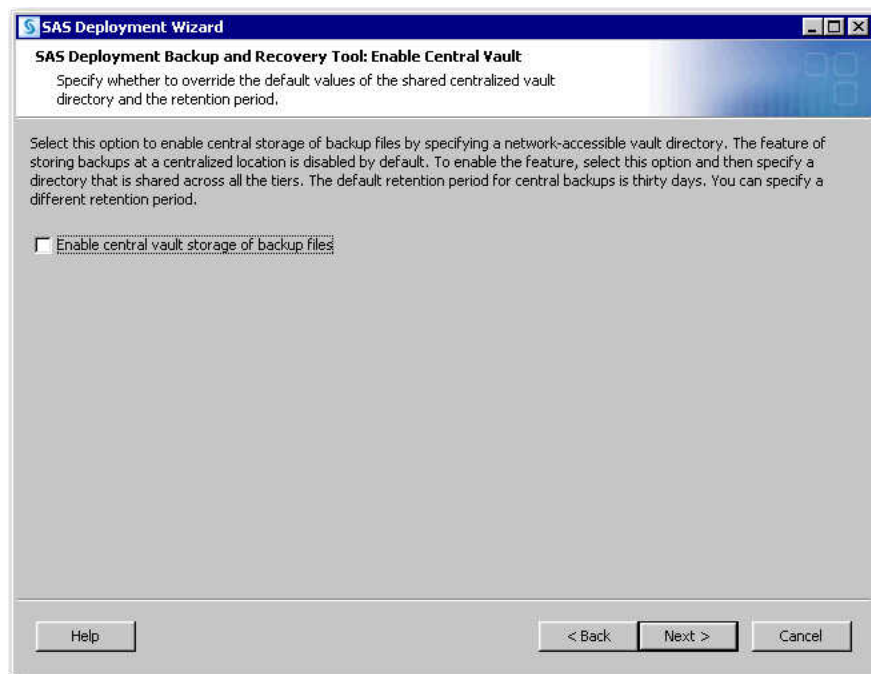
84



SAS Visual Analytics Transport Service: Whitelist Mobile Devices

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

85

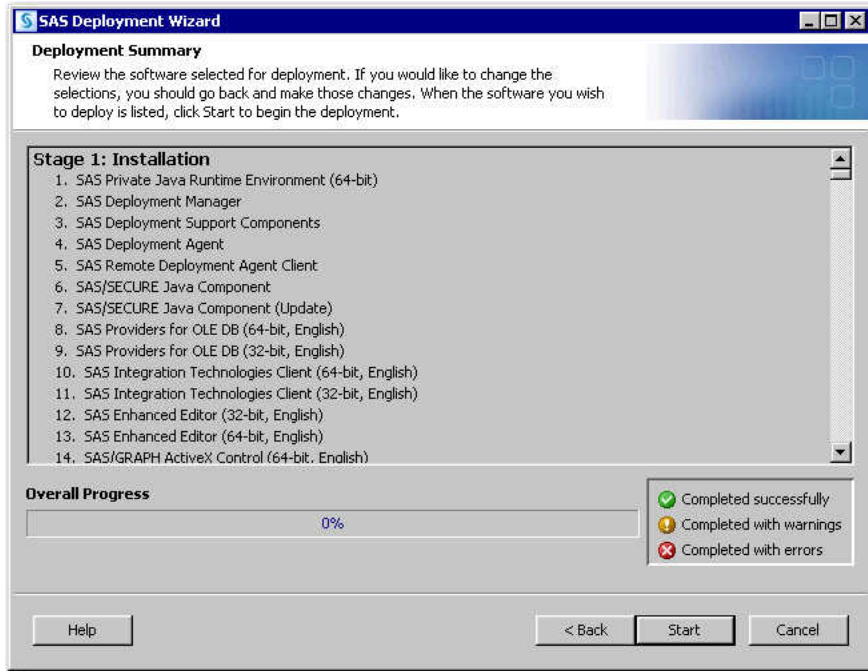


SAS Deployment Backup and Recovery Tool: Enable Central Vault

- 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.

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Deployment Summary

- Make one of the following choices:

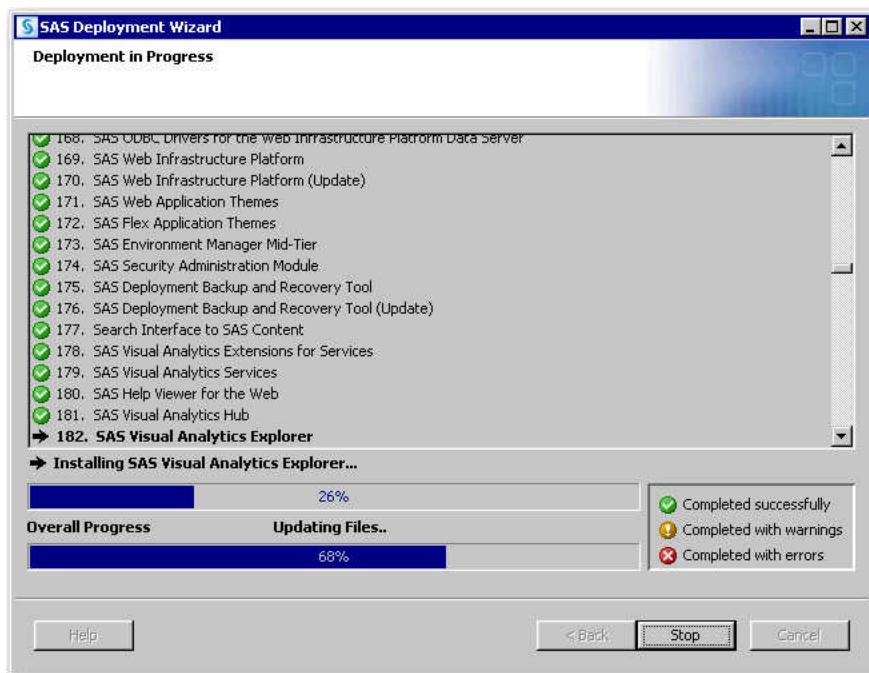
- ☐ Click **Start** to begin installing SAS files and writing the configuration to the current machine.

The deployment wizard launches the installation and configuration process and provides an on-going status update.

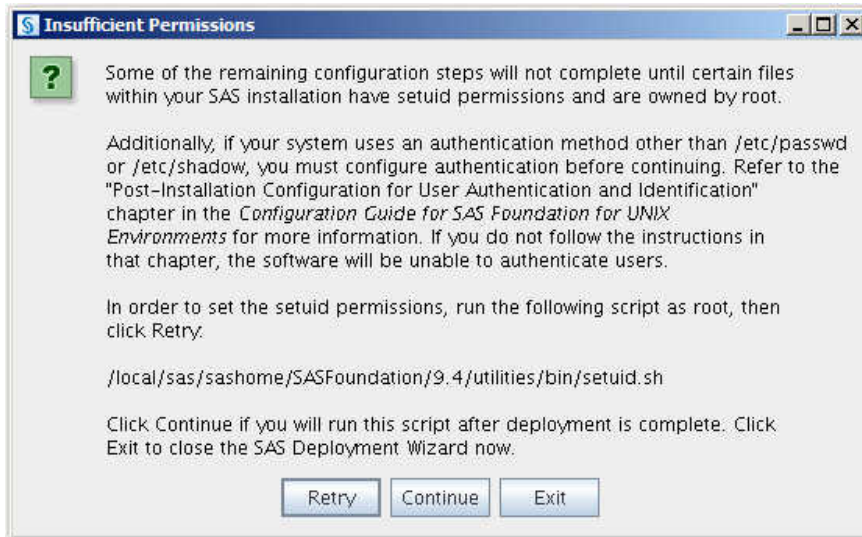
- ☐ Click **Back** to navigate to earlier wizard pages to change installation and configuration information previously entered.
- ☐ Click **Cancel** to terminate the wizard session. Note that you will lose installation and configuration information previously entered.

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.



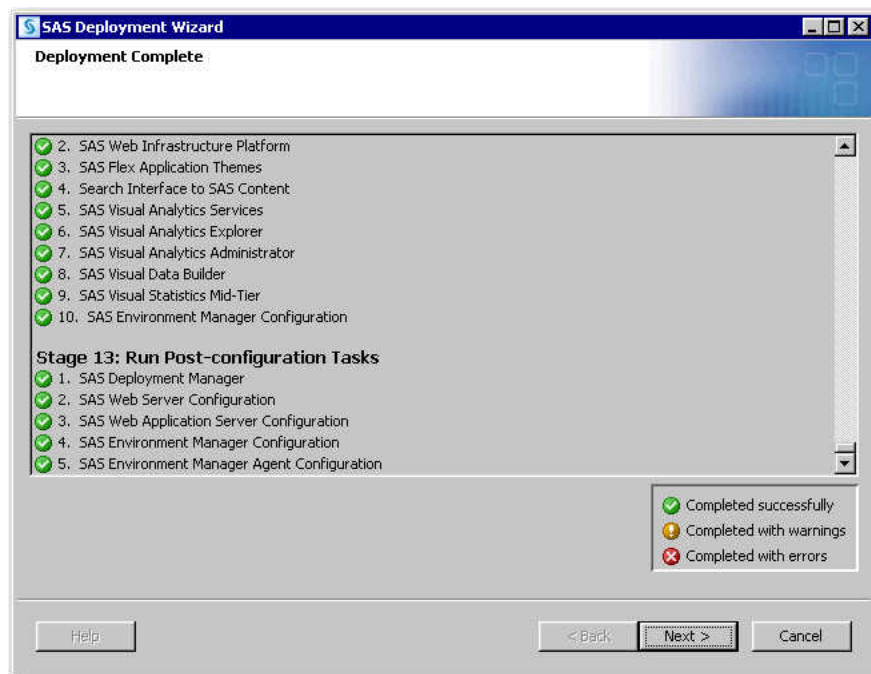
87



Insufficient Permissions (Linux only)

- Keeping this dialog box displayed, run the `setuid.sh` script as root, and then click **Retry**.
- You will not see this dialog box if you chose earlier to run `setuid.sh` as `sudo` using your password. For more information, see [Step 32 on page 46](#).

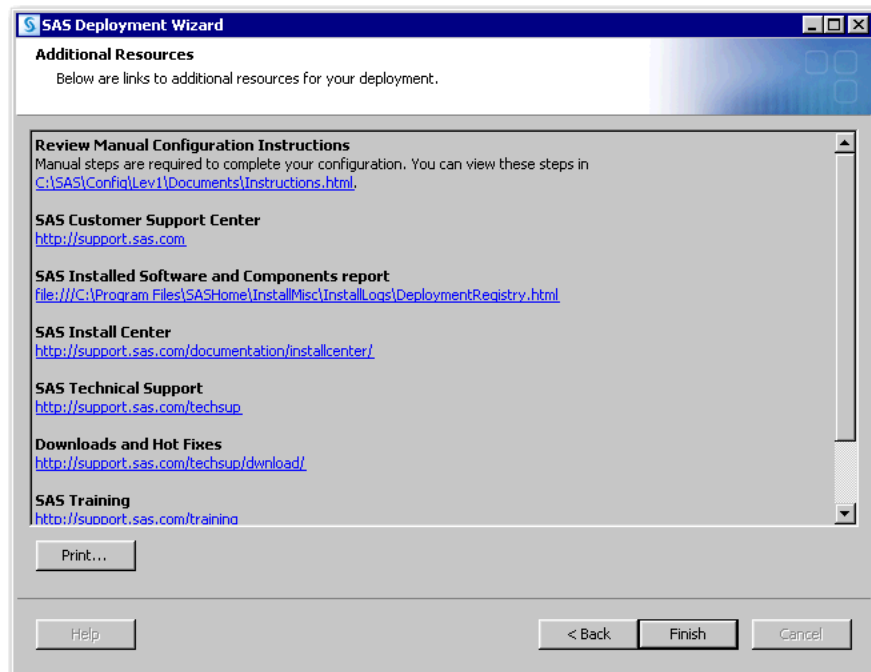
88



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 105](#).
- 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 Appendix 3, “Review SAS Deployment Tool Documents, Reports, and Logs,” in *SAS Intelligence Platform: Installation and Configuration Guide*.

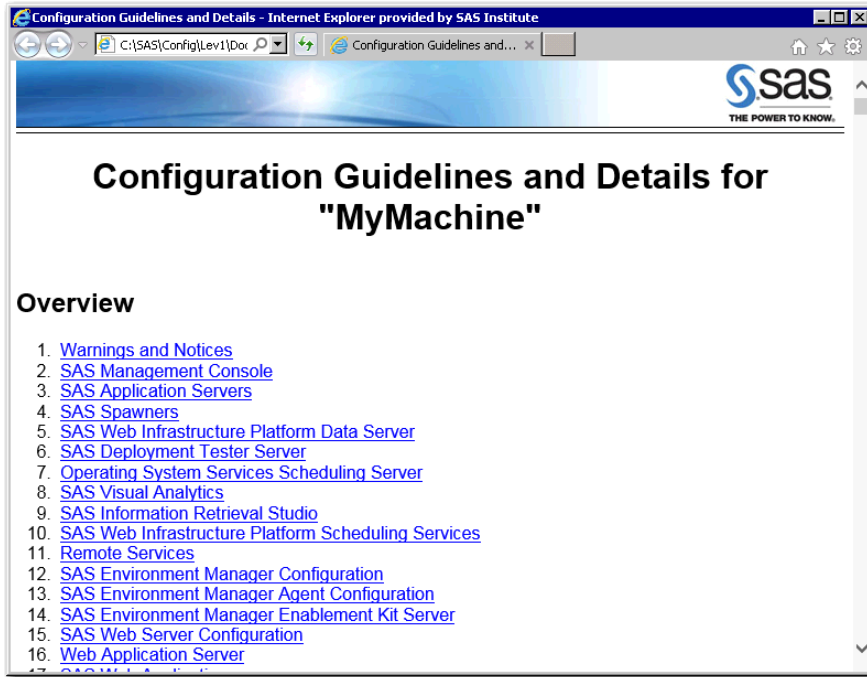
89



Additional Resources

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

90



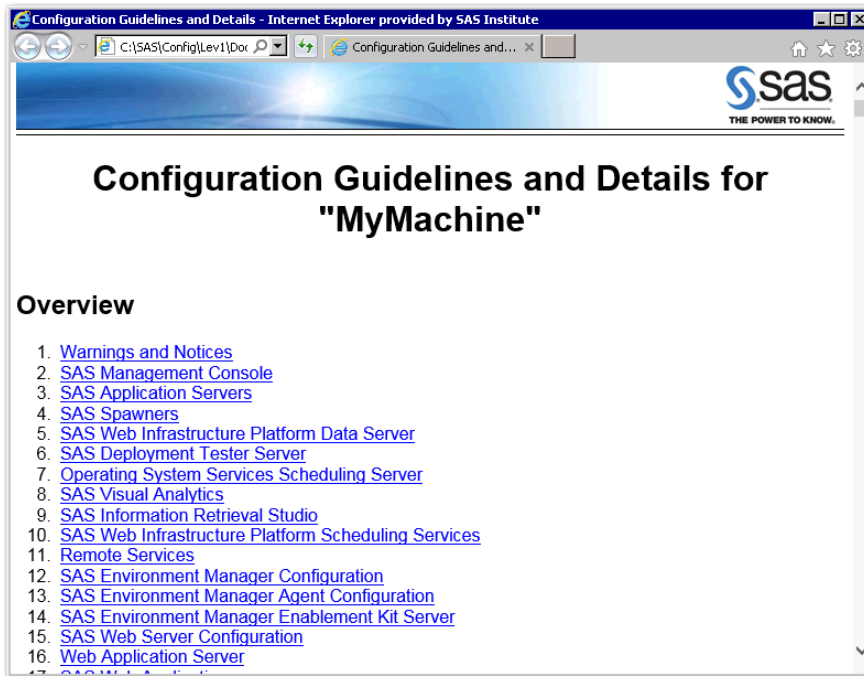
Configuration Guidelines and Details

- 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\Documents*, Instructions.html provides the steps for checking that your SAS servers are running and that your web applications were properly deployed.

Figure 1.4 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.

Proceed to “[Step 6: Add SAS Users](#)”

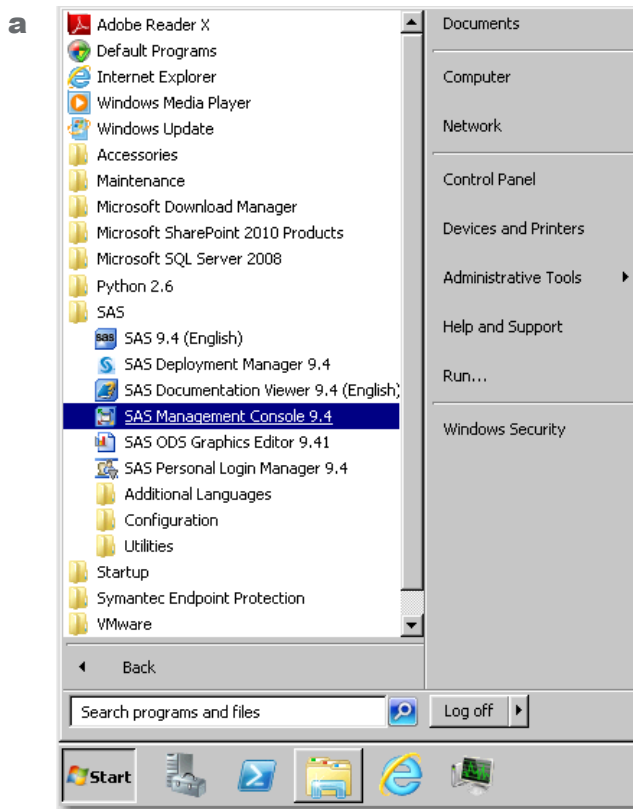
Step 6: Add SAS Users

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

For more information, see *SAS Management Console: Guide to Users and Permissions*, available at <http://support.sas.com/documentation/cdl/en/mcsecug/64770/PDF/default/mcsecug.pdf>.

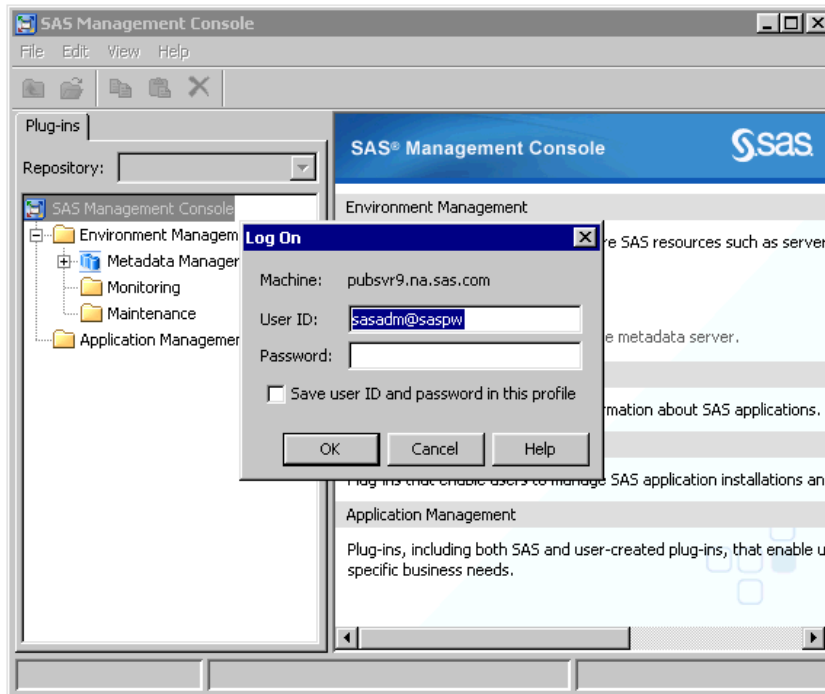
Perform the following steps to add SAS users to SAS metadata:

- 1 Grant the host or domain accounts for each user the required **Log on as a batch job** right. You can do this by adding the user accounts to the SAS Server Users group that was created in the section “[Set Up an Operating System Group](#)” on page 13.
- 2 Create a metadata identity for each user. Follow these steps using SAS Management Console:

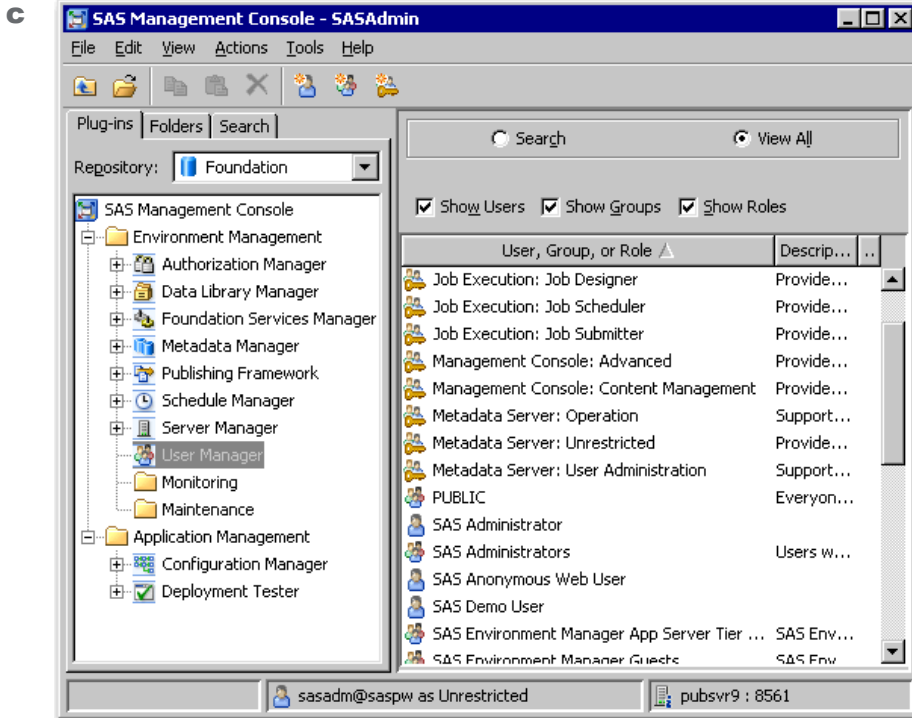


From the Windows **Start** menu, select **All Programs** ► **SAS** ► **SAS Management Console**.

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.



Select **User Manager**.

d Select **Actions** ► **New** ► **User**.

e

New User Properties

General | Groups and Roles | Accounts | Authorization

User

External Identities

Name:

Display Name:

Job Title:

Description:

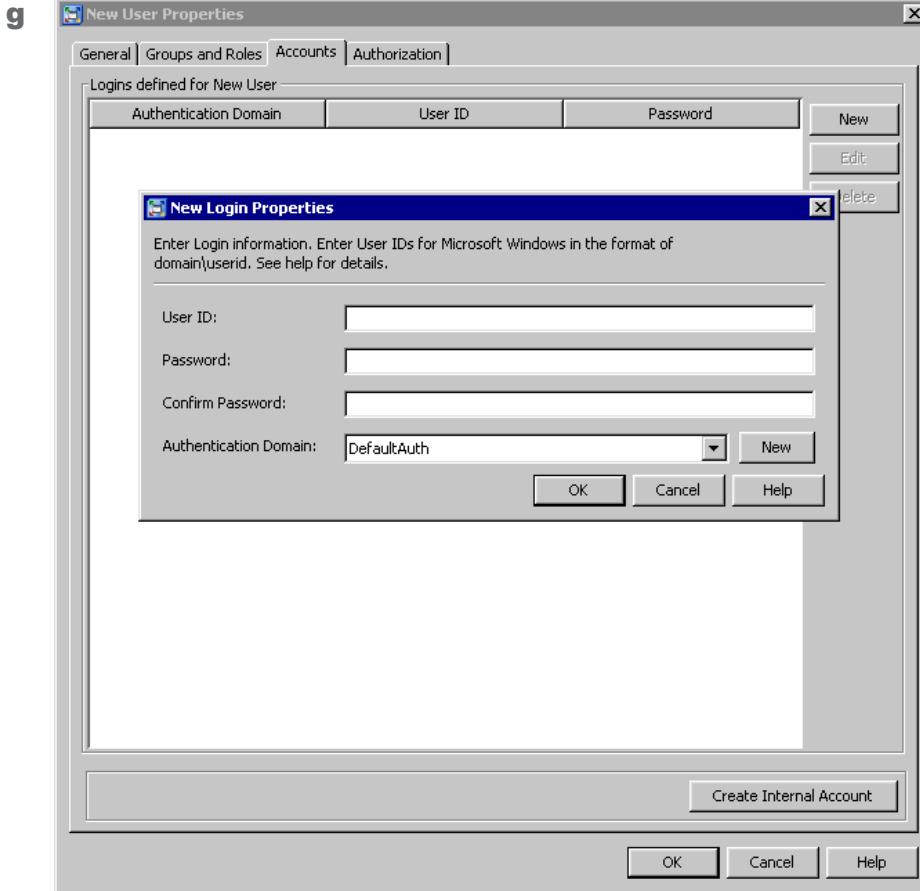
	Type	Address
E-mail		
Phone		
Address		

New Edit Delete

OK Cancel Help

In the **Name** text box, enter the name of the user.

f Click the **Accounts** tab, and then click **New**.



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.

Proceed to “[Step 7: Validate Your SAS Visual Analytics Deployment](#)”.

Step 7: Validate Your SAS Visual Analytics Deployment

Below is a list of suggestions that you can use to validate your *non-distributed* SAS Visual Analytics deployment. The SAS Visual Analytics documentation referenced is available at <http://support.sas.com/documentation/onlinedoc/va/index.html>.

Table 1.3 Validation Suggestions for SAS Visual Analytics

Purpose	Actions	More Information
Create an account for use later in the validation.	<div><div>1</div><div>Use the SAS LASR Analytic Server installer account (sas), or create a new administrator account such as saslasradm.</div></div> <div><div>2</div><div>Assign the Windows user right Log on as a batch job to the account.</div></div>	See your operating system documentation.
Create a SAS identity for use later in the validation.*	<div>In SAS Management Console:</div> <div><div>1</div><div>Define a SAS Visual Analytics Administrator (use the account created previously (saslasradm)).</div></div> <div><div>2</div><div>Assign the administrator to the Visual Analytics Data Administrators and Visual Data Builder Administrators groups.</div></div>	SAS Management Console: Guide to Users and Permissions
Create sample data for use later in the validation.	<div>In SAS Management Console, define a library and register a table.</div> <div>(You can use Sashelp: !SASROOT/sashelp.)</div>	SAS Intelligence Platform: Data Administration Guide
Validate that the home page is running and valid logins are accepted.	<div>Log on to the home page as saslasradm.</div> <div>(http://VA-host.example.com/SASVisualAnalyticsHub)</div>	SAS Visual Analytics: User's Guide

Purpose	Actions	More Information
Demonstrate that SAS Visual Analytics Administrator is functional and able to communicate with the SAS LASR Analytic Server.	<p>On the home page, click Administrator. Then, do the following:</p> <ol style="list-style-type: none"> 1 Start a SAS LASR Analytic Server. 2 Add a SAS table directly to SAS LASR Analytic Server. 	<i>SAS Visual Analytics: Administration Guide</i>
Demonstrate that SAS Visual Data Builder is functional.*	<p>On the home page, click Create Data Query. Then, do the following:</p> <ol style="list-style-type: none"> 1 Create a data query. 2 Click Home in the banner to return to the home page. 	<i>SAS Visual Analytics: User's Guide</i>
Demonstrate that SAS Visual Analytics Explorer is functional.**	<p>On the home page, click Create Exploration. Then, do the following:</p> <ol style="list-style-type: none"> 1 Create an exploration. 2 Click Home in the banner to return to the home page. 	<i>SAS Visual Analytics: User's Guide</i>
Demonstrate that SAS Visual Analytics Viewer is functional.	<p>On the home page, click Create Report. Then, do the following:</p> <ol style="list-style-type: none"> 1 Create a report. 2 Click Home in the banner to return to the home page. 	<i>SAS Visual Analytics: User's Guide</i>
Demonstrate that SAS Visual Analytics Designer is functional.	<p>On the home page, click on a report. Use the object inspector on the home page to view details about the report, and then click View.</p>	<i>SAS Visual Analytics: User's Guide</i>

Purpose	Actions	More Information
Demonstrate that SAS Mobile BI is operable.	Deploy SAS Mobile BI. View a SAS Visual Analytics report on a mobile device.	<i>SAS Visual Analytics: User's Guide</i>

- * SAS Visual Data Builder requires that an identity be a member of the Visual Data Builder Administrators group. Members of the Visual Analytics Data Administrators group do not have access to SAS Visual Data Builder.
- ** Some SAS orders do not contain the SAS Visual Analytics Explorer.

Now that you have verified your deployment, you are ready to begin using SAS Visual Analytics.

For information about how to use SAS Visual Analytics, see *SAS Visual Analytics: User's Guide*, available at <http://support.sas.com/documentation/cdl/en/vaug/67500/PDF/default/vaug.pdf>.