SAS Drug Development 4.3.1

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SAS Drug Development 4.3.1, Installation Instructions

Checklist A: *"Backup of Customized SDD Files"*

Note: This document is intended to assist an administrator in installing *SAS Drug Development (SDD) 4.3.1* from version *4.3*.

Prerequisites: All installation checklists for SDD 4.3 should have been completed prior to completing this checklist.

Checklist A: "Backup of Customized SDD Files"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***
A1.	Login to an admin PC.	Windows display appears.	
A2.	Using the putty tool, create an **ssh** connection from the admin PC to the web server and login as **webtrust**. Make sure the Enable X11 forwarding option is not set. Setting this option causes the web application to crash occasionally.	You're prompted for the password.	
A3.	Enter the webtrust *password*.	You're logged into web server.	
A4.	Use the **script** command to capture commands that are typed in the Unix window. The syntax is **script /var/staging_logs/<*servername*>_431upgrade.txt**	System should indicate script has started.	
A5.	If any customizations were made to the SDD 4.3 web application, these files should be copied to another location on this server. **Ex: cp /sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/web.xml /sfw/sdd43_custom**	Files are copied as a backup.	
A6.	Repeat **steps A1 – A5** for any additional sddservers.	Steps repeated as necessary.	

Signature below indicates completion of Checklist A, items A1 – A6, above.

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

Checklist B: *"Deploy the SDD 4.3.1 Distribution"*

Checklist B: "Deploy the SDD 4.3.1 Distribution"		**Corresponding Document:** *None*	
#	**Activity**	**Expected Results**	**Actual Results**
B1.	**Transfer Files** From the admin PC, download the **SDD 4.3.1** distribution from the SAS Hot Fix site. After the distribution has been downloaded, use the WinSCP2 tool to copy these files to **/sfw/installers** on the web server. Transfer these as binary files. **sdd-4.3.1.PROD.71.20130912.142315.zip** **R:\R&D\Installation\SDD_Setup_43\WebServer\ant-contrib-0.6.jar**	The files are transferred to the web server.	
B2.			
B3.	**Shutdown tcServers** Type **cd /sfw/tcServer**	Navigate to that directory.	
B4.	Type **./tcruntime-ctl.sh sddserver1 stop**	System displays: INFO Instance name: sddserver1 INFO Script directory: /apps/tcServer INFO tc Runtime location:/apps/tcServer INFO Instance base: /apps/tcServer INFO Binary dir: /apps/tcServer/tomcat-6.0.35.A.RELEASE INFO Runtime version: 6.0.35.A.RELEASE INFO Script version: 2.6.3.RELEASE Instance is running as PID=29796, shutting down... Instance is running PID=29796, sleeping for up to 60 seconds waiting for shutdown Instance is still running PID=29796, forcing a shutdown	
B5.	Type **ps –ef	grep webtrust**	You should not see the tcserver process running.	

Checklist B: "Deploy the SDD 4.3.1 Distribution"		Corresponding Document: *None*	
#	***Activity***	***Expected Results***	***Actual Results***
B6.	Type **cd sddserver1/logs**	Navigate to the /sfw/tcServer/sddserver1/logs directory.	
B7.	Delete or rename the **sdd_info.log** and **catalina.out** files.	Log files are deleted or renamed.	
B8.	Type **ls –al**	Verify that log files have been renamed or deleted and the .pid file has been deleted.	
B9.	Repeat **steps B3 – B8** for the remaining tcServers, including stopping the **sddserveradmin** tcServer.	There are no tcServer processes running.	
B10.			
B11.	**Copy ant-contrib-0.6.jar** Type **cd /home/webtrust/.ant/lib**	Navigate to that directory.	
B12.	Type **cp /sfw/installers/ant-contrib-0.6.jar .**	The JAR file is copied.	
B13.	Type **ls –al**	The ant-contrib-0.6.jar and the ant-junit.jar display.	
B14.			
B15.	**Unzip and Deploy the Build** Type **cd /home/webtrust/Installs**	Navigate to that directory.	
B16.	Type **rm –rf dist**	The dist directory is deleted.	
B17.	Type **ls –al**	Verify that the dist directory was deleted.	
B18.	Type **cp /sfw/installers/sdd-4.3.1.PROD.71.20130912.142315.zip .**	The SDD 4.3.1 binary is copied.	
B19.	Type **unzip -q sdd-4.3.1.PROD.71.20130912.142315.zip**	The contents of the zip file are extracted.	
B20.	Type **ls –al**	You will see a dist directory that was created in the previous step.	
B21.	Type **cd dist/install**	Navigate to the /home/webtrust/Installs/dist/install directory.	

Checklist B: "Deploy the SDD 4.3.1 Distribution"		**Corresponding Document:** *None*	
#	Activity	Expected Results	Actual Results

B22.	Type **ant clean**	System displays:
		
		Buildfile: /home/webtrust/Installs/dist/install/build.xml
		
		clean:
		  [delete] Deleting directory /sfw/tcServer/sddserveradmin/webapps/xythosadmin
		  [delete] Deleting directory /sfw/tcServer/sddserver1/webapps/sdd
		  [delete] Deleting directory /sfw/tcServer/sddserver2/webapps/sdd
		  [delete] Deleting directory /sfw/tcServer/sddserver3/webapps/sdd
		  [delete] Deleting directory /sfw/tcServer/sddserver4/webapps/sdd
		
		BUILD SUCCESSFUL
		Total time: 0 seconds	

Checklist B: "Deploy the SDD 4.3.1 Distribution"		**Corresponding Document:** *None*	
#	*Activity*	*Expected Results*	*Actual Results*

B23.	Type **ant deploy**	System displays:
		
		Buildfile: /home/webtrust/Installs/dist/install/build.xml
		
		deploy:
		
		deploy-tomcat-1:
		
		do-deploy:
		   [echo] Deploying to tcServer...
		   [echo] tcServer home = /sfw/tcServer
		   [echo] tcServer deployment =
		/sfw/tcServer/sddserver1/webapps/sdd
		   [copy] Copying 565 files to
		/sfw/tcServer/sddserver1/webapps/sdd
		
		deploy-tcserver-2:
		
		…
		
		deploy-tcserver-8:
		
		deploy-admin-server:
		   [echo] Configuring administration server
		/sfw/tcServer/sddserveradmin
		   [unzip] Expanding:
		/home/webtrust/Installs/dist/webapps/xythosadmin.war into
		/sfw/tcServer/sddserveradmin/webapp
		s/xythosadmin
		   [copy] Copying 2 files to
		/sfw/tcServer/sddserveradmin/webapps/xythosadmin/WEB-
		INF/lib
		   [copy] Copying 3 files to /sfw/tcServer/sddserveradmin
		   [copy] Copying 1 file to /sfw/tcServer/sddserveradmin/lib
		   [copy] Copying 1 file to
		/sfw/tcServer/sddserveradmin/webapps/xythosadmin/WEB-
		INF/classes
		
		deploy-admin-embedded:
		
		BUILD SUCCESSFUL
		Total time: 2 seconds	

B24.	If you are not installing or updating the JavaAPI, then **skip to step B29**. Otherwise, type **cd ../..**	Navigate to the /home/webtrust/Installs directory.	

#	Checklist B: "Deploy the SDD 4.3.1 Distribution"		Corresponding Document: *None*
#	*Activity*	*Expected Results*	*Actual Results*
B25.	Type **unzip sdd-java-api-server-1.6.zip**	The contents of the zip file are extracted.	
B26.	Type **ls -al**	You will see a sdd-java-api-server-16 directory that was created in the previous step.	
B27.	Type **cd sdd-java-api-server-1.6**	Navigate to that directory.	

#	Activity	Expected Results	Actual Results

Checklist B: "Deploy the SDD 4.3.1 Distribution" — **Corresponding Document:** *None*

#	*Activity*	*Expected Results*	*Actual Results*
B28.	Type **ant deploy**	System displays: Buildfile: build.xml deploy: [echo] User home = /home/webtrust deploy-server1: do-deploy: [echo] Deploying distribution to = /sfw/tcServer/sddserver1/webapps/sdd [copy] Copying 4 files to /sfw/tcServer/sddserver1/webapps/sdd/WEB-INF [copy] Copying /home/webtrust/Installs/sdd-java-api-server-1.2/WEB-INF/spring-config/services-config-RAPI.xml to /sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/spring-config/services-config-RAPI.xml [copy] Copying /home/webtrust/Installs/sdd-java-api-server-1.2/WEB-INF/lib/sas.hls.drug.api.jar to /sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/lib/sas.hls.drug.api.jar [copy] Copying /home/webtrust/Installs/sdd-java-api-server-1.2/WEB-INF/spring-config/services-remote-config-RAPI.xml to /sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/spring-config/services-remote-config-RAPI.xml [copy] Copying /home/webtrust/Installs/sdd-java-api-server-1.2/WEB-INF/lib/sas.hls.drug.api.server.jar to /sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/lib/sas.hls.drug.api.server.jar … deploy-server5: deploy-server6: deploy-server7: deploy-server8: BUILD SUCCESSFUL Total time: 1 seconds	

#	Activity	Expected Results	Actual Results
	Checklist B: "Deploy the SDD 4.3.1 Distribution"	**Corresponding Document:** *None*	
B29.	Repeat steps **B11-B28** for each physical server that has tcServers installed.	Additional tcServers are updated.	
B30.			
B31.	**Startup tcServer Admin Server** Type **cd /sfw/tcServer**	Navigate to that directory.	
B32.	Type **./tcruntime-ctl.sh sddserveradmin start**	System displays: INFO Instance name: sddserveradmin INFO Script directory: /sfw/tcServer INFO tc Runtime location:/sfw/tcServer INFO Instance base: /sfw/tcServer INFO Binary dir: /sfw/tcServer/tomcat-6.0.35.A.RELEASE INFO Runtime version: 6.0.35.A.RELEASE INFO Script version: 2.6.3.RELEASE Using CATALINA_BASE: /sfw/tcServer/sddserveradmin Using CATALINA_HOME: /sfw/tcServer/tomcat-6.0.35.A.RELEASE Using CATALINA_TMPDIR: /sfw/tcServer/sddserveradmin/temp Using JRE_HOME: /usr/bin/jdk/jdk1.6.0_21 Using CLASSPATH: /sfw/tcServer/tomcat-6.0.35.A.RELEASE/bin/bootstrap.jar Using CATALINA_PID: /sfw/tcServer/sddserveradmin/logs/tcserver.pid	

#	Activity	Expected Results	Actual Results
Checklist B: "Deploy the SDD 4.3.1 Distribution"		**Corresponding Document:** *None*	
B33.	Type **ps –ef | grep webtrust**	System displays: webtrust 3963 1 0 11:47 ? 00:01:42 /usr/bin/jdk/jdk1.6.0_21/bin/java -Djava.util.logging.config.file=/sfw/tcServer/sddserveradmin/conf/logging.properties -Xss192K -Xms1024M -Xmx1024M -XX:PermSize=320m -XX:MaxPermSize=320m -XX:NewSize=128m -XX:MaxNewSize=256m -XX:+UseConcMarkSweepGC -XX:-UseTLAB -XX:+DisableExplicitGC -XX:+HeapDumpOnOutOfMemoryError -Djava.util.logging.manager=com.springsource.tcserver.serviceability.logging.TcServerLogManager -Djava.endorsed.dirs=/sfw/tcServer/tomcat-6.0.35.A.RELEASE/endorsed -classpath /sfw/tcServer/tomcat-6.0.35.A.RELEASE/bin/bootstrap.jar -Dcatalina.base=/sfw/tcServer/sddserveradmin -Dcatalina.home=/sfw/tcServer/tomcat-6.0.35.A.RELEASE -Djava.io.tmpdir=/sfw/tcServer/sddserveradmin/temp org.apache.catalina.startup.Bootstrap start	
B34.	Type **cd sddserveradmin/logs**	Navigate to the /sfw/tcServer/sddserveradmin/logs directory.	

Checklist B: "Deploy the SDD 4.3.1 Distribution"		**Corresponding Document:** *None*	
#	***Activity***	***Expected Results***	***Actual Results***

B35.	Type **tail –1000 catalina.out**	System displays:
		
		Mar 26, 2012 10:21:56 AM
		org.apache.catalina.startup.Catalina load
		INFO: Initialization processed in 736 ms
		Mar 26, 2012 10:22:35 AM
		org.apache.catalina.startup.Catalina start
		INFO: Server startup in 39283 ms
		[2012-03-26T15:22:35Z] [Par..ing_41] Info
		ParameterMaster:308 Xythos WebFile Server
		Parameter Value Listing
		WebFile Server Version: 7.2.88.1020
		Server last reloaded at: 2012 03 26 10:21:56 EST
		Xythos.RunMode = XythosStorageServer
		Command Line or Init File Parameter Values
		  Xythos.Install=default
		  Xythos.ServerGroup=default
		  Xythos.BaseDBType=oracle
		  Xythos.BaseDBUserName=xgs
		
		Xythos.BaseJDBCDriverName=oracle.jdbc.OracleDriver
		………………………….
		Hosted Virtual Servers
		  default (default)
		
		…
		
		Mar 26, 2012 10:44:27 AM
		org.apache.catalina.startup.Catalina load
		INFO: Initialization processed in 729 ms
		Mar 26, 2012 10:44:35 AM
		org.apache.catalina.startup.Catalina start
		INFO: Server startup in 7734 ms	

B36.	Hit **Ctrl-C** to stop viewing this log file.	You no longer see the output of the log file.	
B37.			
B38.	**Startup tcServer sddservers** Type **cd /sfw/tcServer**	Navigate to that directory.	

#	Activity	Expected Results	Actual Results
	Checklist B: "Deploy the SDD 4.3.1 Distribution"		**Corresponding Document:** *None*
B39.	Type **./tcruntime-ctl.sh sddserver1 start**	System displays: INFO Instance name:　　sddserver1 INFO Script directory:　/sfw/tcServer INFO tc Runtime location:/sfw/tcServer INFO Instance base:　　/sfw/tcServer INFO Binary dir:　　　/sfw/tcServer/tomcat-6.0.35.A.RELEASE INFO Runtime version:　6.0.35.A.RELEASE INFO Script version:　2.6.3.RELEASE Using CATALINA_BASE:　/sfw/tcServer/sddserver1 Using CATALINA_HOME:　/sfw/tcServer/tomcat-6.0.35.A.RELEASE Using CATALINA_TMPDIR: /sfw/tcServer/sddserver1/temp Using JRE_HOME:　　/usr/bin/jdk/jdk1.6.0_21 Using CLASSPATH:　　/sfw/tcServer/tomcat-6.0.35.A.RELEASE/bin/bootstrap.jar Using CATALINA_PID: /sfw/tcServer/sddserver1/logs/tcserver.pid	
B40.	Type **ps –ef | grep webtrust**	System displays: webtrust 3963　1 0 11:47 ?　　00:01:42 /usr/bin/jdk/jdk1.6.0_21/bin/java -Djava.util.logging.config.file=/sfw/tcServer/sddserver1/conf/logging.properties -Xms1024m -Xmx1024m -XX:PermSize=320m -XX:MaxPermSize=320m -Xss160k -XX:NewSize=128m -XX:MaxNewSize=256m -XX:+UseConcMarkSweepGC -XX:-UseTLAB -XX:+DisableExplicitGC -Djava.util.logging.manager=com.springsource.tcserver.serviceability.logging.TcServerLogManager -Djava.endorsed.dirs=/sfw/tcServer/tomcat-6.0.35.A.RELEASE /endorsed -classpath /sfw/tcServer/tomcat- 6.0.35.A.RELEASE /bin/bootstrap.jar -Dcatalina.base=/sfw/tcServer/sddserver1 -Dcatalina.home=/sfw/tcServer/tomcat-6.0.35.A.RELEASE -Djava.io.tmpdir=/sfw/tcServer/sddserver1/temp org.apache.catalina.startup.Bootstrap start	

#	Activity	Expected Results	Actual Results
	Checklist B: "Deploy the SDD 4.3.1 Distribution"	**Corresponding Document:** *None*	
B41.	Type **cd sddserver1/logs**	Navigate to the /sfw/tcServer/sddserver1/logs directory.	
B42.	Type **tail –f sdd_info.log** *Note:* Depending on how fast your server is, you may need to type **tail -300 sdd_info.log**	You will see the contents of the log file while the server is starting up. Look for the following lines, indicating success start of process. 2013-09-06 15:30:16,692 | INFO | TCIRA | Starting Coyote HTTP/1.1 on http-8001 2013-09-06 15:30:16,701 | INFO | TCIRA | Server startup in 19635 ms 2013-09-06 15:30:24,990 | INFO | SDIRA | | | Starting Quartz Scheduler now, after delay of 10 seconds	
B43.	Hit **Ctrl-C** to stop viewing this log file.	You no longer see the output of the log file.	
B44.	Repeat **steps B38 – B43** to start up any additional sddservers.	Steps repeated as necessary.	
B45.	Hit **Ctrl-D** to stop the script command.	System indicates script stopped running.	
B46.	Type **exit**	You're logged off the web server.	

Signature below indicates completion of Checklist B, items B1 – B46, above.

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