Post-Installation Guide

SAS® Enterprise Miner™ 5.3

After completing your SAS Enterprise Miner 5.3 installation, follow these post-installation steps based upon your installation type:

- Personal Workstation, SAS Enterprise Miner Desktop, and SAS Data Mining for the Classroom below.
- SAS Enterprise Miner Multi-Machine Deployment on page 3.

Personal Workstation/SAS Enterprise Miner Desktop/SAS Data Mining for the Classroom

Note: *The path names in this document are based on the sample SAS Enterprise Miner plan. If this plan is used during the installation, the default configuration directory is named* `EMiner`*; if not; the configuration directory will be different and should be substituted for* `EMiner` *in the path.*

1. Stop the SAS services in the following order:

    Start → Programs → SAS → EMiner → Stop SAS Object Spawner

    Start → Programs → SAS → EMiner → Stop SAS Metadata Server

2. Apply the following hot fixes from the SAS Technical Support Hot Fix site to your system:

    E9BB61

    http://ftp.sas.com/techsup/download/hotfix/e9_sbcs_prod_list.html#E9BB61

    This fix for the SASMSG function is required by SAS Enterprise Miner 5.3. Apply this fix to the SAS Server image.

    E9BB91
    http://ftp.sas.com/techsup/download/hotfix/e9_sbcs_prod_list.html#E9BB91

    This fix will resolve a ClassFormatError exception found when executing the SAS Enterprise Miner score code where coded characters contain umlauts. Apply this fix to the SAS Server image.

    E9BC17
    http://ftp.sas.com/techsup/download/hotfix/e9_sbcs_prod_list.html#E9BC17

    This fix will resolve a problem where the SAS Enterprise Miner Java client hangs at the SAS Enterprise Miner splash screen after submitting log on to SAS Analytics Platform.

    Apply the latest SAS Enterprise Miner 5.3 hot fixes

    http://ftp.sas.com/techsup/download/hotfix/em_home.html

Apply the latest SAS Enterprise Guide 4.1 hot fixes

http://ftp.sas.com/techsup/download/hotfix/ent_guide41.html

Apply the latest SAS Analytics Platform 1.4 hot fixes

http://ftp.sas.com/techsup/download/hotfix/apcore_home.html

If you are running SAS Text Miner 3.2, apply the latest hot fixes

http://ftp.sas.com/techsup/download/hotfix/tmine_home.html

If you are running SAS Credit Scoring for Enterprise Miner 5.3, apply the latest hot fixes

http://ftp.sas.com/techsup/download/hotfix/credscem_home.html

3. Restart the SAS services in the following order:

   Start → Programs → SAS → EMiner → Start SAS Metadata Server

   Start → Programs → SAS → EMiner → Start SAS Object Spawner

4. If SAS Text Miner is also included in your deployment scenario, complete the post-installation tasks for SAS Text Miner by referring to the following Web page:

   http://support.sas.com/documentation/onlinedoc/txtminer/.

5. Merge the SAS Enterprise Miner Smart Object from the SAS Analytics Platform.

   Merging the SAS Enterprise Miner Smart Object is necessary in order for users to register SAS Enterprise Miner models to the SAS Metadata Server for integration with other applications. In order to perform the merge, you'll need to know the installation location of the SAS Enterprise Miner smartobject.xml file. The default location is:

   Windows: C:\Program Files\SAS\SASAPCore\apps\EnterpriseMiner\conf

   a. Start SAS Enterprise Miner by selecting

      Start → Programs → SAS → SAS Enterprise Miner 5.3 → Enterprise Miner.

      In the **Log On** window, select **Personal Workstation**, enter your **User Name** and **password**, and then click **Log On**. This step will deploy the SAS Foundation Services required by the merging of the Smart Object.

   b. If the SAS Management Console is not open, start it by selecting

      Start → Programs → SAS → SAS Management Console 9.1.

      Log in.

   c. Expand the following folders: **Environment Management → Foundation Services Manager → Analytics Platform** - **Foundation Services → Core Services**

      Note: *If SAS Management Console was open prior to starting SAS Enterprise Miner, you may need to right-click on **Foundation Services Manager** and select **Refresh** for the Analytics Platform service to appear.*

   d. Right-click on **Information Service** and select **Merge Service Configuration**.

   e. Navigate to the location noted above, select the **smartobject.xml** file, and then click **Open** to merge.

   When this step is finished, the SAS Enterprise Miner Smart Object merge will be complete.

6. Once these steps are complete, the metadata server and object spawner should be running and you should be able to launch SAS Enterprise Miner.

You can further customize your SAS Enterprise Miner environment. Please refer to the SAS Enterprise Miner online help for more information.

Note: *If you desire to produce Java Score code through SAS Enterprise Miner, please read and follow the platform-specific directions in SAS Note SN-014569 available at* `http://support.sas.com/kb/14/569.html`.

Enterprise Miner Multi-Machine Deployment

Note: *The path names in this document are based on the sample SAS Enterprise Miner plan. If this plan is used during the installation, the default configuration directory is named* `EMiner`*; if not; the configuration directory will be different and should be substituted for* `EMiner` *in the path.*

On the Metadata and Computational Servers

1. Stop the SAS Object Spawner and SAS Metadata Server.

SAS Object Spawner

To stop the SAS Object Spawner, perform the following steps:

On UNIX systems:

    a. Navigate to the following path:
       `<path-to-config-dir>/Lev1/SASMain/ObjectSpawner`

    b. Execute the script in the directory that stops the SAS Object Spawner.
       `./ObjectSpawner.sh stop`

On Windows systems:

From the Start menu, select **Programs → SAS → EMiner → Stop SAS Object Spawner**

SAS Metadata Server

To stop the SAS Metadata Server, perform the following steps:

On UNIX systems:

    a. Navigate to the following path:
       `<path-to-config-dir>/Lev1/SASMain/MetadataServer`

    b. Execute the script in the directory that stops the SAS Metadata Server.
       `./MetadataServer.sh stop`

On Windows systems:

From the Start menu, select
Programs → SAS → EMiner → Stop SAS Metadata Server

Note: *All currently active SAS sessions, daemons, spawners and servers must be terminated before applying hot fixes. If your installation has additional servers configured (such as a SAS OLAP Server), stop those at this time.*

2. Apply the following hot fixes from the SAS Technical Support Hot Fix site to your system:

Note: *All currently active SAS sessions, daemons, spawners and servers must be terminated before applying hotfixes.*

E9BB61
`http://ftp.sas.com/techsup/download/hotfix/e9_sbcs_prod_list.html#E9BB61`

This fix for the SASMSG function is required by SAS Enterprise Miner 5.3. Apply this fix to the SAS Server image.

E9BB91
http://ftp.sas.com/techsup/download/hotfix/e9_sbcs_prod_list.html#E9BB91

This fix will resolve a ClassFormatError exception found when executing the SAS Enterprise Miner score code where coded characters contain umlauts. Apply this fix to the SAS Server image.

E9BC09 (for AIX)
http://ftp.sas.com/techsup/download/hotfix/e9_sbcs_prod_list.html#E9BC09

This fix resolves performance problems and errors found when running very large SAS DATA STEP programs such as those generated by the Interactive-Grouping node in SAS Enterprise Miner. Apply this fix to the SAS server image.

E9BC17
http://ftp.sas.com/techsup/download/hotfix/e9_sbcs_prod_list.html#E9BC17

This fix will resolve a problem where the SAS Enterprise Miner Java client hangs at the SAS Enterprise Miner splash screen after submitting log on to SAS Analytics Platform.

Apply the latest SAS Enterprise Miner 5.3 hot fixes

http://ftp.sas.com/techsup/download/hotfix/em_home.html

Apply the latest SAS Enterprise Guide 4.1 hot fixes

http://ftp.sas.com/techsup/download/hotfix/ent_guide41.html

Apply the latest SAS Analytics Platform 1.4 hot fixes

http://ftp.sas.com/techsup/download/hotfix/apcore_home.html

If you are running SAS Text Miner 3.2, apply the latest hot fixes

http://ftp.sas.com/techsup/download/hotfix/tmine_home.html

If you are running SAS Credit Scoring for Enterprise Miner 5.3, apply the latest hot fixes

http://ftp.sas.com/techsup/download/hotfix/credscem_home.html

SAS Note SN-014569
http://support.sas.com/kb/14/569.html

This SAS Note details the platform-specific directions of modifying the SAS configuration file to add an environment variable for creating Java scoring code from SAS Enterprise Miner.

3. Restart the SAS servers in the following order:

    On Windows systems:
    Start → Programs → SAS → EMiner → Start Metadata Server

    Start → Programs → SAS → EMiner → Start Object Spawner

    On UNIX systems, to start the Metadata Server:

    a. Navigate to the following path:
        <path-to-config-dir>/Lev1/SASMain/MetadataServer
    b. Execute the script in the directory that starts the SAS Metadata Server.
        ./MetadataServer.sh start

On UNIX systems, to start the Object Spawner:

    a.   Navigate to the following path:
        `<path-to-config-dir>/Lev1/SASMain/ObjectSpawner`

    b.   Execute the script in the directory that starts the SAS Metadata Server.
        ./ObjectSpawner.sh start

Note: *If your installation has additional servers configured (such as a SAS OLAP Server), start those at this time.*

4.   Add additional users in the SAS Management Console for SAS Enterprise Miner. To do so, complete the following steps:

    a.   Start the SAS Metadata service if it has not already been started.

    b.   Log on to SAS Management Console by opening a metadata profile with your *administrative user* account (or with the *unrestricted user* account).

    c.   In the navigation panel of SAS Management Console, select **User Manager**.

    d.   Open the New User properties dialog box by selecting this path from the menu bar: **Actions → New → User**.

    e.   On the **General** tab, enter the user's name in the **Name** field. The other fields on this tab are optional.

    f.   On the **Logins** tab, do the following: Add a login that the metadata server can use to determine the user's metadata identity. This login must contain the fully qualified form of the user ID for the primary account. If this login will be used to provide access to other servers from applications that do not cache credentials, include the password and specify the **DefaultAuth** authentication domain.

    g.   On the **Groups** tab, define the user's group memberships. Each user can belong to multiple groups.

    h.   Click **OK** to save and close the user definition.

Note: *For more information, refer to the* SAS 9.1.3 Intelligence Platform Security Administration Guide *at* http://support.sas.com/documentation/configuration/bisecag.pdf.

Note: *If SAS Text Miner is also included in your deployment scenario, complete the post-installation tasks for SAS Text Miner by referring to the following web page:* http://support.sas.com/documentation/onlinedoc/txtminer/.

On the Mid-Tier Server

1.   Configure the SAS Analytics Platform server.

Specify the **sasadm** user account when prompted and be sure to check the box **Remember password** in order to store your credentials. If you do not store your credentials, then you cannot run the SAS Analytics Platform as a service or background process. Accept all the default values and settings.

On Windows platforms you can configure the server by selecting

Start → Programs → SAS → SAS Analytics Platform → AP Server Advanced Configuration.

On UNIX platforms you should run the **apserver** script in an XWindow session as follows:

      ./apserver config

Note: *On UNIX, the* **apserver** *script is typically found in the following location:*

      `<installdir>/SASAPCore/bin`

For more information about the SAS Analytics Platform, see the *Administrator's Guide for SAS Analytics Platform* at the following Web address:

http://support.sas.com/documentation/onlinedoc/apcore

2. Create a Foundation Service Manager Entry for the SAS Analytics Platform.

   To create an entry in the Foundation Services Manager with in the SAS Management Console, you must start and stop the SAS Analytics Platform.

   a. Start the SAS Analytics Platform.

      On Windows Platforms, you can start the server by selecting

      Start → Programs → SAS → SAS Analytics Platform → Start AP Server

      On UNIX platforms, you should start the server by running the **apserver** script, which is typically located at <installdir>/SASAPCore/bin. You should run the script in an XWindow session as follows:

      ./apserver start &

   b. Stop the SAS Analytics Platform.

      On Windows Platforms, you can start the server by selecting

      Start → Programs → SAS → SAS Analytics Platform → Stop AP Server

      On UNIX platforms, you should stop the server by running the **apserver** script as follows:

      ./apserver stop

3. Merge the SAS Enterprise Miner Smart Object from the SAS Analytics Platform.

   Merging the SAS Enterprise Miner Smart Object is necessary in order for users to register SAS Enterprise Miner models to the SAS Metadata Server for integration with other applications. In order to perform the merge, you'll need to know the installation location of the SAS Enterprise Miner smartobject.xml file. The default location is:

   Windows: C:\Program Files\SAS\SASAPCore\apps\EnterpriseMiner\conf

   UNIX: <installdir>/SASAPCore/apps/EnterpriseMiner/conf

   a. If the SAS Management Console is not open, start it by selecting

      Start → Programs → SAS → SAS Management Console 9.1.

      Log in.

   b. Expand the following folders: **Environment Management → Foundation Services Management → Analytics Platform** - **Foundation Services → Core Services**

      > **Note**: *If SAS Management Console was open prior to configuring the SAS Analytics Platform, you may need to right-click on **Foundation Service** and select **Refresh** for the Analytics Platform service to appear.*

   c. Right-click on **Information Service** and select **Merge Service Configuration**.

   d. Navigate to the location noted above, select the **smartobject.xml** file, and then click **Open** to merge.

   When this step is finished, the SAS Enterprise Miner Smart Object merge will be complete.

4. Apply the appropriate hot fixes.

   Apply the latest SAS Enterprise Miner 5.3 hot fixes

   http://ftp.sas.com/techsup/download/hotfix/em_home.html

   Apply the latest SAS Enterprise Guide 4.1 hot fixes

   http://ftp.sas.com/techsup/download/hotfix/ent_guide41.html

   Apply the latest SAS Analytics Platform 1.4 hot fixes

   http://ftp.sas.com/techsup/download/hotfix/apcore_home.html

   If you are running SAS Text Miner 3.2, apply the latest hot fixes

   http://ftp.sas.com/techsup/download/hotfix/tmine_home.html

5. Start the SAS Analytics Platform server.

   Note: *By default the SAS Analytics Platform is not installed as a Windows Service. Likewise, on UNIX, this process does not run as a background process by default. This means that once you close the terminal session that was used to start the server, the server will not continue to run. For information on how to install this as a Windows service or run on UNIX as a background process, refer to the* Administrator's Guide for SAS Analytics Platform *at the following Web address:* http://support.sas.com/documentation/onlinedoc/apcore.

   On Windows Platforms, you can start the server by selecting

   Start → Programs → SAS → SAS Analytics Platform → Start AP Server

   On UNIX platforms, you should start the server by running the **apserver** script, which is typically located at <installdir>/SASAPCore/bin. You can run the script in one of the following ways:

   ./apserver start

     or

   nohup ./apserver -headless start > *<installdir>*/SASAPCore/logs/ap.log 2>&1 &

   Note: *This command will start the* **apserver** *process as a background task so that you can exit your xterm session and leave the server running. It will also generate a log file instead of sending the output to* stdout. *For more information, please refer to "Installing and Running the SAS Analytics Platform as a UNIX Background Service" in the* Administrator's Guide for SAS Analytics Platform *at the following Web address:*

   http://support.sas.com/documentation/onlinedoc/apcore

6. * Optional - To customize your SAS Workspace Server for use by SAS Enterprise Miner, refer to the "Customizing SAS Enterprise Miner Metadata by Using the Enterprise Miner Plug-in for SAS Management Console" section in the "Administering SAS Enterprise Miner" chapter in the SAS 9.1.3 Intelligence Platform: Desktop Application Administration Guide at http://support.sas.com/documentation/configuration/bidaag.pdf for more information. You can go directly to this information in the SAS OnlineDoc version of this document here: http://support.sas.com/onlinedoc/913/getDoc/en/bidaag.hlp/a002760408.htm.

   Note: *If you make any modifications to the workspace server settings, the SAS Analytics Platform must be stopped and restarted in order to pick up the changes.*

On the Client

If You are Deploying Using Java Web Start

1. Install Sun's 1.4.2 JRE from the Sun Web site. The download link for Sun's archive of 1.4.2_09 is
   `http://java.sun.com/products/archive/j2se/1.4.2_09/index.html`. Select the **Download J2RE** link.

2. Launch the SAS Enterprise Miner 5.3 Java Web Start Client by pointing your Web browser to the SAS Analytics Platform server, using the port number of the embedded HTTP server. By default, this port is `6098`. Therefore, if your SAS Analytics Platform Server is running on a machine called **my.apserver** then you would enter the following URL: `http://my.apserver:6098`.

   You should then see the SAS Analytics Platform status page. Click the **Configuration** tab and then select the **Launch** link provided for SAS Enterprise Miner.

3. Enter the appropriate **User Name** and **password** when prompted.

   Install the SAS Enterprise Miner Tree Desktop Application if you have not previously done so and you want the capability to perform interactive training of decision trees within SAS Enterprise Miner. This application is a separate application and is not installed via the SAS Enterprise Miner files downloaded with Java Web Start. You can install this application from the **Client Side Components CD, Volume 1** (CLIENT1CD in your SAS Software Depot) or you can download the application from the following Web site:

   `http://www.sas.com/apps/demosdownloads/setupcat.jsp;jsessionid=6F246`
   `D6E6A988B749F080F15599DF96E.tomcat2?cat=Enterprise+Miner`

   Make sure to run the System Requirements Wizard prior to installing this application.

1 July 2008