SAS Drug Development 3.5_07

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SAS Drug Development 3.5_07, Installation Instructions

SAS Institute Inc., SAS Campus Drive, Cary, North Carolina 27513.

SDD 3.5_07 System Requirements

JRE

1.5 and 1.6.0_*n* (where *n* is not 14)

Data Server

- Oracle 10.2.0.4.0 (To obtain this software, contact http://oracle.com/)
  Note: This is a recommended patch from previous versions of SDD that supported Oracle 10.2.0.1.0.
- Solaris 10 (S64) or HP-UX (IPF)

Note: The database must be created with the following characteristics:

1. UTF8 for the National Character Set. The Database Character Set should be set to WE8ISO8859P1. However, if you are providing DBCS support, then the Database Character Set must be set to UTF8.
2. A block size of 8K or greater
3. The default compatibility option, i.e., compatibility (10.2.0.1.0)
4. The open_cursors startup parameter equal to the value of "300" or higher.
5. The recommended setting for the processes parameter should be set to at least 1000. This number may need to be adjusted according to the number of servers, users, hardware in your environment.

   Because Oracle typically uses only one database instance, Xythos WFS requires the creation of schemas, also known as users. WFS uses one schema for the Xythos Global Schema and at least one other schema for a Xythos Document Store.

The SAS system for Solaris (S64) or HP-UX (IPF)

- SAS 9.2 (Rev. 920_10w46)
- Base SAS
- SAS/AF
- SAS/CONNECT
- SAS/GRAPH
- Integration Technologies
- SAS/STAT

Note: *You must apply a security certificate to the web server in order to use the WebDAV LIBNAME statement feature.*

Note: *While this list shows the SAS products that SAS Drug Development requires, you may have others that support your programming environment, e.g., STAT for running statistical procedures.*

The SAS system for Windows

- SAS 9.2 (Rev. 920_10w46)
- Base SAS
- SAS/ACCESS Interface to PC Files
- SAS/CONNECT

This release of SAS Drug Development supports two encoding options for DBCS enabled systems. These options are UTF-8 and SJIS. *If you are running DBCS with SJIS encoding*, the following options must be installed/set from the Regional and Language Options window in the Control Panel:

- In the Supplemental language support section under the **Languages** tab, check the box **Install files for East Asian languages**. The **Windows Server 2003** CD is required to copy the necessary language files to the PC.
- In the Language for non-Unicode programs section under the **Advanced** tab, select **Japanese** from the drop-down list.

Patch Instructions

Note: This document is intended to assist an administrator in installing the patch of ***SAS Drug Development (SDD) 3.5_07*** from version ***3.5, 3.5_02, 3.5_03, 3.5_04, 3.5_05, 3.5_051 or 3.5_06***.

Prerequisites: The "Installation Instructions for Hot Fix A80007" should have been completed prior to completing this checklist.

Checklist A: "Backup of SDD Patch-Related Files"

Checklist A: "Backup of SDD Patch-Related Files"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
A1.	Log on to the web server as a user that can perform administrative functions on that machine.	Admin user is logged on to the web server.	
A2.	Stop the web server process(es) that is running SDD. ***Note***: In a clustered web server environment, all web server process(es) that are running SDD should be stopped.	The process(es) is stopped.	
A3.	Navigate to the directory containing the SDD configuration files. Example: **cd /apps/bea/user_projects/domains/sdddomain/sdd/conf**	Navigate to that directory.	
A4.	Back up the following files: **sdd-portal.propeties** Example: **cp sdd-portal.properties sdd-portal.properties.sdd35**	Files are copied as a backup.	
A5.	Navigate to the SDD applications directory. Example: **cd /apps/bea/user_projects/domains/sdddomain/applications**	Navigate to that directory.	

Checklist A: "Backup of SDD Patch-Related Files"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
A6.	Back up the following file: **sas-sdd-p21.ear** Example: **cp sas-sdd-p21.ear sas-sdd.p21.ear.sdd35**	File is copied as a backup.	
A7.	Navigate to the SDD directory containing the version information. Example: **cd /apps/bea/user_projects/domains/sdddomain/sdd**	Navigate to that directory.	
A8.	Back up the following file: **VERSION.txt** Example: **cp VERSION.txt VERSION.txt.sdd35**	File is copied as a backup.	
A9.	If you are performing an upgrade from **SDD 3.5_05** or later, then **skip to checklist B**. Otherwise, log on to the SAS server as a user that can perform administrative functions on that machine.	Admin user is logged on to the SAS server.	
A10.	Stop the Resource Supervisor process for SDD on the SAS server. Example: **/apps/ResourceSupervisor1/resourceSupervisor.sh stop**	The process is stopped.	
A11.	Stop the Object Spawner process for SDD on the SAS server. Example: **/apps/sas_servers/Lev1/ObjectSpawner/ObjectSpawner.sh stop**	The process is stopped.	
A12.	Navigate to the directory containing the SAS catalogs for SDD. Example: **cd /apps/sas9.2/SASFoundation/9.2/nls/en/sascfg**	Navigate to that directory.	

Checklist A: "Backup of SDD Patch-Related Files"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
A13.	Back up the following catalogs: **gdbdata.sas7bcat** **ibutils.sas7bcat** **sddtrans.sas7bcat** Example: **cp gdbdata.sas7bcat gdbdata.sas7bcat.sdd35** **cp ibutils.sas7bcat ibutils.sas7bcat.sdd35** **cp sddtrans.sas7bcat sddtrans.sas7bcat.sdd35** ***Note***: In a clustered environment, these steps must be performed on all SAS servers in the cluster.	Catalogs are copied as backups.	

Note: In a clustered environment, these steps must be performed on all web servers in the cluster.

Signature below indicates completion of Checklist A, items A1 – A13, above.

Name (print or type): _____ Sign-off : _____ Date:_____

Checklist B: "Copy the Patch Distribution"

Checklist B: "Copy the Patch Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B1.	Navigate to the ***SASHOME*** location on the web server. This location was defined in the installation of hot fix A80007. Example: **/apps/sas9.2/**	Navigate to that directory.	
B2.	Navigate to the **SASDrugDevelopmentMidTier/3.5/webserver** directory from within ***SASHOME***.	Navigate to that directory.	
B3.	Copy **sas-sdd-p21.ear** to the applications directory within the WebLogic domain that SDD is installed to. Example: **cp sas-sdd-p21.ear /apps/bea/user_projects/domains/sdddomain/applications**	The sas-sdd-p21.ear file is copied to the applications directory.	
B4.	Ensure that the permissions on that file match those of the other files in that directory.	The permissions are verified.	
B5.	Navigate up one directory so you are in ***SASHOME*****/SASDrugDevelopmentMidTier/3.5**.	Navigate to that directory.	
B6.	Copy **VERSION.txt** to the sdd directory within the WebLogic domain that SDD is installed to. Example: **cp VERSION.txt /apps/bea/user_projects/domains/sdddomain/sdd**	VERSION.txt is copied to the sdd directory.	
B7.	Ensure that the permissions on that file match those of the other files in that directory.	The permissions are verified.	

Checklist B: "Copy the Patch Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B8.	Navigate to ***SASHOME*/SASDrugDevelopmentMidTier/3.5/webserver/sdd/conf**.	Navigate to that directory.	
B9.	Copy the **sdd-portal.properties** file to the sdd/conf directory within the WebLogic domain where SDD is installed. Example: **cp sdd-portal.properties /apps/bea/user_projects/domains/sdddomain/sdd/conf**	The sdd-portal.properties file is copied to the sdd/conf directory.	
B10.	Navigate to the directory where the **sdd-portal.properties** file was just copied to (the destination location). Example: **cd /apps/bea/user_projects/domains/sdddomain/sdd/conf**	Navigate to that directory.	
B11.	Ensure that the permissions on that file match those of the other files in that directory.	The permissions are verified.	
B12.	Edit the **sdd-portal.propeties** file. Example: **vi sdd-portal.properties**	File is opened in vi editor.	
B13.	Modify the property so that the token **@APP_SHARE@** is replaced with the ***actual value*** of the sddshared directory: Example: **ibiomatics.sddshared.temp.dir.root=@APP_SHARE@** change this to: **ibiomatics.sddshared.temp.dir.root=/sddshared/sdd_shared** ***Note:*** *The above is just an* ***example*** *of what the modified property will look like. View the backup copy of this file to see what the true value of this property should be.*	The value of the property is modified.	

Checklist B: "Copy the Patch Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B14.	Save the changes made to the **sdd-portal.properties** file. ***Note***: In a clustered web server environment, steps B5 – B14 must be performed on all web servers in the cluster.	The file is saved with changes made.	
B15.	If you are running on a **HP-UX IPF** operating system and are performing an upgrade from **SDD 3.5_04** or earlier, proceed to step B16. Otherwise, **skip to step B20**.	Proceed to step B16 or step B20.	
B16.	Navigate to the root directory of the WebLogic domain where SDD is installed. Example: **cd /apps/bea/user_projects/domains/sdddomain**	Navigate to that directory.	
B17.	Edit the **sasEnv.sh** file.	File is in edit mode.	
B18.	Search for the **JAVA_VM** line and delete the **–d64** option from the Environment Variable. The line will look like the following after the edit: **JAVA_VM="-D${KILL_FLAG} -server"**	Edit is made.	
B19.	Save the file.	File is saved.	

Checklist B: "Copy the Patch Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B20.	If you are performing an upgrade from **SDD 3.5_05** or later, then **skip to checklist C**. Otherwise, transfer the following files from the web server to a temp directory on the SAS server: ▪ ***SASHOME*/SASDrugDevelopmentMidTier/3.5/sasserver/ResourceSupervisor/Registry/checkForProcessUpdateBeforeRun.xmlreg** ▪ ***SASHOME*/SASDrugDevelopmentMidTier/3.5/sasserver/ResourceSupervisor/Registry/startUpStatements.xmlreg** ▪ ***SASHOME*/SASDrugDevelopmentMidTier/3.5/sasserver/ResourceSupervisor/Registry/suppressInfoMsgs.xmlreg** ▪ ***SASHOME*/SASDrugDevelopmentMidTier/3.5/sasserver/ResourceSupervisor/dist/SCL/cimport.sas** ▪ ***SASHOME*/SASDrugDevelopmentMidTier/3.5/sasserver/ResourceSupervisor/dist/SCL/cimport.sh** ▪ ***SASHOME*/SASDrugDevelopmentMidTier/3.5/sasserver/ResourceSupervisor/dist/SCL/sdd.xpt**	The files are transferred.	
B21.	On the SAS server, navigate to the location where the files were transferred.	Navigate to that directory.	
B22.	Edit the **cimport.sh** file. Example: **vi cimport.sh**	File is opened in vi editor.	

Checklist B: "Copy the Patch Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B23.	Modify the property so that the token **@SAS_ROOT@** is replaced with the *actual value* of !SASROOT (root directory of SAS). Example: **@SAS_ROOT@/sas cimport.sas** change this to: **/apps/sas9.2/SASFoundation/9.2/sas cimport.sas** ***Note:*** *The above is just an* ***example*** *of what the modified property will look like.*	The value of the property is modified.	
B24.	Save the changes made to the **cimport.sh** file.	The file is saved with changes made.	
B25.	Ensure that the permissions on the **cimport.sh** and **cimport.sas** are such that they can be executed.	The permissions are verified.	
B26.	Execute the script **cimport.sh**. Example: **sh cimport.sh**	The system displays the log of the script. The log should indicate that the catalogs are updated.	
B27.	Navigate to the directory containing the SAS catalogs for SDD. Example: **cd /apps/sas9.2/SASFoundation/9.2/nls/en/sascfg**	Navigate to that directory.	

Checklist B: "Copy the Patch Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B28.	Change the permissions and ownership of the **gdbdata.sas7bcat, ibutils.sas7bcat** and **sddtrans.sas7bcat** catalogs so that they match those of the other files in that directory. Example: **chmod 644 gdbdata.sas7bcat ibutils.sas7bcat sddtrans.sas7bcat** **chown sastrust:staff gdbdata.sas7bcat ibutils.sas7bcat sddtrans.sas7bcat**	The permissions are modified.	
B29.	Start the Object Spawner process for SDD on the SAS server. Example: **/apps/sas_servers/Lev1/ObjectSpawner/ObjectSpawner.sh start** ***Note***: In a clustered SAS server environment, steps B21 – B29 must be performed on all SAS servers in the cluster.	The Object Spawner process is started.	
B30.	Start the ResourceSupervisor process for SDD on the SAS server. Example: **/apps/ResourceSupervisor1/resourceSupervisor.sh start**	The process is started.	
B31.	Change directories to the root of the Resource Supervisor. Example: **cd /apps/ResourceSupervisor1**	Navigate to that directory.	
B32.	If you are performing an upgrade from **3.5_04**, **skip to Checklist C**. Otherwise, proceed to step B33.	Proceed to Checklist C or step B33.	
B33.	Launch the SDD Registry by typing: **./registryEditor.sh** ***Note:*** You will need Exceed running to launch the Registry.	The SDD Registry opens.	

Checklist B: "Copy the Patch Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B34.	Navigate to the following location in the Registry: **/registry/system/sas/ibiomatics/SDD/portal/Applications**	The Applications branch is selected.	
B35.	Change the **Value** field for the **Key Name** JREVERSION to: **1.5.0+**	The Value for JREVERSION is modified.	
B36.	Select **File → Import** from the SDD Registry menu.	The Open window displays allowing you to select a file to import.	
B37.	In the Open window, navigate to the temp directory location where the SAS file was transferred to and select the **checkForProcessUpdateBeforeRun.xmlreg** file.	The file is selected in the File Name: field.	
B38.	Select **Open**.	The branches, keys, and values included in the checkForProcessUpdateBeforeRun.xmlreg file are imported into the SDD Registry.	
B39.	If you are performing an upgrade from **3.5_03**, **skip to step B47**. Otherwise, proceed to step B40.	Proceed to step B47 or step B40.	
B40.	Select **File → Import** from the SDD Registry menu.	The Open window displays allowing you to select a file to import.	
B41.	In the Open window, navigate to the temp directory location where the SAS file was transferred to and select the **suppressInfoMsgs.xmlreg** file.	The file is selected in the File Name: field.	
B42.	Select **Open**.	The branches, keys and values included in the suppressInfoMsgs.xmlreg file are imported into the SDD Registry.	
B43.	If you are performing an upgrade from **3.5_02**, **skip to step B47**. Otherwise, proceed to step B44.	Proceed to step B47 or step B44.	
B44.	Select **File → Import** from the SDD Registry menu.	The Open window displays allowing you to select a file to import.	
B45.	In the Open window, navigate to the temp directory location where the SAS file was transferred to and select the **startUpStatements.xmlreg** file.	The file is selected in the File Name: field.	

Checklist B: "Copy the Patch Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B46.	Select **Open**.	The branches, keys and values included in the startUpStatements.xmlreg file are imported into the SDD Registry.	
B47.	Select **File → Exit** from the SDD Registry menu.	The SDD Registry is closed.	

Signature below indicates completion of Checklist B, items B1 – B47, above.

Name (print or type): _____ Sign-off : _____ Date:_____

Checklist C: "DBCS Configuration"

Note: This checklist should only be executed if you are running DBCS with either SJIS or UTF-8 ***and*** upgrading from **SDD 3.5**. If you are upgrading from **SDD 3.5_02** or later, then you should **skip to Checklist D** as these steps were completed in previous installation instructions.

Checklist C: "DBCS Configuration"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
C1.	Edit the **sasv9_local.cfg** file found in !SASROOT. Example: **vi /apps/sas9.2/SASFoundation/9.2/sasv9_local.cfg**	The file is open for edit.	
C2.	Insert the following line to the end of the file: **-insert sashelp ('!SASROOT/nls/u8/sashelp')**	Line is added to the end of the file.	
C3.	Save the changes made to the **sasv9_local.cfg** file.	File is saved.	
C4.	If you are running DBCS with **UTF-8** encoding, **skip to step C8**. Otherwise, navigate to the ObjectSpawner.sh script found in your Lev1config. Example: **cd /apps/sas_servers/Lev1/ObjectSpawner**	Navigate to that directory.	
C5.	Edit the **ObjectSpawner.sh** script.	The file is open for edit.	
C6.	At the beginning of this file beneath the block of #'s representing comments, change the following locale variables to the following: **LANG=ja_JP.PCK** **LC_ALL=ja_JP.PCK** **LC_CTYPE= ja_JP.PCK** **export LANG** **export LC_ALL** **export LC_CTYPE**	Edits are made.	
C7.	Save the changes made to the **ObjectSpawner.sh** script.	File is saved.	

Checklist C: "DBCS Configuration"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
C8.	Restart the Object Spawner process for SDD on the SAS server. Example: **/apps/sas_servers/Lev1/ObjectSpawner/ObjectSpawner.sh restart** ***Note***: In a clustered SAS server environment, steps C1 - C8 must be performed on all SAS servers in the cluster.	The Object Spawner process is started.	
C9.	Start the ResourceSupervisor process for SDD on the SAS server if not running already. Example: **/apps/ResourceSupervisor1/resourceSupervisor.sh start**	The process is started.	
C10.	Change directories to the root of the Resource Supervisor. Example: **cd /apps/ResourceSupervisor1**	Navigate to that directory.	
C11.	Launch the SDD Registry by typing: **./registryEditor.sh**	The SDD Registry opens.	
C12.	Navigate to **registry/system/sas/ibiomatics/SASSessionManager** in the SDD Registry.	Branch is displayed in the SDD Registry.	
C13.	If this is a DBCS instance with SJIS encoding, change the *Value* field for the **encoding** *Key Name* to **sjis**	Value is changed from latin1 to sjis.	
C14.	If this is a DBCS instance with UTF-8 encoding, change the *Value* field for the **encoding** *Key Name* to **utf-8**	Value is changed from latin1 to utf-8.	
C15.	Select **File → Exit** from the SDD Registry menu.	The SDD Registry is closed.	

Checklist C: "DBCS Configuration"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
C16.	If you are running DBCS with **UTF-8** encoding, **skip to Checklist D**. Otherwise, return to the web server and navigate to the root of the WebLogic domain. Example: **cd /apps/bea/user_projects/domains/sdddomain**	Navigate to that directory.	
C17.	Edit the **start.sh** script.	File is in edit mode.	
C18.	At the beginning of this file, change the following locale variables to the following: **LANG=en_US.UTF-8** **LC_CTYPE= ja_JP.PCK** **export LANG** **export LC_CTYPE**	Edits are made.	
C19.	Save the changes made to the **start.sh** script.	File is saved.	
C20.	Edit the **sasEnv.sh** script.	File is in edit mode.	
C21.	Add the following options to the existing JAVA_OPTIONS line in this file. You only need to add these options to the first occurrence of the JAVA_OPTIONS found in the "${IS_SDD_SERVER}" = "true" condition. **-Dfile.encoding=UTF-8 -Duser.language=en**	Edits are made.	
C22.	Save the changes made to the **sasEnv.sh** script. ***Note***: In a clustered web server environment, steps C16 - C22 must be performed on all web servers in the cluster.	File is saved.	

Signature below indicates completion of Checklist C, items C1 – C22, above.

Name (print or type): _____ Sign-off : _____ Date:_____

Checklist D: "Update the SDD Database Schema"

***Note*:** If you are upgrading from **SDD 3.5_04** or later, then you should **skip to Checklist E** as these steps would have been executed in the **SDD 3.5_04** installation instructions. Otherwise, prior to running this checklist, Oracle patch 10.2.0.4.0 must be applied as indicated in the SDD 3.5_04 or later System Requirements. It is recommended that the database is backed up prior to executing this checklist to ensure data integrity.

Checklist D: "Update the SDD Database Schema"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
D1.	Log on to the data server using an Oracle administrator userid. This would be the userid that created the Oracle database that is used by SDD.	Logged on to the data server.	
D2.	Transfer the **oracle-sdd-upgrade-35_04.sql** file from the web server location below to a temp area on the data server that the Oracle administrator userid has access to. Example: **/apps/sas9.2/SASDrugDevelopmentMidTier/3.5/dataserver/oracle/upgrade**	File is transferred.	
D3.	Type **env** to make sure the ORACLE_SID variable is set to one used for SDD.	You should see ORACLE_SID value in the listing of environment variables.	
D4.	Navigate to the location that the .sql script was transferred to and type **sqlplus**	SQL*Plus is invoked and you are prompted for your username.	
D5.	Type the username for the SDD schema. Example: **sdds1**	You are prompted for the password for this username.	
D6.	Type the *password* for the username used in the previous step.	The `SQL>` command prompt displays.	
D7.	Type **start oracle-sdd-upgrade-35_04.sql**	The oracle-sdd-updgrade-35_04.sql script runs and you will see alter table and drop index statements.	
D8.	Type **quit** to close SQL*Plus.	Return to UNIX prompt.	
D9.	Type **exit** to log off the data server.	User is logged off the data server.	

Signature below indicates completion of Checklist D, items D1 – D9, above.

Name (print or type): _____ Sign-off : _____ Date:_____

Checklist E: "Redeploy the Application"

Checklist E: "Redeploy the Application"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
E1.	Return to the web server and navigate to the root of the WebLogic domain. Example: **cd /apps/bea/user_projects/domains/sdddomain**	Navigate to that directory.	
E2.	Start up the SDD web server process(es). ***Note***: In a clustered web server environment, all web server process(es) that are running SDD should be started.	Web server process is started.	
E3.	You must redeploy the EAR file to pick up the new SDD 3.5_07 codebase. Open an Internet Explorer window and go to **https://<*webservername.domain.com*>:<*admin-server-HTTPS-port-number*>/console**	The login page displays for the BEA console.	
E4.	Type in the userid and password to access the BEA console application.	Web browser displays the Welcome to BEA WebLogic Server Home page.	
E5.	In the left panel, select the ***SDD domain*** **> Deployments** (where *SDD domain* is the name of your WebLogic domain)	The Summary of Deployments page displays.	
E6.	Click **Lock & Edit** in the Change Center section in the upper left part of the screen.	The Summary of Deployments page displays in Edit mode.	
E7.	Select the check box next to the **sas-sdd-p21** application and click the **Update** button.	The Update Application Assistant page displays.	
E8.	Click the **Finish** button.	The Summary of Deployments page displays.	
E9.	Click on **Activate Changes** in the Change Center in the upper left corner.	Page refreshes with the message that the changes were activated.	
E10.	Log out of the console window (web browser) by clicking on the **Log Out** button in the upper right corner of the window.	You are logged out of the console.	
E11.	Stop the web server process(es) that is running SDD. ***Note***: In a clustered web server environment, all web server process(es) that are running SDD should be stopped.	The process(es) is stopped.	

Checklist E: "Redeploy the Application"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
E12.	Start up the SDD web server process(es). ***Note***: In a clustered web server environment, all web server process(es) that are running SDD should be started.	Web server process(es) is started.	

Signature below indicates completion of Checklist E, items E1 – E12, above.

Name (print or type): _____ Sign-off : _____ Date:_____