Enhanced Features of Java Installs

The table below lists the components that use the enhanced features. Beside each component is a list of the sections of this document relevant to the component. Find the product you are interested in from the left column, then refer to the listed chapters for information about your install.

Component Name	Chapters to consult
Additional Fonts	A, B, C, F
Configuration Troubleshooter	A, B, C, F
Configuration Troubleshooter Mid-Tier	A, B, C, F
Deployment Tester	A, B, C, F
Deployment Tester SAS Management Console Plug-in	A, B, C, F
SAS Analytics Platform	A, B, C, F
SAS AppDev Studio Eclipse Plug-ins	A, B, C, F
SAS AppDev Studio Server Side Catalogs	A, D, E, F
SAS BI API Developer Documentation for Java	A, D, F
SAS BI Dashboard	A, B, C, F
SAS BI Web Services for Java	A, B, C, F
SAS Campaign Studio	A, B, C, F
SAS Credit Risk Management	A, B, C, F
SAS Customer Intelligence Reporting Mid-Tier	A, B, C, F
SAS Detail Data Store for Banking	A, B, C, F
SAS Detail Data Store for Retail	A, B, C, F
SAS Data Integration Studio	A, B, C, F
SAS Data Surveyor for Oracle Applications	A, B, C, F
SAS Data Surveyor for PeopleSoft	A, B, C, F
SAS Data Surveyor for SAP	A, B, C, F
SAS Data Surveyor for Siebel	A, B, C, F
SAS Drivers for JDBC and SAS/CONNECT	A, B, C, F
SAS E-mail Marketing	A, B, C, F
SAS E-mail Marketing Web Reporting Infrastructure	A, B, C, F
SAS Enterprise Miner Java Client	A, B, C, F
SAS Enterprise Miner Desktop	A, B, C, F
SAS ESRI Map Manager Plug-in for SAS Management Console	A, B, C, F
SAS Fair Banking Assessment Area Maps	A, B, C, F
SAS Fair Banking Mid-tier	A, B, C, F
SAS Financial Management Data Tier	A, B, C, F
SAS Financial Management Mid-Tier	A, B, C, F
SAS Financial Management Studio	A, B, C, F
SAS Forecast Server Plug-ins for SAS Management Console	A, B, C, F
SAS Forecast Studio	A, B, C, F
SAS Forecast Studio Planning Server	A, B, C, F
SAS Foundation Services	A, B, C, F
SAS Grid Manager Plug-in for SAS Management Console	A, B, C, F

SAS Human Capital Management Data Tier	A, B, C, F
SAS Human Capital Management Mid-Tier	A, B, C, F
SAS Information Delivery Portal	A, B, C, F
SAS Information Map Studio	A, B, C, F
SAS Integration Technologies Documentation	A, D, E, F
SAS IT Management Adapter for SAP	A, B, C, F
SAS IT Management Solutions Core Components Client	A, B, C, F
SAS IT Management Solutions Core Data Tier	A, B, C, F
SAS IT Resource Management Client	A, B, C, F
SAS Optimization Mid-Tier	A, B, C, F
SAS Inventory Optimization Script Runner	A, B, C, F
SAS Inventory Policy Studio	A, B, C, F
SAS IT Service Level Management Client	A, B, C, F
SAS Java Metadata Interface	A, B, C, F
SAS Management Console	A, B, C, F
SAS Marketing Automation Application Server	A, B, C, F
SAS Marketing Automation Export Adapters	A, B, C, F
SAS Marketing Automation Integration Utilities	A, B, C, F
SAS Marketing Automation Launcher	A, B, C, F
SAS Marketing Automation Plug-ins for SAS Management Console	A, B, C, F
SAS Marketing Automation Web Components	A, B, C, F
SAS Marketing Optimization	A, B, C, F
SAS Marketing Optimization Mid-Tier	A, B, C, F
SAS Marketing Optimization Plug-in for SAS Management Console	A, B, C, F
SAS Merchandise Intelligence Mid-Tier	A, B, C, F
SAS Merchandise Intelligence Plug-ins for SAS Management Console	A, B, C, F
SAS Metadata Bridges	A, B, C, F
SAS OLAP Cube Studio	A, B, C, F
SAS Model Manager Application Programming Interface	A, B, C, F
SAS Model Manager Client	A, B, C, F
SAS OLAP Server Monitor for SAS Management Console	A, B, C, F
SAS OnlineDoc 9.1 for the Web	A, D, F
SAS OnlineTutor: Advanced SAS	A, D, E, F
SAS OnlineTutor: Basic and Intermediate SAS	A, D, E, F
SAS OnlineTutor: Business Intelligence	A, D, E, F
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SAS Real-Time Decision Manager Design Mid-Tier	A, B, C, F
SAS Real-Time Decision Manager Engine	A, B, C, F

SAS Real-Time Decision Manager Plug-ins for SAS Management Console	A, B, C, F
SAS Real-Time Decision Manager Server Configuration	A, B, C, F
SAS Revenue Optimization Client	A, B, C, F
SAS Revenue Optimization Configuration Tool	A, B, C, F
SAS Rich Client Platform, Version 3.11	A, B, C, F
SAS Rich Client Platform, Version 3.20	A, B, C, F
SAS Rich Client Platform, Version 3.3	A, B, C, F
SAS Rich Client Platform Plug-ins, Version 3.11	A, B, C, F
SAS Rich Client Platform Plug-ins, Version 3.20	A, B, C, F
SAS Rich Client Platform Plug-ins, Version 3.3	A, B, C, F
SAS Risk Dimensions Java Client	A, B, C, F
SAS Risk Reporting Repository	A, B, C, F
SAS Remote Help for z/OS	A, D, F
SAS Solutions Adapter for SAP – Client	A, B, C, F
SAS Solutions Plug-ins for SAS Management Console	A, B, C, F
SAS Solutions Services Data Tier	A, B, C, F
SAS Solutions Services Dimension Editor	A, B, C, F
SAS Solutions Services Mid-Tier	A, B, C, F
SAS Sourcing Data Quality ETL-Plug-ins	A, B, C, F
SAS Sourcing Data Quality Mid-Tier	A, B, C, F
SAS Sourcing Data Quality Quality Knowledge Base Server	A, B, C, F
SAS Sourcing Strategy	A, B, C, F
SAS Spend Analysis ETL Plugins	A, B, C, F
SAS Spend Analysis ETL Server	A, B, C, F
SAS Spend Analysis Mid-Tier	A, B, C, F
SAS SQL Library for C	A, D, F
SAS Strategic Performance Management Data Tier	A, B, C, F
SAS Strategic Performance Management Mid-Tier	A, B, C, F
SAS Strategic Performance Management Migration Wizard	A, B, C, F
SAS Subscription Manager	A, B, C, F
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SAS Warranty Analysis Mid-tier	A, B, C, F
SAS Web Analytics	A, B, C, F
SAS Web Infrastructure Kit	A, B, C, F
SAS Web OLAP Viewer for Java	A, B, C, F
SAS Web Report Studio	A, B, C, F
SAS Web Report Viewer	A, B, C, F

SAS XML Mapper	A, B, C, F
SAS/GRAPH Java Applets	A, D, E, F
SAS/GRAPH Java Applets Documentation	A, D, E, F
SAS/IntrNet Documentation	A, D, E, F
SAS/SECURE Java Component	A, B, C, F
SAS/STAT Power and Sample Size	A, B, C, F
SAS Warranty Analysis Client	A, B, C, F
SAS Warranty Analysis for Analytics Platform	A, B, C, F
SAS Warranty Analysis Server Configuration	A, B, C, F

Table of Contents

A. Overview

This document provides information to assist you with installing the software, and covers the following areas:

- Pre-Installation Steps
- Installation, including modes of installation
- Uninstallation

The term `<Setup_Program>` is used throughout this document to indicate the install program for the platform onto which you are installing, as follows.

Platform	Setup_Program
Windows 32-bit	`setup.exe`
Windows 64-bit	`setup.exe`
AIX	`setup_r64.sh`
HP-UX Itanium	`setup_h6i.sh`
HP-UX PA-RISC	`setup_h64.sh`
Solaris	`setup_s64.sh`
Linux for Intel Architecture	`setup_lnx.sh`
Linux for Itanium-based Systems	`setup_lix.sh`

For the remaining platforms, we have provided the software in the format listed below.

Platform	Format
Tru64 UNIX	Compressed tar
OpenVMS	Compressed zip
z/OS	Compressed tar

See the section "E. Installing Compressed Archives" for more information on installations that use these files.

Note for Windows Terminal Server Users

If you are using a Windows terminal server, you **must** use the same account for every installation on the terminal server and for any subsequent updates to the terminal server.

Note about Interaction with SAS Software Navigator

When you install your software via the SAS Software Navigator, you are presented with a choice of deployment type. If you choose a Personal or Advanced deployment, most Java installs can be installed silently. Alternatively, you can choose to install all the software using GUI mode.

If you choose a Software Index deployment, all Java software will be installed in GUI mode.

Note about `vpd.properties`

Note that Service Pack installer updates are based on data contained in a file called `vpd.properties`. If you delete, move, or rename this file such that the service pack installer cannot find it, your products will not be updated. This file should not be moved, modified, or deleted in any way to ensure successful application of service packs.

Installing on UNIX as `root`

If a Java installation is performed under the `root` account on HP-UX or Solaris, a `vpd.properties` file will not be created. This may cause future installations to fail or to be incomplete. SAS strongly recommends performing all installations under a `sas` account, and that the `root` account should not be used.

B. Client and Mid-Tier Java Software Installations

Pre-Installation Steps

Before installing client and mid-tier software, the appropriate Java Runtime Environment (JRE) must be installed on the computer. The required JRE can be installed from the appropriate *Third Party Software Components CD* using the SAS Private JRE installs.

The SAS Private JRE is a fully functional Java Runtime Environment, provided by the JRE vendor, for installation and runtime use of SAS applications. It is the JRE version upon which the SAS products have been developed and tested. SAS strongly encourages the use of the SAS Private JRE for use with the SAS products. Other JRE versions may not work with the SAS products.

SAS Private JRE Default Installation Locations

The SAS Private JRE installation will default to the locations below. SAS *strongly recommends* that you install the SAS Private JRE in the default location. Please consult the system requirements of the product you are installing in order to determine the specific JRE required.

Platform	Default Install Location
Windows	`<Shared_Files>\JRE\<version>*`
Windows for 64-Bit Itanium-based Systems	`<Shared Files>\JRE\<version>*`
Solaris	`/usr/local/SAS/SAS_9.1/sasjre/<version>`
HP-UX Itanium	`/usr/local/SAS/SAS_9.1/sasjre/<version>`
HP-UX PA-RISC	`/usr/local/SAS/SAS_9.1/sasjre/<version>`
AIX	`/usr/local/SAS/SAS_9.1/sasjre/<version>`
Linux for Intel Architecture	`/usr/local/SAS/SAS_9.1/sasjre/<version>`
Linux for Itanium-based Systems	`/usr/local/SAS/SAS_9.1/sasjre/<version>`

*The Windows SAS Private JRE install will attempt to locate the default SAS Shared Files directory in the registry. If it is found, the default path will be `<Shared_Files>\JRE\<version>`, where `<Shared_Files>` is the path to your SAS Shared Files folder stored in the registry and `<version>` is the version appropriate for your hardware found in the table above. Otherwise, you are asked to enter a Shared Files location and the default path will be set to `<rootdrive>\Program Files\SAS\Shared Files\JRE\<version>`, where `<rootdrive>` is the drive where Windows is installed and `<version>` is the version appropriate for you hardware found in the table above.

Software Installation Steps

Once you have begun the installation, follow the instructions in the InstallShield Wizard displayed on your screen.

Starting the Install

The installation can be started in one of three modes:
- GUI (graphical interface)
- Console (text interface)
- Silent (interface disabled for unattended operation)

GUI Mode

GUI mode is the default for performing a stand-alone installation. The installation may be run in GUI mode from the SAS Software Navigator using a Software Index deployment. Use the SAS Software Navigator to locate and launch the installation you require by clicking on the appropriate link.

Console Mode

Console mode is an installation mode to allow installation from a text-only window, or console window. This mode is useful in circumstances where displaying the graphical user interface is not desirable (or possible). NOTE: Console mode is not supported on Windows platforms at this time.

To start an installation in Console mode, you must locate the installation program on the appropriate CD, and launch the install from a console or command-prompt using the `-console` option.

Usage:
```
<Setup_Program> -console
```

For example:
(Solaris) `<MOUNT_PATH>/client1cd/client1cd/mgmtconsole/setup_s64.sh -console`

Silent Mode

Silent mode is an optional installation mode that does not require user interaction. This is useful for administrators who need to deploy software to many machines across their enterprise in an unattended manner.

Silent mode assumes that the computers onto which the software will be installed have already been prepared with the required JRE. If the system does not have the required JRE, the install will be terminated, leaving `errorlog.txt` in the computer's temporary location. See the section above, "Pre-Installation Steps," for more information on installing the JRE.

To use silent mode you must run the installation program with the appropriate command-line options.

- **Basic Silent Mode**

    Basic silent mode is the simplest usage, and is the recommended installation method. Basic silent mode installs the software using the default values for each response that would have occurred during an interactive install.

    Usage:
    ```
    <Setup_Program> -silent
    ```

For example:

```
(Solaris) <MOUNT_PATH>/client1cd/client1cd/mgmtconsole/setup_s64.sh -silent
(Windows) <CDROM_DRIVE>\client1cd\client1cd\mgmtconsole\setup.exe -silent
```

- **Custom Silent Mode**

    Custom silent mode allows unattended installation with custom responses to the questions that would normally have been asked during an interactive install. This is accomplished by providing the responses in a *response file* that is then passed to the install as a command-line option.

    Use custom silent mode as follows:

    1. Generate the template response file.

        Usage:
        ```
        <Setup_Program> -options-template <full path to response file>
        ```

        For example:
        ```
        (Solaris) <MOUNT_PATH>/client1cd/client1cd/mgmtconsole/setup_s64.sh
        -options-template /tmp/response.txt
        (Windows) <CDROM_DRIVE>\client1cd\client1cd\mgmtconsole\setup.exe
        -options-template C:\temp\response.txt
        ```

    2. Edit and save the response file.

        Edit the file you created in step #1 to indicate the default values to be used. A sample response file is included below (the sections in italics cannot be edited):

        Note: *Yes/No fields in the response file are case-sensitive and should be entered in all lower case.*

        ```
        ####################################################################
        #
        # InstallShield Options File Template
        #
        # Wizard name: Setup
        # Wizard source: setup.jar
        # Created on: Thu Mar 27 16:13:19 EST 2003
        # Created by: InstallShield Options File Generator
        #
        # This file can be used to create an options file (i.e., response file) for the
        # wizard "Setup". Options files are used with "-options" on the command line to
        # modify wizard settings.
        #
        # The settings that can be specified for the wizard are listed below. To use
        # this template, follow these steps:
        #
        #    1. Enable a setting below by removing leading '###' characters from the
        #    line (search for '###' to find settings you can change).
        #
        #    2. Specify a value for a setting by replacing the characters '<value>'.
        #    Read each settings documentation for information on how to specify its
        #    value.
        #
        #    3. Save the changes to the file.
        ```

```
#
#    4. To use the options file with the wizard, specify -options <file-name>
#       as a command line argument to the wizard, where <file-name> is the name
#       of this options file.
#
######################################################################
# User Input Field - jreChoices
#
# Do not enable this setting.
#
### -W jreNotFound.jreChoices="<value>"


######################################################################
# User Input Field - PATH
#
# Do not enable this setting.
#
### -W jrePath.PATH="<value>"


######################################################################
# User Input Field - YES_NO
#
# Do not enable this setting.
#
### -W continue.YES_NO="<value>"


######################################################################
# Setup Install Location
#
# The install location of the product. Specify a valid directory into which the
# product should be installed. If the directory contains spaces, enclose it in
# double-quotes. For example, to install the product to C:\Program Files\My
# Product, use
#
#    -P installLocation="C:\Program Files\My Product"
#
### -P bean5.installLocation="<value>"
```

3. **Run the install in custom silent mode**

    <u>Usage</u>:
    ```
    <Setup_Program> -options <full path to response file> -silent
    ```

    <u>For example:</u>
    (Solaris) `<MOUNT_PATH>/client1cd/client1cd/mgmtconsole/setup_s64.sh -options /tmp/reponse.txt -silent`
    (Windows) `<CDROM_DRIVE>\client1cd\client1cd\mgmtconsole\setup.exe -options C:\temp\reponse.txt -silent`

Removing/Uninstalling the Software

Similar to installing the software, uninstalling may be accomplished both interactively and in silent mode.

GUI Uninstallation

To remove the software interactively on Windows platforms, use the **Add/Remove Programs** utility in the Windows Control Panel.

For all platforms (including non-Windows platforms), GUI uninstallation can be performed by running the uninstall executable. This executable is available under the folder where the software was originally installed in a `_uninst*` subdirectory, where the `*` may be a short software name abbreviation (see the example below). UNIX customers must run the uninstall from one level above the root installation directory.

Usage:
```
<Installed software location>\_uninst*\<uninstall executable>
```

For example:

SAS Management Console:

(Solaris) `/usr/local/SAS/SASManagementConsole/_uninst/UninstSASMC` **(run the uninstall from** `/usr/local/SAS` **to remove the directories)**

(Windows) `C:\Program Files\SAS\SASManagementConsole\_uninst\UninstSASMC.exe`

SAS OLAP Server Monitor SAS MC Plug-in:

(Solaris) `usr/local/SAS/SASManagementConsole/_uninstOLAPMon/UninstOLAPMon` **(run the uninstall from** `/usr/local/SAS`**)**

(Windows) `C:\Program Files\SAS\SASManagementConsole\_uninstOLAPMon\UninstOLAPMon.exe`

Silent Uninstallation

To remove the software without requiring user input, use the following command:

Usage:
```
<Installed software location>\_uninst*\<uninstall executable> -silent
```

For example:

SAS Management Console:

(Solaris) `/usr/local/SAS/SASManagementConsole/_uninst/UninstSASMC –silent` **(run the uninstall from** `/usr/local/SAS`**)**

(Windows) `C:\Program Files\SAS\SASManagementConsole\_uninst\UninstSASMC -silent`

SAS OLAP Server Monitor SAS MC Plug-in:

(Solaris) `/usr/local/SAS/SASManagementConsole/_uninstOLAPMon/UninstOLAPMon –silent` **(run the uninstall from** `/usr/local/SAS`**)**

(Windows) `C:\Program Files\SAS\SASManagementConsole\_uninstOLAPMon\UninstOLAPMon -silent`

Upgrading the Software

If a 9.1 release of SAS software is detected by the installation process, the install will execute in update mode. Update mode presents a minimal set of the dialogs and will replace the original files with the updated files in the same location as they were originally installed; this is known as an upgrade-in-place installation. Side-by-side installation, or two copies of the software installed on the same machine is not supported. However, side-by-side installation on two different systems is supported. This is known as a staged installation. **SAS recommends using a staged installation approach for sites wishing to test and verify SAS Software prior to replacing production versions of a previous 9.1 SAS Software release.**

If you wish to alter the configuration of the software or do not want to run in update mode, you must first uninstall the previous release of the software using the appropriate uninstallation scripts. On Windows, you should uninstall using Add/Remove Programs, and on UNIX you should run the uninstallation script. Please see the section, "Removing/Uninstalling the Software" above for specific uninstallation instructions.

Note about Mid-Tier Installations

Because of the mechanism of deployment, most mid-tier installs present a full installation experience so that the Web applications can be redeployed. Those installs will still be running update mode, so the original files will be overwritten.

C. Installing/Running/Uninstalling SAS Software with a Different Java Version

WARNING: SAS *highly recommends* that you run your SAS Software using the Java version required for the software. You will be given the option of installing with a different version of Java, however SAS will not provide support for an alternate Java version that has not been subjected to full testing by SAS.

Installing the Software

If the installation does not detect the required Java version, it will give you a warning message similar to the warning above, and will allow you to either specify a Java you already have installed or exit the install so that you may install the SAS Private JRE or download and install a vendor Java Development Kit described in the above section entitled *Pre-Installation Steps*.

Running the Software

If you decide after installation that you would like to use a different Java, the following modification is needed.

The installer will create an INI file or shell script depending on the operating system in the same folder that you installed the software. The file will be named `<software>.ini` on Windows or just `<software>` on UNIX. For example, `sasmc.ini` (Windows) or `sasmc` (UNIX) would be used for SAS Management Console.

Within this file you will find a "CommandToExecute" entry. Update the value of this entry to contain the full path to the alternate java executable that you want to use. Be sure that `java.exe` (on Windows) or `java` (on UNIX) is included. Save your changes to this file.

Uninstalling the Software

If you have uninstalled the version of the Java that you originally installed the software with, you will also need to make a similar change for the uninstaller, which can be found in a `_uninst*` subdirectory of the software's installation directory, where the * may be a short software name abbreviation. The uninstall files that need to be edited are typically named `Uninst<software>.ini` on Windows and `Uninst<software>` on UNIX. For example, `UninstSASMC.ini` (Windows) or `UninstSASMC(UNIX)`.

NOTE: The SAS Private JRE should **not** be uninstalled until after all SAS products in the list above have been uninstalled. If the SAS Private JRE is accidentally uninstalled, re-install it in the same location. After re-installing the SAS Private JRE, you should be able to continue from where you left off.

D. Client and Mid-Tier Software Installations without Java

Starting the Install

The installation can be started in one of three modes:
- GUI (graphical interface)
- Console (text interface)
- Silent (interface disabled for unattended operation)

GUI Mode

GUI mode is the default for performing a stand-alone installation. The installation may be run in GUI mode from the SAS Software Navigator using a Software Index deployment. Use the SAS Software Navigator to locate and launch the installation you require by clicking on the appropriate link.

Console Mode

Console mode is an installation mode to allow installation from a text-only window, or console window. This mode is useful in circumstances where displaying the graphical user interface is not desirable (or possible). NOTE: Console mode is not supported on Windows platforms at this time.

To start an installation in Console mode, you must locate the installation program on the appropriate CD, and launch the install from a console or command-prompt using the `-console` option.

Usage:
```
<Setup_Program> -console
```

For example:
```
(Solaris) <MOUNT_PATH>/client1cd/client1cd/mgmtconsole/setup_s64.sh -console
```

Silent Mode

Silent mode is an optional installation mode that does not require user interaction. This is useful for administrators who need to deploy software to many machines across their enterprise in an unattended manner.

To use silent mode you must run the installation program with the appropriate command-line options.

- **Basic Silent Mode**

  Basic silent mode is the simplest usage, and is the recommended installation method. Basic silent mode installs the software using the default values for each response that would have occurred during an interactive install.

Usage:
```
<Setup_Program> -silent
```

For example:
```
(Solaris) <MOUNT_PATH>/client1cd/client1cd/mgmtconsole/setup_s64.sh -silent
(Windows) <CDROM_DRIVE>\client1cd\client1cd\mgmtconsole\setup.exe -silent
```

- **Custom Silent Mode**

  Custom silent mode allows unattended installation with custom responses to the questions that would normally have been asked during an interactive install. This is accomplished by providing the responses in a *response file* that is then passed to the install as a command-line option.

  Use custom silent mode as follows:

  1. Generate the template response file.

     Usage:
     ```
     <Setup_Program> -options-template <full path to response file>
     ```

     For example:
     ```
     (Solaris) <MOUNT_PATH>/client1cd/client1cd/mgmtconsole/setup_s64.sh
     -options-template /tmp/response.txt
     (Windows) <CDROM_DRIVE>\client1cd\client1cd\mgmtconsole\setup.exe
     -options-template C:\temp\response.txt
     ```

  2. Edit and save the response file.

     Edit the file you created in step #1 to indicate the default values to be used. A sample response file is included below:

     Note: *Yes/No fields in the response file are case-sensitive and should be entered in all lower case.*

     ```
     ##################################################################
     #
     # InstallShield Options File Template
     #
     # Wizard name: Setup
     # Wizard source: setup.jar
     # Created on: Thu Mar 27 16:13:19 EST 2003
     # Created by: InstallShield Options File Generator
     #
     # This file can be used to create an options file (i.e., response file) for the
     # wizard "Setup". Options files are used with "-options" on the command line to
     # modify wizard settings.
     #
     # The settings that can be specified for the wizard are listed below. To use
     # this template, follow these steps:
     #
     #    1. Enable a setting below by removing leading '###' characters from the
     #    line (search for '###' to find settings you can change).
     #
     #    2. Specify a value for a setting by replacing the characters '<value>'.
     #    Read each settings documentation for information on how to specify its
     #    value.
     #
     #    3. Save the changes to the file.
     #
     #    4. To use the options file with the wizard, specify -options <file-name>
     #    as a command line argument to the wizard, where <file-name> is the name
     #    of this options file.
     ```

```
#
####################################################################
#
# Setup Install Location
#
# The install location of the product. Specify a valid directory into which the
# product should be installed. If the directory contains spaces, enclose it in
# double-quotes. For example, to install the product to C:\Program Files\My
# Product, use
#
#    -P installLocation="C:\Program Files\My Product"
#
### -P bean5.installLocation="<value>"
```

3. **Run the install in custom silent mode**

    Usage:
    ```
    <Setup_Program> -options <full path to response file> -silent
    ```

    For example:
    (Solaris) `<MOUNT_PATH>/client1cd/client1cd/mgmtconsole/setup_s64.sh -options /tmp/reponse.txt -silent`
    (Windows) `<CDROM_DRIVE>\client1cd\client1cd\mgmtconsole\setup.exe -options C:\temp\reponse.txt -silent`

Removing/Uninstalling the Software

Similar to installing the software, uninstalling may be accomplished both interactively and in silent mode.

GUI Uninstallation

To remove the software interactively on Windows platforms, use the **Add/Remove Programs** utility in the Windows Control Panel.

For all platforms (including non-Windows platforms), GUI uninstallation can be performed by running the uninstall executable. This executable is available under the folder where the software was originally installed in a _uninst* subdirectory, where the * may be a short software name abbreviation (see the example below). UNIX customers must run the uninstall from one level above the root installation directory.

Usage:
```
<Installed software location>\_uninst*\<uninstall executable>
```

For example:

SAS Management Console:

(Solaris) `/usr/local/SAS/SASManagementConsole/_uninst/UninstSASMC` (run the uninstall from `/usr/local/SAS` to remove the directories)

(Windows) `C:\Program Files\SAS\SASManagementConsole\_uninst\UninstSASMC.exe`

SAS OLAP Server Monitor SAS MC Plug-in:

(Solaris) `/usr/local/SAS/SASManagementConsole/_uninstOLAPMon/UninstOLAPMon` **(run the uninstall from** `/usr/local/SAS`**)**

(Windows) `C:\Program Files\SAS\SASManagementConsole\_uninstOLAPMon \UninstOLAPMon.exe`

Silent Uninstallation

To remove the software without requiring user input, use the following command:

<u>Usage</u>:
`<Installed software location>\_uninst*\<uninstall executable> -silent`

<u>For example</u>:

SAS Management Console:

(Solaris) `/usr/local/SAS/SASManagementConsole/_uninst/UninstSASMC –silent` **(run the uninstall from** `/usr/local/SAS`**)**

(Windows) `C:\Program Files\SAS\SASManagementConsole\_uninst\UninstSASMC - silent`

SAS OLAP Server Monitor SAS MC Plug-in:

(Solaris)`/usr/local/SAS/SASManagementConsole/_uninstOLAPMon/UninstOLAPMon – silent` **(run the uninstall from** `/usr/local/SAS`**)**

(Windows) `C:\Program Files\SAS\SASManagementConsole\_uninstOLAPMon\UninstOLAPMon -silent`

Upgrading the Software

If a 9.1 release of SAS software is detected by the installation process, the install will execute in update mode. Update mode presents a minimal set of the dialogs and will replace the original files with the updated files in the same location as they were originally installed; this is known as an upgrade-in-place installation. Side-by-side installation, or two copies of the software installed on the same machine is not supported. However, side-by-side installation on two different systems is supported. This is known as a staged installation. **SAS recommends using a staged installation approach for sites wishing to test and verify SAS Software prior to replacing production versions of a previous 9.1 SAS Software release.**

If you wish to alter the configuration of the software or do not want to run in update mode, you must first uninstall the previous release of the software using the appropriate uninstallation scripts. On Windows, you should uninstall using Add/Remove Programs, and on UNIX you should run the uninstallation script. Please see the section, "Removing/Uninstalling the Software" above for specific uninstallation instructions.

Note about Mid-Tier Installations

Because of the mechanism of deployment, most mid-tier installs present a full installation experience so that the Web applications can be redeployed. Those installs will still be running update mode, so the original files will be overwritten.

E. Installing Compressed Archives

For the platforms where compressed archives are provided, instructions are provided below for each format type.

Compressed Zip Files

Once you have navigated to the software component you wish to install, click the Install link provided for OpenVMS in the table. In the **Save Archive** dialog, enter the location where the archive should be saved for later extraction. Use the Unzip utility to extract the files from the zip archive from the directory you saved it to. For example:

OpenVMS Alpha—`mcr disk:[directory] unzip <filename>.zip -d <dest_dir>`, where `disk:[directory]` is the location of `unzip.exe`.

To uninstall the software, simply delete the directory where the software was extracted.

Compressed Tar Files

Once you have navigated to the software component you wish to install, click the Install link provided for Tru64 UNIX or z/OS in the table. In the **Save Archive** dialog, enter a location where the archive should be saved for later extraction. Use the system TAR utility to extract the files from the tar archive from the directory you saved it to. For example:

```
tar –xvf <filename>.tar
```

To uninstall the software, simply delete the directory where the software was extracted.

F. Known Installation Issues

Platform:	Windows Terminal Servers
Symptom:	Warning messages in log.txt after uninstallation

The `log.txt` file may contain one or more entries similar to the following after uninstallation:

```
(Mar 4, 2004 4:16:39 PM), Uninstall.product.uninstall,
com.installshield.wizard.platform.win32.Win32ProductServiceImpl, wrn,
Installed Component with UID = 60cb1b9a85211d7a5c968f4d6f9493f8 was not
found in the VPD.
```

Attempting to reinstall will default into Update mode, because the install registry (VPD) was not properly updated during the uninstall.

Workaround:

Before installing or uninstalling software on Terminal Servers, always make sure that you have changed into install mode using the following command:

```
C:\> change user /install
```

Platform:	Windows
Symptom:	"Missing Shortcut" message displayed

After applying the Mid-Tier and Desktop Clients Service Pack, some of the start menu shortcuts for SAS desktop clients are changed to point to non-existent directories. When you attempt to run these shortcuts, the operating system will display a "Missing Shortcut" notification dialog.

Workaround:

If you are on Windows XP, the system will continue to search for the appropriate file and, if found, will allow you to correct the path by clicking on the **Fix It** button. Before doing so, make sure you verify the suggested path as appropriate.

Otherwise, you will need to right-click on the **Start** menu shortcut and select **Properties** from the menu. Change the path in the **Target** field on the **Shortcut** tab to point to the appropriate installation location of the target executable. Click **Apply** to save the changes.

Platform:	All Platforms
Symptom:	Empty log.txt file

After a successful installation an empty `log.txt` may remain in the software's installation directory.

Workaround:

This file should be deleted before uninstalling.

Platform:	UNIX Platforms
Symptom:	Uninstall directories remain after successful uninstallation

In some instances, after a successful uninstallation, the _uninst* directory will not be removed properly. This directory may be empty or may still contain a _jvm subdir and Uninst* file.

Workaround:

The _uninst* directory can be deleted safely if the uninstallation has been completed and no other files remain using the following command (assuming the Bourne Shell):

```
$ rm -rf _uninst*          /* where _uninst* is uninstall directory
```

Platform:	UNIX Platforms
Symptom:	'The scrollbar page increment is less than 1.'

During uninstalls on UNIX, the following message may display multiple times on the console:

```
Warning:
    Name: scrollbar
    Class: XmScrollBar
    The scrollbar page increment is less than 1.
```

This issue should not cause problems with the uninstall, and can be ignored.

Workaround:

None.

Platform:	Linux for Intel Architecture
Symptom:	Install hangs during file copy process

You may encounter a hang just after the progress bar appears when installing Client and Mid-tier products without Java (described in Section D, above) on Linux for Intel Architecture systems in GUI mode. This is an intermittent problem for which SAS has been unable to determine the cause. Further documentation can be found in SAS Note SN-013041.

Workaround:

The only known workaround is to kill the hung install and repeat the install until it no longer hangs. To do this, perform the following steps:

1. Determine the process ID of the currently running install program. The SAS Software Navigator will be a Java process, and the install program that needs to be terminated will be a child Java process of the SAS Software Navigator.

2. Using that process ID, kill the process with the following command:

```
$ kill -9 PID          /* where PID is the process ID
```

3. Click **Retry** in the SAS Software Navigator to attempt the install again.

Platform:	AIX
Symptom:	Numbers cannot be entered using numeric keypad

When installing on AIX, the numeric keypad cannot be used to enter numeric values even when NUM LOCK is activated.

Workaround:

Numeric values should be entered using the standard number keys on the keyboard.

Platform:	AIX
Symptom:	'tzmappings: Illegal format at near line 11.'

During installs on AIX, the following message may display on the console:

```
tzmappings: Illegal format at near line 11.
```

This issue should not cause problems with the install, and can be ignored.

Workaround:

None.

Platform:	AIX
Symptom:	'Error writing file'

Error writing file = 21 There may not be enough temporary disk space. Try using `-is:tempdir` to use a temporary directory on a partition with more disk space.

Workaround:

Take the following steps to workaround the problem (assuming the Bourne Shell):

```
$ env | grep MALLOCTYPE          /* remember current value if any */
$ export MALLOCTYPE=3.1
$                                /* run the install  here */
$ export MALLOCTYPE=<old value>  /* restore previous value, if any */
```

7 December 2007