

The Roadmap for Installing, Configuring and Migrating to SAS 9

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Destiny Corporation is a SAS Alliance Partner and also acts as a subcontractor to SAS Institute. Destiny personnel are often hired by SAS Institute and Destiny's direct clients to guide them through the installation, configuration and knowledge transfer process when an organization migrates to SAS Version 9. In addition, Destiny Corporation delivered the first Version 9 Changes and Enhancements course ever to be offered at SUGI 2002.

The purpose of this paper is to show what is available for documentation to support the Version 9 installation and configuration process. Destiny has performed several hundred SAS 9 migrations to date throughout the U.S. and Europe.

The following information is currently available on <http://support.sas.com> as of this writing, September, 2005.

Overview of Deploying the SAS Intelligence Platform

Here are the main steps involved in deploying the SAS Intelligence Platform--whether you are deploying the platform on a single machine or in a distributed heterogeneous environment:

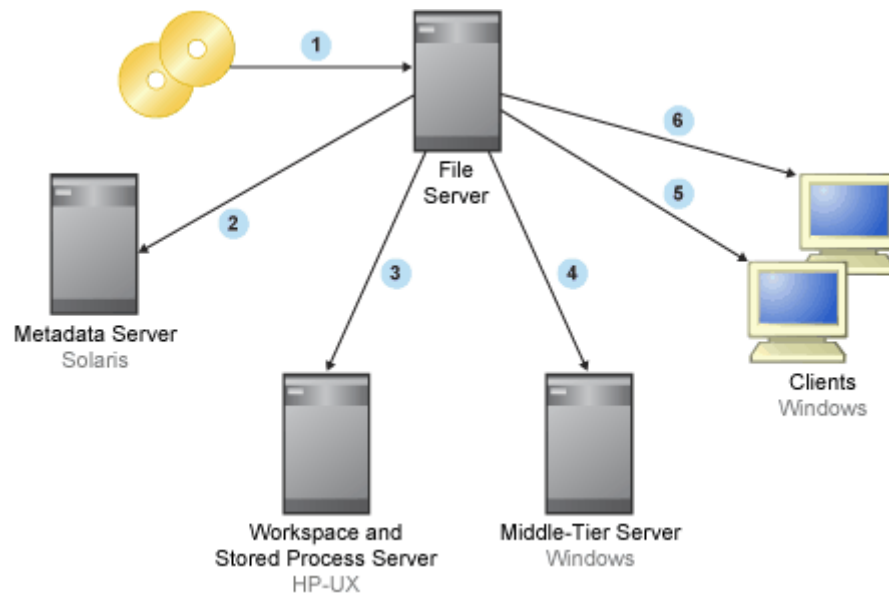
1. Create a SAS Software Depot, which is simply a network copy of the contents of all of the CDs or DVDs that you received from SAS.
2. Locate your SID and deployment plan files, and place them in a central location. (If you will be using a standard plan, you do not need a deployment plan file; you just need the name of a deployment plan.)
3. Create a set of operating system users and groups that will be required during the installation and configuration of your system.
4. Install any third-party products, such as a J2EE application server or a WebDAV server.
5. Install and configure your SAS software using the SAS Software Navigator (an installation tool) and the SAS Configuration Wizard.

The sections below provide a brief overview of each of these tasks. Subsequent chapters in the guide provide the step-by-step instructions that you will need to perform them.

Creating a SAS Software Depot

A SAS Software Depot is essentially a copy of the contents of all of the CDs or DVDs in your installation kits on a file server on the network. Choose a location for the depot that is accessible from all of the hosts on which you will install software. As shown in the figure below, you can install software on all of the hosts in your system from a single depot, even if the hosts are running different operating systems.

Installing Software from a Software Depot



Step 1 represents the installer creating the depot. Steps 2 through 6 represent software being installed on all of the hosts in the system. Note the order in which the software is installed. As we explain a little further on, it is a requirement to install your software in this order.

Note: Creating this depot is **highly recommended**; setting it up will simplify the installation and save you time. However, it is not a requirement. You can install software on each machine from CDs or DVDs. ■

For instructions on how to create your software depot, see [Building a SAS Software Depot](#).

Locating Your SID and Deployment Plan Files

One or more SID files and possibly a deployment plan file will have been mailed to you by SAS. You need to locate these files and, as with the software depot, copy them to a location on the network that is accessible to all of the machines on which you will be installing software. The tools that you use to install and configure your software read these files in order to determine the following for each machine:

- what software has been licensed and should be installed
- what components (for example, SAS servers) should be configured

For information about finding your SID and deployment plan files, see [Locating Your SID and Deployment Plan Files](#).

Creating Users and Groups

Before you can install and configure your software, you must create a small set of users and groups at the operating system level. For the most part, this work is necessary so that the system can authenticate a special set of users. For example, you will be asked to create an account for a SAS Administrator. This

user has unrestricted access to the metadata repository; therefore, it is essential that the metadata server host be able to authenticate this user.

For information about what user accounts and groups you need to create, see [Setting Up Required Users and Groups](#).

Installing Third-Party Products

Third-party products often play an important role in the SAS Intelligence Platform. For example, an application such as SAS Web Report Studio is a Java 2 Enterprise Edition (J2EE) Web application. This application must execute in a servlet container or a J2EE application server. It would be impractical for SAS to develop this type of server; therefore, SAS has qualified several industry-leading third-party products to fill this role, including BEA WebLogic Server, IBM WebSphere Application Server, and Apache Tomcat.

In general, the third-party products fall into the following categories:

- servlet container or J2EE application server, both of which depend on a Java Development Kit (JDK)
- WebDAV server
- scheduling server

Your SAS representative will have given you a list of the specific third-party products that you must install. These products will be listed in your planning file as well.

Note that this guide does not explain how to install these third-party products. Rather, it explains the following:

- how to obtain the product, if you don't already have it
- how to find installation instructions for the product
- how to start the product's installation program

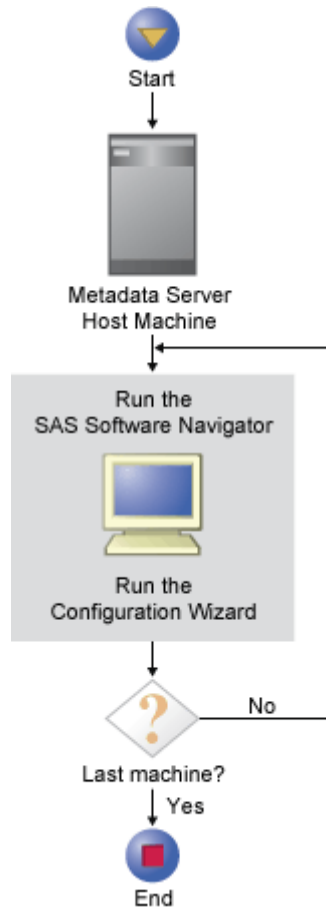
This guide also explains what information you should record about the installation of each product so that you can successfully configure the product later.

For information about installing third-party products, see [Installing Third-Party Products](#).

Installing and Configuring Your SAS Software

Finally, you install and configure your SAS software on one machine at a time, beginning with your metadata server host machine. As shown in the figure below, you use tools called the SAS Software Navigator and the SAS Configuration Wizard to install and configure the software on each machine in your system.

Installing and Configuring Your SAS Software



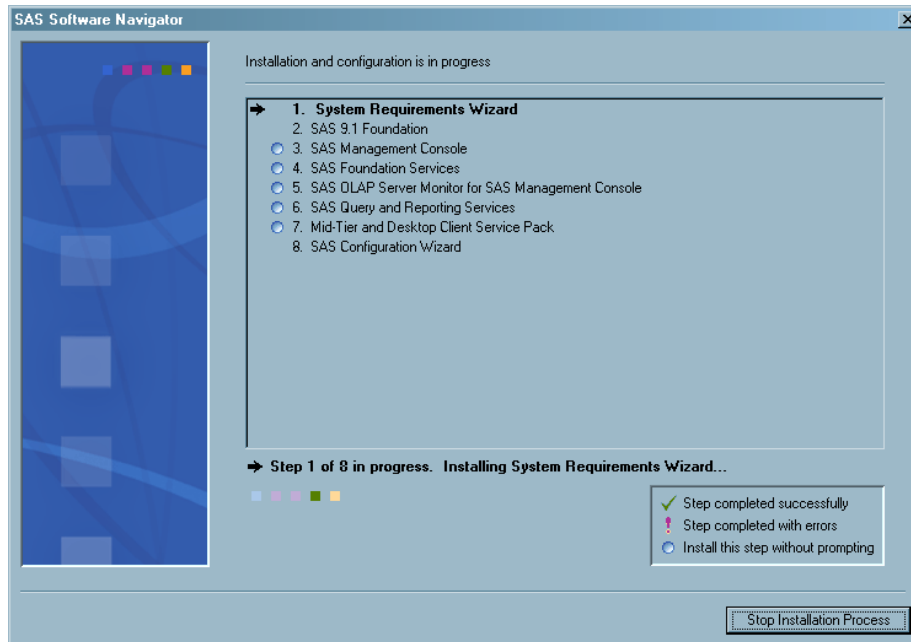
Order of Installations

In a distributed environment, you must install software on the computers that make up the system in a particular order. For instance, you always install software on the metadata server host machine first. This order is necessary because the configuration of a machine often involves creating new metadata objects, and if the metadata server is not available, this configuration cannot take place. The general rules to follow with regard to order are fairly simple:

- As mentioned above, first install and configure the software on the metadata server host machine.
- If other systems will host server-tier components (such as a workspace server or a stored process server), install and configure software on those systems next.
- If your system contains a middle tier and you have not installed all of your middle-tier components, install those next. (Middle-tier components include the Java Development Kit, a Java application server, Web applications such as SAS Web Report Studio and SAS Information Delivery Portal, and a WebDAV server.)
- Finally, install software on the machines that will host only clients.

SAS Software Navigator

You install the software on each host computer in your system by using an installation tool called the SAS Software Navigator. This tool reads your deployment plan file and enables you to install, on any particular machine, only the components that the plan calls for.



SAS Configuration Wizard

After the SAS Software Navigator has installed software on a machine, it typically starts the SAS Configuration Wizard, which configures the software that you just installed. (Client machines may not require configuration.) This configuration is broad ranging: it may involve creating a metadata repository; creating metadata objects for users, groups, and servers; building and deploying Web applications; and many other tasks.

The following screen captures start from this link:

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

Welcome to Install Center!

[English](#) | [Japanese](#)

The Install Center supports the new installation process that is in place for SAS®9. The installation and administration documentation on this site is grouped by operating environment. Each page provides access to the contents of the Installation Kit for the specified operating environment. In addition, these pages include updated documentation and information that has been made available after the Installation Kits were shipped to you. Installation documentation for previous releases of SAS software are still available from the Administrator Documentation site.

To locate information that is specific to your SAS 9.1 or Version 9 installation, select the appropriate link below.

- ▶ [AIX](#)
- ▶ [HP-UX](#)
- ▶ [HP-UX for the Itanium Processor](#)
- ▶ [Linux for Intel Architecture](#)
- ▶ [Linux for Itanium-based Systems](#)
- ▶ [Solaris](#)
- ▶ [Tru64 UNIX](#)
- ▶ [Microsoft Windows](#)
- ▶ [Microsoft Windows for 64-Bit Itanium-based Systems](#)
- ▶ [OpenVMS Alpha](#)
- ▶ [z/OS](#)

Installation and administration information for other releases of SAS software is available from the [Administrator Documentation site](#).

Installation FAQ

We have worked to improve SAS 9.1 and Version 9 installation processes. With improvement comes change. With change comes some confusion. To help eliminate as much first-time confusion as possible, we have created an FAQ about the installation process and this Web site. If you have questions or want a quick introduction to the Install Center, please [review the FAQ](#).

Providing Feedback

SAS is committed to listening to you and using your input to guide our direction. We value your feedback on what we have accomplished as well as your input on our future development direction. Please take the time to contact us and be heard. You can send e-mail to sasinstalls@sas.com to provide your comments regarding the Install Center website. Questions concerning your SAS installation should be addressed to support@sas.com

Install Center: SAS for AIX®

Select the SAS release and type of installation that you will be performing in the AIX environment:

- ▶ SAS 9.1.3 (TS1M3)
[Basic Installation Edition Kit](#) | [Planning Installation Edition Kit](#) | [SAS Road Map Kit](#)
- ▶ SAS 9.1.2 (TS1M2)
[Installation and Administration Information](#)
- ▶ SAS 9.1 (TS1M0)
[Installation and Administration Information](#)
- ▶ SAS 9.0
[Installation and Administration Information](#)
- ▶ SAS Software, Release 8.2 and earlier
[Administrator Documentation for UNIX](#)

Not sure which installation kit to follow?

A *Basic Installation Edition Kit* is used to install "basic" SAS software. The platform-specific installation program and SAS Installation Data (SID) are needed to complete this type of installation.

A *Planning Installation Edition Kit* is used to install and configure multi-tier SAS software products or solutions. A "planning" phase is required for this type of installation to create a "plan file" for use during the installation and configuration process. The SAS Software Navigator, SAS Installation Data, and the "plan file" are needed to complete this type of installation.

A *SAS Road Map Kit* contains SAS Road Maps for multi-tier SAS software products or solutions. A SAS Road Map is used to guide the deployment of multiple installation kits required by multi-tier SAS software products or solutions.

SAS 9.1 for AIX®

Installation and Administration Information

SAS 9.1.3 (TS1M3) Basic Installation Edition Kit

The installation and configuration documentation for SAS 9.1.3 for AIX are available from this Web page.

QuickStart

You should review the following before you begin the installation process.

- [QuickStart Guide to Your SAS 9.1.3 UNIX Installation](#) APR 20, 2005

Getting Started

You should review the following documents prior to beginning the installation process.

- [Basic Getting Started Guide for SAS 9.1.3](#) MAR 8, 2005
- [SAS 9.1.3, Pre-Production Products and Features List, AIX](#)

Installation

- [Alert Notes--SAS 9.1.3, for AIX](#) AUG 10, 2005
- [System Requirements--SAS 9.1.3 Foundation for AIX](#) AUG 9, 2005
- [Installation Instructions--SAS 9.1.3 Foundation for UNIX Environments](#) MAY 26, 2005
- [SAS 9.1.3 Qualification Tools Users Guide](#) FEB 1, 2005
- [Installation Instructions--Additional Fonts](#) FEB 24, 2005
- [Installation Instructions--SAS/ACCESS 4.1 Interface to R/3](#) MAY 11, 2005
- [Installation Instructions--SAS/ACCESS 9.1.3 Interface to SAP BW Software](#) SEP 1, 2004

Note: To view the complete list of Alert Notes for SAS 9.1.3, visit the [Alert Notes Search page](#).

Configuration

- [Configuration Guide--SAS 9.1.3 Foundation for UNIX](#) JUL 12, 2005

Service and Support

- [Maintaining Your SAS Software](#) FEB 17, 2005
- [Software License Renewal--SAS 9.1.3 for UNIX](#) DEC 7, 2004
- [SAS Technical Support Information](#) APR 21, 2005

SAS 9.1 for AIX®

Installation and Administration Information

SAS 9.1.3 (TS1M3) Planning Installation Edition Kit

The installation and configuration documentation for SAS 9.1.3 for AIX are available from this Web page.

Getting Started

You should review the following documents prior to beginning the installation process.

- [Getting Started Guide for SAS 9.1.3](#) MAY 24, 2005
- [SAS 9.1.3, Pre-Production Products and Features List, AIX](#)
- [Planning, Installation, and Configuration Workflow](#)
- [Planning and Administrators Guides](#) AUG 5, 2005
- [Pre-Installation Checklists](#) FEB 28, 2005

Installation

- [Alert Notes--SAS 9.1.3, for AIX](#) AUG 10, 2005
- [System Requirements--SAS 9.1.3 Foundation for AIX](#) AUG 9, 2005
- [Installation Instructions--SAS 9.1.3 Foundation for UNIX Environments](#) MAY 26, 2005
- [SAS 9.1.3 Qualification Tools Users Guide](#) FEB 1, 2005
- [Installation Instructions--Additional Fonts](#) FEB 24, 2005
- [Installation Instructions--SAS/ACCESS 4.1 Interface to R/3](#) MAY 11, 2005
- [Installation Instructions--SAS/ACCESS 9.1.3 Interface to SAP BW Software](#) SEP 1, 2004

Note: To view the complete list of Alert Notes for SAS 9.1.3, visit the [Alert Notes Search page](#).

Configuration

- [Configuration Guide--SAS 9.1.3 Foundation for UNIX](#) JUL 12, 2005

Service and Support

- [Maintaining Your SAS Software](#) FEB 17, 2005
- [Software License Renewal--SAS 9.1.3 for UNIX](#) DEC 7, 2004
- [SAS Technical Support Information](#) APR 21, 2005

SAS Road Map Kit

SAS 9.1.3 (TS1M3)

A SAS Road Map Kit contains SAS Road Maps for multi-tier SAS software products or solutions. A SAS Road Map is used to guide the deployment of multiple installation kits required by multi-tier SAS software products or solutions.

- [SAS Road Map Letter](#) FEB 23, 2005
- [Road Map for SAS Activity-Based Management](#) FEB 23, 2005
- [Road Map for SAS Activity-Based Management - Select Edition](#) FEB 23, 2005
- [Road Map for SAS Anti-Money Laundering 1.4](#) FEB 23, 2005
- [Road Map for SAS BI Server](#) FEB 23, 2005
- [Road Map for SAS Bridge for ESR](#) FEB 23, 2005
- [Road Map for SAS Campaign Management](#) FEB 23, 2005
- [Road Map for SAS Credit Risk Management for Banking](#) FEB 23, 2005
- [Road Map for SAS Email Marketing](#) APR 20, 2005
- [Road Map for SAS Enterprise BI Server](#) FEB 23, 2005
- [Road Map for SAS Enterprise Miner](#) AUG 4, 2005
- [Road Map for SAS Enterprise ETL Server](#) FEB 23, 2005
- [Road Map for SAS ETL Server](#) FEB 23, 2005
- [Road Map for SAS Fair Banking](#) MAR 18, 2005
- [Road Map for SAS Financial Management](#) MAR 17, 2005
- [Road Map for SAS Information Delivery Portal](#) FEB 23, 2005
- [Road Map for SAS Intelligence Storage](#) FEB 23, 2005
- [Road Map for SAS IT Charge Management](#) FEB 23, 2005
- [Road Map for SAS IT Resource Management](#) FEB 23, 2005
- [Road Map for SAS IT Service Level Management](#) FEB 23, 2005
- [Road Map for SAS Markdown Optimization](#) MAR 16, 2005
- [Road Map for SAS Marketing Automation](#) FEB 23, 2005
- [Road Map for SAS Marketing Optimization](#) APR 1, 2005
- [Road Map for SAS OpRisk VaR](#) FEB 23, 2005
- [Road Map for SAS Promotion Optimization](#) MAR 16, 2005
- [Road Map for SAS Risk Dimensions Analyst](#) MAY 25, 2005
- [Road Map for SAS Risk Dimensions Enterprise](#) MAY 25, 2005
- [Road Map for SAS Sourcing Data Quality](#) FEB 23, 2005
- [Road Map for SAS Spend Analysis](#) FEB 23, 2005
- [Road Map for SAS Strategic Performance Management](#) MAR 17, 2005

SAS® 9.1.3 Intelligence Platform: Administration Documentation

SAS creates and delivers enterprise intelligence through the SAS Intelligence Platform. This cohesive platform is based on an architecture that fully integrates SAS technologies in data extraction, transformation, and loading; data storage; business intelligence; and analytic intelligence. These capabilities provide the end-to-end infrastructure necessary for exploring, analyzing, optimizing, reporting, and understanding your data.

In July 2005, the *SAS 9.1.3 Intelligence Platform: Planning and Administration Guide* was updated and divided into three documents: an overview, an installation guide, and an administration guide. For details about the changes and enhancements in the new guides, see [What's New](#).

The new guides are available from this page and also in [SAS OnlineDoc](#). In SAS OnlineDoc, the three guides are grouped under the heading *SAS Intelligence Platform* in the table of contents.

Administration Documents by Task

To help you better understand which Intelligence Platform document to use, the following table lists commonly performed tasks and refers you to the document to use to complete those tasks. You can also see these administration [documents listed by title](#).

Note: To view some of the PDF documentation, you must have Adobe Acrobat Reader 6.0 or later. You can download the reader from the [Adobe web site](#).

Get an overview of the SAS Intelligence Platform	
• Obtain a high-level overview of the platform's architecture • Learn about the platform's products and how they interact • Learn about the benefits of using the platform	New SAS® 9.1.3 <i>Intelligence Platform: Overview</i> SAS OnlineDoc PDF Purchase Book
Install and configure the SAS Intelligence Platform	
• Learn how to work with deployment plans • Follow step-by-step instructions to install and configure the platform • Install separate additional products after you have installed the platform	New SAS® 9.1.3 <i>Intelligence Platform: Installation Guide</i> SAS OnlineDoc PDF

Learn about supported third-party software	Third Party Software Downloads Web page
Obtain host-specific installation and configuration instructions, primarily for SAS Foundation	Install Center Web page
Install the platform for a single user, along with SAS Enterprise Guide, SAS Enterprise Miner, or both	<i>SAS® 9.1.3 Intelligence Platform: Single-User Installation Guide</i> PDF
Understand the SAS configuration directory structure and files	New <i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
Upgrade an Existing Installation	
Upgrade from 9.1 or 9.1.2 to the current release of the platform	New <i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
- Obtain planning information and instructions for converting existing SAS files to the current release - Find resources and support information related to migration	SAS Migration Community Web page
Set up and maintain SAS metadata	
- Learn about SAS Management Console - Define and manage repositories, servers, libraries, users, licenses, and scheduled jobs	<i>SAS® 9.1.2 Management Console: User's Guide</i> SAS OnlineDoc PDF
- Back up and restore SAS metadata repositories - Optimize metadata repository memory usage	<i>SAS® 9.1.3 Metadata Server: Setup and Administration Guide</i> HTML
Promote or replicate metadata	<i>SAS 9.1.3® Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
Set up and manage security	
- Plan your security implementation - Learn how authentication works in the platform - Change the authentication provider - Manage users and groups - Manage user IDs and passwords - Define user access to resources - Implement encryption within the platform	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF (The SAS OnlineDoc link takes you to the first security task listed.)

• Implement security for the Xythos WebFile Server • Implement encryption with SAS Integration Technologies • Implement security for SAS servers	<i>SAS® 9.1.3 Integration Technologies: Server Administrator's Guide</i> HTML PDF
Administer SAS servers and manage SAS Integration Technologies	
• Change the configuration for the SAS Metadata Server	<i>SAS® 9.1.3 Metadata Server: Setup and Administration Guide</i> HTML
• Set up basic load balancing for SAS servers • Set up basic pooling for the workspace server • Tune the workspace server to improve SAS Web Report Studio performance	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
• Set up advanced load balancing for SAS servers • Set up advanced pooling for the workspace server • Implement security for SAS servers	<i>SAS® 9.1.3 Integration Technologies: Server Administrator's Guide</i> HTML PDF
• Understand and administer SAS Foundation Services • Register and modify SAS Stored Processes • Administer the SAS Publishing Framework	<i>SAS® 9.1.3 Integration Technologies: Administrator's Guide</i> HTML PDF
Manage data integration	
• Prepare SAS data and data sources from third-party vendors for use • Optimize data storage	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF (The SAS OnlineDoc link takes you to the first data integration task listed.)
Administer SAS information design, analysis, and reporting	
• Learn about the components and configuration of the SAS OLAP Server • Administer SAS OLAP servers and clients • Monitor SAS OLAP servers	<i>SAS® 9.1.3 OLAP Server: Administrator's Guide</i> SAS OnlineDoc PDF
• Administer SAS ETL Studio	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
• Prepare SAS Enterprise Miner for use	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF

• Administer SAS Information Map Studio	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
• Administer SAS Web Report Studio	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
• Schedule jobs and reports	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
• Administer the SAS Enterprise Guide environment • Define metadata repositories for use with SAS Enterprise Guide • Create metadata definitions for SAS Enterprise Guide	<i>SAS® Enterprise Guide 3.0 Administrator: User's Guide</i> PDF
Administer SAS Web applications	
• Learn about the middle-tier environment, including third-party software requirements	<i>SAS® 9.1.3 Intelligence Platform: Overview</i> SAS OnlineDoc PDF Purchase Book
• Tune a J2EE application server or a servlet container • Configure an HTTP server to serve static content • Tune an HTTP server for better performance • View sample middle-tier deployment scenarios	<i>SAS® 9.1.3 Intelligence Platform: Administration Guide</i> SAS OnlineDoc PDF
• Administer the SAS Information Delivery Portal or the portal application shell in the SAS Web Infrastructure Kit • Set up and add users to the portal environment • Set up portal views for users and groups of users • Deploy themes, portlets, and other portal content • Redistribute middle-tier components	<i>SAS® Web Infrastructure Kit 1.0: Administrator's Guide</i> HTML PDF
• Develop custom portlets and themes for the portal Web application • Integrate other Web applications with the portal Web application	<i>SAS® Web Infrastructure Kit 1.0: Developer's Guide</i> HTML PDF
Additional resources	
• While using SAS software, see the online Help that is provided with the product • See SAS OnlineDoc for additional documentation	

- See the [Web Technologies Community](#) pages for information about SAS AppDev Studio, SAS Information Delivery Portal, and SAS Integration Technologies (including the SAS Web Infrastructure Kit)
- See the [Enterprise Integration Community](#) pages for information about the SAS Open Metadata Architecture and SAS Integration Technologies
- See the [Technical FAQs](#) pages for frequently asked questions about SAS products

Administration Documents by Title

In July 2005, the *SAS 9.1.3 Intelligence Platform: Planning and Administration Guide* was updated and divided into three documents: an overview, an installation guide, and an administration guide. For details about the changes and enhancements in the new guides, see [What's New](#).

The new guides are available from this page and also in [SAS OnlineDoc](#). In SAS OnlineDoc, the three guides are grouped under the heading *SAS Intelligence Platform* in the table of contents.

Note: To view some of the PDF documentation, you must have Adobe Acrobat Reader 6.0 or later. You can download the reader from the [Adobe web site](#).

- ▶ **SAS® 9.1.3 Intelligence Platform: Overview** [SAS OnlineDoc](#) | [PDF](#) | [Purchase Book](#)
This guide is the point-of-entry document for understanding the basics of the SAS Intelligence Platform. It discusses the benefits of the SAS Intelligence Platform to businesses, describes the architecture of the SAS Intelligence Platform, and provides an overview of each software component in the platform. This document can be used alone or as an introduction to the *Installation Guide* and the *Administration Guide*.
- ▶ **SAS® 9.1.3 Intelligence Platform: Installation Guide** [SAS OnlineDoc](#) | [PDF](#)
Provides step-by-step instructions to install and configure the platform. It also addresses some initial configuration tasks. This document must be used in conjunction with the *Administration Guide*.
- ▶ **SAS® 9.1.3 Intelligence Platform: Administration Guide** [SAS OnlineDoc](#) | [PDF](#)
Addresses a wide range of post-installation administration tasks. It covers setting up security, establishing connectivity to data sources and optimizing data access, tuning servers for optimal performance, maintaining the system, and administering specific applications. This guide offers the added benefits of best practices and practical experience from the field. It is recommended that you use this document in conjunction with the *Installation Guide*.
- ▶ **SAS® 9.1.3 Intelligence Platform: Single-User Installation Guide** [PDF](#)
Addresses the installation of SAS Enterprise Guide and SAS Enterprise Miner for a single user and single machine.
- ▶ **SAS® 9.1.3 Integration Technologies: Server Administrator's Guide** [HTML](#) | [PDF](#)
Provides detailed instructions for all of the server administration tasks that are required for SAS Workspace Servers and spawners, and SAS Stored Process Servers and spawners. Also provides general information for administering all IOM servers.

- ▶ **SAS® 9.1.3 Integration Technologies: Administrator's Guide** [HTML](#) | [PDF](#)
Provides detailed instructions for the administration of the following SAS Integration Technologies features: SAS Foundation Services, SAS Stored Processes, and SAS Publishing Framework.
- ▶ **SAS® Web Infrastructure Kit 1.0: Administrator's Guide** [HTML](#) | [PDF](#)
Provides detailed information for administering portal Web applications, including the SAS Information Delivery Portal.
- ▶ **SAS® 9.1.3 Metadata Server: Setup and Administration Guide** [HTML](#)
Contains step-by-step instructions for administering a SAS Metadata Server.
- ▶ **SAS® 9.1.3 Open Metadata Architecture: Best Practices Guide** [HTML](#)
Contains information to assist you in planning your SAS metadata environment, including how to set up repositories and estimate system requirements for a SAS Metadata Server.
- ▶ **SAS® 9.1.3 OLAP Server: Administrator's Guide** [SAS OnlineDoc](#) | [PDF](#)
Provides information about how to perform administrative tasks such as installing, configuring, securing, and monitoring a SAS OLAP Server. Also includes information about building and using data cubes. This document is valid for SAS 9.1, SAS 9.1.2, SAS 9.1.3, and SAS 9.1.3 SP2.
- ▶ **SAS® 9.1.2 Management Console: User's Guide** [SAS OnlineDoc](#) | [PDF](#)
Contains information about using SAS Management Console to define and manage metadata object definitions (for SAS resources such as servers, libraries, users, and authorization controls) stored in a repository on a SAS Metadata Server. This document is valid for SAS 9.1.2 and SAS 9.1.3.

Third Party Software Downloads

To see a list of the Third Party Software supported for each version of SAS®, follow the appropriate link below.

The labels on the media in your SAS Installation Kit identify which version of the SAS System or service pack you are applying. Check your media to determine the appropriate Third Party Web page to use. For example, if the CD imprint says "SAS 9.1.3 Service Pack 2", use the Third Party Web page for SAS 9.1.3 Service Packs 2 and 3. If you received an installation kit, check the media in the *800 SAS Foundation Media Guide* section of the **Media Storage** division.

Currently Supported Versions of SAS®

- [SAS 9.1.3 Service Packs 2 and 3](#)
 - [Java Runtime Environments \(JRE\)](#)
 - [Java Development Kits \(JDK\)](#)
 - [Web Application Servers](#)
 - [Web Browsers](#)
 - [HTTP Servers](#)
 - [WebDAV Servers](#)
- [SAS 9.1.3 \(Original Release and Service Pack 1\)](#)
 - [Java Runtime Environments \(JRE\)](#)
 - [Java Development Kits \(JDK\)](#)
 - [Web Application Servers](#)
 - [Web Browsers](#)
 - [HTTP Servers](#)
 - [WebDAV Servers](#)
- [SAS 9.1.2](#)
 - [Java Runtime Environments \(JRE\)](#)
 - [Java Development Kits \(JDK\)](#)
 - [Web Application Servers](#)
 - [Web Browsers](#)
 - [HTTP Servers](#)
- [SAS 9.1](#)
 - [Java Runtime Environments \(JRE\)](#)
 - [Java Development Kits \(JDK\)](#)
 - [Web Application Servers](#)
 - [Web Browsers](#)
 - [HTTP Servers](#)

Third Party Software Downloads for SAS 9.1.3 SP2 and SP3

Follow the links below to download recommended versions of third-party software used with SAS components.

Table Of Contents

1. [Java Runtime Environments](#)
2. [Java Development Kits](#)
3. [Application Servers](#)
4. [Web Browsers](#)
5. [HTTP Servers](#)
6. [WebDAV Servers](#)

Java Runtime Environments

The following versions of the Java Runtime Environment (JRE) are recommended for use with the SAS Foundation and SAS client applications. Application servers and servlet engines require a full Java Software Development Kit (JDK). See the next section for a list of Java Development Kits required by supported application servers.

Platform	Version	Link	Notes
HP Tru64 UNIX	1.4.1-1		Not on vendor website. Available on 3rd party CD
OpenVMS Alpha	1.4.1-1		Not on vendor website. Available on 3rd party CD
HP-UX PA-RISC	1.4.1.02	Download	Registration is required
HP-UX Itanium	1.4.1.01	Download	Registration is required
z/OS	1.4.1	Download	Registration is required. No JRE available, install SDK V1.4.
AIX	1.4.0		This JRE is not available on the vendor's website. This JRE is installed with Base SAS and is on the Third Party CD. It is the supported version for the SAS Foundation Servers running on AIX.
	1.4.1	Download	SAS® Management Console, SAS® Enterprise Miner and SAS®Merchandise Intelligence Server on AIX require IBM's 1.4.1 32-bit JRE. Please review SAS Note SN-012999 for more detailed information.