



SAS Drug Development 4.5.3

*January 25, 2016
Upgrade Instructions*

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SAS Drug Development 4.5.3, Installation Instructions

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Checklist A: “Backup of Customized SDD Files”

Note: This document is intended to assist an administrator in installing *SAS Drug Development (SDD) 4.5.3* from version *4.5, 4.5.1* or *4.5.2*.

Prerequisites: All installation checklists for SDD 4.5 should have been completed prior to completing this checklist.

Checklist A: “Backup of Customized SDD Files”		Corresponding Document: <i>None</i>	
#	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 <i>password</i> .	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>_453upgrade.txt	System should indicate script has started.	
A5.	If any customizations were made to the SDD 4.5 web application, these files should be copied to another location on this server. Ex: cp /sso/sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/web.xml /sso/sfw/sdd45_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 4.5.3 Distribution”

Checklist B: “Deploy the SDD 4.5.3 Distribution”		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B1.	<p><u>Transfer Files</u></p> <p>From the admin PC, download the SDD 4.5.3 distribution from the SAS Hot Fix site. After the distribution has been downloaded, use the WinSCP2 tool to copy this file to /sso/sfw/installers on the web server. Transfer this as a binary file.</p> <p>sdd-4.5.3.PROD.4.20160104.135850.zip</p>	The file is transferred to the web server.	
B2.	<p><u>Shutdown tcServers</u></p> <p>Type cd /sso/sfw/tcServer</p>	Navigate to that directory.	
B3.	Type ./tcruntime-ctl.sh sddserver1 stop	<p>System displays:</p> <p>INFO Instance name: sddserver1 INFO Script directory: /sso/sfw/tcServer INFO tc Runtime location:/sso/sfw/tcServer INFO Instance base: /sso/sfw/tcServer INFO Binary dir: /sso/sfw/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</p>	
B4.	Type ps -ef grep webtrust	You should not see the tcserver process running.	
B5.	Type cd sddserver1/logs	Navigate to the /sso/sfw/tcServer/sddserver1/logs directory.	
B6.	Delete or rename the sdd_info.log and catalina.out files.	Log files are deleted or renamed.	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B7.	Type ls -al	Verify that log files have been renamed or deleted and the .pid file has been deleted.	
B8.	Repeat steps B2 – B7 for the remaining tcServers, including stopping the sddserveradmin tcServer. Repeat this for each physical server that has tcServers installed.	There are no tcServer processes running.	
B9.	Unzip and Deploy the Build Type cd /home/webtrust/Installs	Navigate to that directory.	
B10.	Type rm -rf dist	The dist directory is deleted.	
B11.	Type ls -al	Verify that the dist directory was deleted.	
B12.	Type cp /sfw/installers/sdd-4.5.3.PROD.4.20160104.135850.zip .	The SDD 4.5.3 binary is copied.	
B13.	Type unzip -q sdd-4.5.3.PROD.4.20160104.135850.zip	The contents of the zip file are extracted.	
B14.	Type ls -al	You will see a dist directory that was created in the previous step.	
B15.	Type cd dist/install	Navigate to the /home/webtrust/Installs/dist/install directory.	
B16.	Type ant clean	System displays: Buildfile: /home/webtrust/Installs/dist/install/build.xml clean: [delete] Deleting directory /sso/sfw/tcServer/sddserveradmin/webapps/xythosadmin [delete] Deleting directory /sso/sfw/tcServer/sddserver1/webapps/sdd [delete] Deleting directory /sso/sfw/tcServer/sddserver2/webapps/sdd [delete] Deleting directory /sso/sfw/tcServer/sddserver3/webapps/sdd [delete] Deleting directory /sso/sfw/tcServer/sddserver4/webapps/sdd BUILD SUCCESSFUL Total time: 0 seconds	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B17.	Type ant deploy	<pre> System displays: Buildfile: /home/webtrust/Installs/dist/install/build.xml deploy: deploy-tomcat-1: do-deploy: [echo] Deploying to tcServer... [echo] tcServer home = /sso/sfw/tcServer [echo] tcServer deployment = /sso/sfw/tcServer/sddserver1/webapps/sdd [copy] Copying 565 files to /sso/sfw/tcServer/sddserver1/webapps/sdd deploy-tcserver-2: ... deploy-tcserver-8: deploy-admin-server: [echo] Configuring administration server /sso/sfw/tcServer/sddserveradmin [unzip] Expanding: /home/webtrust/Installs/dist/webapps/xythosadmin.war into /sso/sfw/tcServer/sddserveradmin/webapp s/xythosadmin [copy] Copying 2 files to /sso/sfw/tcServer/sddserveradmin/webapps/xythosadmin/WE B-INF/lib [copy] Copying 3 files to /sso/sfw/tcServer/sddserveradmin [copy] Copying 1 file to /sso/sfw/tcServer/sddserveradmin/lib [copy] Copying 1 file to /sso/sfw/tcServer/sddserveradmin/webapps/xythosadmin/WE B-INF/classes deploy-admin-embedded: BUILD SUCCESSFUL Total time: 2 seconds </pre>	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B18.	If you are not installing or updating the JavaAPI, then skip to step B24 . Otherwise, type cd ../../ .	Navigate to the /home/webtrust/Installs directory.	
B19.	Type unzip sdd-java-api-server-1.7.1.zip	The contents of the zip file are extracted.	
B20.	Type ls -al	You will see an sdd-java-api-server-1.7.1 directory that was created in the previous step.	
B21.	Type cd sdd-java-api-server-1.7.1	Navigate to that directory.	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B22.	Type ant deploy	System displays: Buildfile: build.xml deploy: [echo] User home = /home/webtrust deploy-server1: do-deploy: [echo] Deploying distribution to = /sso/sfw/tcServer/sddserver1/webapps/sdd [copy] Copying 4 files to /sso/sfw/tcServer/sddserver1/webapps/sdd/WEB-INF [copy] Copying /home/webtrust/Installs/sdd-java-api-server-1.7.1/WEB-INF/spring-config/services-config-RAPL.xml to /sso/sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/spring-config/services-config-RAPL.xml [copy] Copying /home/webtrust/Installs/sdd-java-api-server-1.7.1/WEB-INF/lib/sas.hls.drug.api.jar to /sso/sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/lib/sas.hls.drug.api.jar [copy] Copying /home/webtrust/Installs/sdd-java-api-server-1.7.1/WEB-INF/spring-config/services-remote-config-RAPL.xml to /sso/sfw/tcServer/sddserver1/webapps/sdd/WEB-INF/spring-config/services-remote-config-RAPL.xml [copy] Copying /home/webtrust/Installs/sdd-java-api-server-1.7.1/WEB-INF/lib/sas.hls.drug.api.server.jar to /sso/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	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B23.	Repeat steps B9 - B22 for each physical server that has tcServers installed.	Additional tcServers are updated.	
B24.	<u>Startup tcServer Admin Server</u> Type cd /sso/sfw/tcServer	Navigate to that directory.	
B25.	Type ./tcruntime-ctl.sh sddserveradmin start	System displays: INFO Instance name: sddserveradmin INFO Script directory: /sso/sfw/tcServer INFO tc Runtime location:/sso/sfw/tcServer INFO Instance base: /sso/sfw/tcServer INFO Binary dir: /sso/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: /sso/sfw/tcServer/sddserveradmin Using CATALINA_HOME: /sso/sfw/tcServer/tomcat-6.0.35.A.RELEASE Using CATALINA_TMPDIR: /sso/sfw/tcServer/sddserveradmin/temp Using JRE_HOME: /usr/bin/jdk/jdk1.6.0_35 Using CLASSPATH: /sso/sfw/tcServer/tomcat-6.0.35.A.RELEASE/bin/bootstrap.jar Using CATALINA_PID: /sso/sfw/tcServer/sddserveradmin/logs/tcserver.pid	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B26.	Type ps -ef grep webtrust	<p>System displays:</p> <pre>webtrust 3963 1 0 11:47 ? 00:01:42 /usr/bin/jdk/jdk1.6.0_35/bin/java - Djava.util.logging.config.file=/sso/sfw/tcServer/sddserve radmin/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.s erviceability.logging.TcServerLogManager - Djava.endorsed.dirs=/sso/sfw/tcServer/tomcat- 6.0.35.A.RELEASE/endorsed -classpath /sso/sfw/tcServer/tomcat- 6.0.35.A.RELEASE/bin/bootstrap.jar - Dcatalina.base=/sso/sfw/tcServer/sddserveradmin - Dcatalina.home=/sso/sfw/tcServer/tomcat- 6.0.35.A.RELEASE - Djava.io.tmpdir=/sso/sfw/tcServer/sddserveradmin/temp org.apache.catalina.startup.Bootstrap start</pre>	
B27.	Type cd sddserveradmin/logs	<p>Navigate to the /sso/sfw/tcServer/sddserveradmin/logs directory.</p>	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B28.	Type tail -1000 catalina.out	<p>System displays:</p> <pre> 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 Xyθος WebFile Server Parameter Value Listing WebFile Server Version: 7.2.88.1020 Server last reloaded at: 2012 03 26 10:21:56 EST Xyθος.RunMode = XyθοςStorageServer Command Line or Init File Parameter Values Xyθος.Install=default Xyθος.ServerGroup=default Xyθος.BaseDBType=oracle Xyθος.BaseDBUserName=xgs Xyθος.BaseJDBCDriverName=oracle.jdbc.OracleDrive r 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 </pre>	
B29.	Hit Ctrl-C to stop viewing this log file.	You no longer see the output of the log file.	
B30.	<p><u>Startup tcServer sddservers</u></p> <p>Type cd /sso/sfw/tcServer</p>	Navigate to that directory.	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B31.	Type <code>./tcruntime-ctl.sh sddserver1 start</code>	<p>System displays:</p> <pre> INFO Instance name: sddserver1 INFO Script directory: /sso/sfw/tcServer INFO tc Runtime location:/sso/sfw/tcServer INFO Instance base: /sso/sfw/tcServer INFO Binary dir: /sso/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: /sso/sfw/tcServer/sddserver1 Using CATALINA_HOME: /sso/sfw/tcServer/tomcat-6.0.35.A.RELEASE Using CATALINA_TMPDIR: /sso/sfw/tcServer/sddserver1/temp Using JRE_HOME: /usr/bin/jdk/jdk1.6.0_35 Using CLASSPATH: /sso/sfw/tcServer/tomcat-6.0.35.A.RELEASE/bin/bootstrap.jar Using CATALINA_PID: /sso/sfw/tcServer/sddserver1/logs/tcserver.pid </pre>	
B32.	Type <code>ps -ef grep webtrust</code>	<p>System displays:</p> <pre> webtrust 3963 1 0 11:47 ? 00:01:42 /usr/bin/jdk/jdk1.6.0_35/bin/java - Djava.util.logging.config.file=/sso/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=/sso/sfw/tcServer/tomcat-6.0.35.A.RELEASE/endorsed -classpath /sso/sfw/tcServer/tomcat-6.0.35.A.RELEASE /bin/bootstrap.jar - Dcatalina.base=/sso/sfw/tcServer/sddserver1 - Dcatalina.home=/sso/sfw/tcServer/tomcat-6.0.35.A.RELEASE - Djava.io.tmpdir=/sso/sfw/tcServer/sddserver1/temp org.apache.catalina.startup.Bootstrap start </pre>	

Checklist B: "Deploy the SDD 4.5.3 Distribution"		Corresponding Document: <i>None</i>	
#	Activity	Expected Results	Actual Results
B33.	Type cd sddserver1/logs	Navigate to the /sso/sfw/tcServer/sddserver1/logs directory.	
B34.	Type tail -f sdd_info.log <i>Note:</i> 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	
B35.	Hit Ctrl-C to stop viewing this log file.	You no longer see the output of the log file.	
B36.	Repeat steps B30 – B35 to start up any additional sddservers. Repeat this for each physical server that has tcServers installed.	Steps repeated as necessary.	
B37.	Hit Ctrl-D to stop the script command.	System indicates script stopped running.	
B38.	Type exit	You're logged off the web server.	

Signature below indicates completion of Checklist B, items B1 – B38, above.

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