

## SAS Drug Development 4.1.1

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## SAS Drug Development 4.1.1, 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) 4.1.1 from version 4.1.

Prerequisites: All installation checklists for SDD 4.1 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.	Start Xming by selecting Start $\rightarrow$ Programs $\rightarrow$ Xming $\rightarrow$ Xming.	Xming starts and you see an icon on the PC taskbar.	
	<i>Note:</i> Exceed was having some display issues with some third party applications, so we recommend using Xming.		
A3.	Using the putty tool, create an <b>ssh</b> connection from the admin PC to the web server and login as <b>webtrust</b> .	You're prompted for the password.	
	Make sure the Enable X11 forwarding option is not set. Setting this option causes the web application to crash occasionally.		
A4.	Enter the webtrust <i>password</i> .	You're logged into web server.	
A5.	Use the <b>script</b> command to capture commands that are typed in the Unix window. The syntax is <b>script</b> /var/staging_logs/< <i>servername</i> >_411upgrade.txt	System should indicate script has started.	
A6.	If any customizations were made to the SDD 4.1 web application, these files should be copied to another location on this server. Ex: cp /sfw/tcServer/sddserver1/webapps/sdd/WEB-	Files are copied as a backup.	
	INF/web.xml /sfw/sdd41_custom		
A7.	Repeat steps A1 - A6 for any additional sddservers.	Steps repeated as necessary.	

Signature below indicates completion of Checklist A, items A1 – A7, above.

Name (print or type):	Sign-off :	Date:
		2400

## Checklist B: "Deploy the SDD 4.1.1 Distribution"

Check	klist B: "Deploy the SDD 4.1.1 Distribution"	Corresponding Document: None	
#	Activity	Expected Results	Actual Results
B1.	<u>Transfer Files</u>	The files are transferred to the web server.	
	From the admin PC, use the WinSCP2 tool to copy the following files from <b>R:\R&amp;D\Installation\SDD_Setup_41\WebServer</b> to /sfw/installers on web server. Transfer this as a binary file.		
	ant-contrib-1.0b3.jar		
B2.	From the admin PC, download the <b>SDD 4.1.1</b> distribution from the SAS Hot Fix site. After the distribution has been downloaded, use the WinSCP2 tool to copy the file to /sfw/installers on the web server. Transfer this as a binary file.	The file is transferred to the web server.	
	sdd-4.1.1.PROD.140.20120815.164617.zip		
B3.			
B4.	Shutdown tcServers	Navigate to that directory.	
	Type cd /sfw/tcServer		

Checklist B: "Deploy the SDD 4.1.1 Distribution"		Corresponding Document: None	
#	Activity	Expected Results	Actual Results
B5.	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	
B6.	Type <b>ps</b> –ef   grep webtrust	You should not see the tcserver process	
		running.	
B7.	Type cd sddserver1/logs	Navigate to the /sfw/tcServer/sddserver1/logs	
		directory.	
B8.	Delete or rename the <b>sdd.log</b> and <b>catalina.out</b> files.	Log files are deleted or renamed.	
B9.	Type <b>ls –al</b>	Verify that log files have been renamed or	
		deleted and the .pid file has been deleted.	
B10.	Repeat <b>steps B4 – B9</b> for the remaining tcServers, including stopping the <b>sddserveradmin</b> tcServer.	There are no tcServer processes running.	
B11.			
B12.	Prepare SDD Image for Install	User is webtrust and is in the	
		/home/webtrust/.ant/lib directory.	
	Type cd /home/webtrust/.ant/lib		
B13.	Type cp /sfw/installers/ant-contrib-1.0b3.jar .	JAR file is copied.	
B14.	Type <b>ls –al</b>	Verify that the ant-contrib-1.0b3.jar file was copied.	
B15.	Repeat steps <b>B12-B14</b> for each physical server that has tcServers installed.	The ant-contrib-1.0b3.jar file is copied to all web servers.	

Check	klist B: "Deploy the SDD 4.1.1 Distribution"	Corresponding Doct	ument: None
#	Activity	Expected Results	Actual Results
B16.			
B17.	<b>Unzip and Deploy the Build</b>	Navigate to that directory.	
	Type cd /home/webtrust/Installs		
B18.	71	The dist directory is deleted.	
B19.	Type <b>ls</b> –al	Verify that the dist directory was deleted.	
B20.		The SDD 4.1.1 binary is copied.	
	4.1.1.PROD.140.20120815.164617.zip .		
B21.	Type unzip sdd-4.1.1.PROD.140.20120815.164617.zip	The contents of the zip file are extracted.	
B22.	Type <b>ls –al</b>	You will see a dist directory that was created	
		in the previous step.	
B23.	Type cd dist/install	Navigate to the	
		/home/webtrust/Installs/dist/install directory.	
B24.	Type ant clean	System displays:	
		Buildfile: build.xml	
		clean-tomcat:	
		clean-tcserver:	
		[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	
		clean:	
		BUILD SUCCESSFUL	
		Total time: 0 seconds	

Checklist B: "Deple	oy the SDD 4.1.1 Distribution"	Corresponding D	Ocument: None
#	Activity	Expected Results	Actual Results
B25. Type ant de	ploy	System displays:	
		Buildfile: build.xml	
		deploy-tomcat:	
		deploy-tcserver:	
		deploy-tcserver-1:	
		do-deploy-tcserver: [echo] Deploying to tcServer [echo] tcServer home = /sfw/tcServer [echo] tcServer deployment = /sfw/tcServer/sddserver1/webapps/sdd [copy] Copying 536 files to /sfw/tcServer/sddserver1/webapps/sdd	
		deploy-tcserver-2:	
		do-deploy-tcserver: [echo] Deploying to tcServer [echo] tcServer home = /sfw/tcServer [echo] tcServer deployment = /sfw/tcServer/sddserver2/webapps/sdd [copy] Copying 536 files to /sfw/tcServer/sddserver2/webapps/sdd	
		deploy-tcserver-5:	
		deploy-tcserver-6:	
		deploy-tcserver-7:	
		deploy-tcserver-8:	
		deploy: [echo] User home = /home/webtrust	
		BUILD SUCCESSFUL Total time: 2 seconds	

Checklist B: "Deploy the SDD 4.1.1 Distribution"		Corresponding Document: None	
#	Activity	Expected Results	Actual Results
B26.	If you are not updating the JavaAPI, then skip to step B31.	Navigate to the /home/webtrust/Installs	
	Otherwise, type <b>cd/</b>	directory.	
B27.	Type unzip sdd-java-api-server-1.2.zip	The contents of the zip file are extracted.	
B28.	Type <b>ls -al</b>	You will see a sdd-java-api-server-1.2	
		directory that was created in the previous	
		step.	
B29.	Type cd sdd-java-api-server-1.2	Navigate to that directory.	

#         Activity         Expected Results         Actual Results           B30.         Type ant deploy         System displays:         Buildifie: build.xml         Buildifie: build.x	Checl	klist B: "Deploy the SDD 4.1.1 Distribution"	Corresponding Do	cument: None
Buildfile: build.xml         Buildfile: build.xml         deploy:         [ccho] User home = /home/webtrust         deploy:server1:         do-deploy:         [ceho] User home = /home/webtrust         deploy-server1:         do-deploy:         [ceho] User home = /home/webtrust         deploy-server2:         do-deploy:         [ceho] User home = /home/webtrust         deploy-server3:         deploy-server4:         deploy-server5:         deploy-server6:         BUILD SUCCESSPUL         Total time: 0 seconds         tcServers installed.<	#	Activity	Expected Results	Actual Results
[echo] User home = /home/webtrust         deploy-server1:         do-deploy:         ehol Deploying distribution to =         /sfw/teServer/sddserver1/webapps/sdd         [copy] Copying 4 files to         /sfw/teServer/sddserver1/webapps/sdd/WEB-INF         do-deploy:         [echo] Deploying distribution to =         /sfw/teServer/sddserver2/webapps/sdd/WEB-INF         do-deploy:         [echo] Deploying distribution to =         /sfw/teServer/sddserver2/webapps/sdd/WEB-INF         /do-deploy:         [echo] Deploying distribution to =         /sfw/teServer/sddserver2/webapps/sdd         [copy] Copying 4 files to         /sfw/teServer/sddserver2/webapps/sdd/WEB-INF            /deploy-server5:         deploy-server5:         deploy-server6:         deploy-server7:         deploy-server8:         BUILD SUCCESSFUL         Total im:: 0 seconds         B31.         Repeat steps B17-B30 for each physical server that has         tcServers installed.         B32.	B30.	Type <b>ant deploy</b>	Buildfile: build.xml	
B31.       Repeat steps B17-B30 for each physical server that has teServer is stalled.         B32.       Image: Comparison of the server			[echo] User home = /home/webtrust deploy-server1:	
B31.       Repeat steps B17-B30 for each physical server that has tcServers installed.       do-deploy: [echo] Deploying distribution to = //sfw/tcServer/sddserver2/webapps/sdd [copy] Copying 4 files to //sfw/tcServer/sddserver2/webapps/sdd/WEB-INF          deploy-server5: deploy-server6: deploy-server7: deploy-server7: deploy-server8: BUILD SUCCESSFUL Total time: 0 seconds         B31.       Repeat steps B17-B30 for each physical server that has tcServers installed.			/sfw/tcServer/sddserver1/webapps/sdd [copy] Copying 4 files to /sfw/tcServer/sddserver1/webapps/sdd/WEB-INF	
B31.       Repeat steps B17-B30 for each physical server that has tcServers installed.         B32.       Image: Comparison of the comp				
B31.       Repeat steps B17-B30 for each physical server that has tcServers installed.       Additional tcServers are updated.         B32.       Image: Comparison of the compariso			[echo] Deploying distribution to = /sfw/tcServer/sddserver2/webapps/sdd [copy] Copying 4 files to	
deploy-server7:       deploy-server8:         BUILD SUCCESSFUL       BUILD SUCCESSFUL         Total time: 0 seconds       Total time: 0 seconds         B31.       Repeat steps B17-B30 for each physical server that has tcServers installed.         B32.       Image: Comparison of the second server that has tcServers are updated.				
B31.     Repeat steps B17-B30 for each physical server that has tcServers installed.       B32.     Image: Constant of the second server that has the second server the second server that has the second serve			deploy-server6:	
BUILD SUCCESSFUL Total time: 0 seconds       B31.     Repeat steps B17-B30 for each physical server that has tcServers installed.     Additional tcServers are updated.       B32.     Image: Comparison of the second server that has				
B31.       Repeat steps B17-B30 for each physical server that has tcServers installed.       Additional tcServers are updated.         B32.       Example 1       Example 2			BUILD SUCCESSFUL	
B33.     SDD 4.1.1 Schema Upgrade Script     Directory is changed.	B32.			
Type cd /home/webtrust/Builds	B33.		Directory is changed.	

Check	klist B: "Deploy the SDD 4.1.1 Distribution"	Corresponding	Document: None
#	Activity	Expected Results	Actual Results
B34.	The schema upgrade script does not require DBA "system" account access, but it does require Xythos Global Schema and Xythos Docstore account information.	File opens in vi for editing.	
	Type vi sdd-install.properties		
B35.	Make sure the following lines are set to:	File is modified.	
	# Should we install the schema database.install=true		
	Also, ensure that the following lines are <i>not</i> commented out:		
	datasource.xgs.username= <username></username>		
	datasource.xgs.password= <password></password>		
	datasource.xds.username== <username></username>		
	datasource.xds.password= <password></password>		
B36.	Hit <b>Esc</b> and type <b>:x</b> to save the file.	File is saved with changes made.	
B37.	Type more sdd-install.properties	Verify that changes have been saved.	
B38.	Type cd /home/webtrust/Installs/dist/install	Navigate to that directory.	
B39.	Type ant upgrade-4.1.1	System displays:	
		Buildfile: build.xml	
		upgrade-4.1.1:	
		[input] Your server must NOT be running for this to work - is your server stopped? (y, n)	

Checl	klist B: "Deploy the SDD 4.1.1 Distribution"	Corresponding	Document: None
#	Activity	Expected Results	Actual Results
B40.	Type <b>y</b>	System displays:	
		do-upgrade-4.1.1:	
		[echo] Upgrading schemas xgs1 xdstore1 from 4.1 to	
		4.1.1	
		[sql] Executing resource:	
		/home/webtrust/Installs/dist/install/sql/oracle/upgrade/1.0	
		.1/sas_content_xds_custom.sql	
		[sql] 2 of 2 SQL statements executed successfully	
		[sql] Executing resource:	
		/home/webtrust/Installs/dist/install/sql/oracle/upgrade/1.0	
		.1/sas_content_xgs_custom.sql	
		[sql] 1 of 1 SQL statements executed successfully	
		BUILD SUCCESSFUL	
		Total time: 1 minute 6 seconds	
B41.			
B42.	Startup tcServer Admin Server	Navigate to that directory.	
	Type cd /sfw/tcServer		

Chec	klist B: "Deploy the SDD 4.1.1 Distribution"	Corresponding Docu	iment: None
#	Activity	Expected Results	Actual Results
B43.	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_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	

Checklist B: "	Deploy the SDD 4.1.1 Distribution"	Corresponding Docum	Corresponding Document: None	
#	Activity	Expected Results	Actual Results	
	s –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/sddserverad min/conf/logging.properties -Xss192K -Xms1024M - Xmx1024M -XX:PermSize=320m - XX:MaxPermSize=320m - XX:MaxNewSize=256m -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=/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		
B45. Type <b>c</b>	l sddserveradmin/logs	Navigate to the /sfw/tcServer/sddserveradmin/logs directory.		

Checklist B: "Deploy the SDD 4.1.1 Distribution"		Corresponding Document: None	
#	Activity	Expected Results	Actual Results
	'ype 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.BaseDBType=oracle         Xythos.BaseDBType=oracle         Xythos.BaseDBUserName=xgs         Xythos.BaseJDBCDriverName=oracle.jdbc.OracleDrive r	
	Iit <b>Ctrl-C</b> to stop viewing this log file.	You no longer see the output of the log file.	
B48.			
	Startup tcServer sddservers	Navigate to that directory.	

Checklist B: "Deploy the SDD 4.1.1 Distributio	n" Corresponding	Corresponding Document: None		
# Activity	Expected Results	Actual Results		
B50. Type ./tcruntime-ctl.sh sddserver1 star				
	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_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			
B51. Type <b>ps</b> – <b>ef</b>   <b>grep webtrust</b>	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/c onf/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.s erviceability.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.base=/sfw/tcServer/tomcat- 6.0.35.A.RELEASE - Djava.io.tmpdir=/sfw/tcServer/sddserver1/temp org.apache.catalina.startup.Bootstrap start			

Checklist B: "Deploy the SDD 4.1.1 Distribution"		Corresponding Document: None	
#	Activity	Expected Results	Actual Results
B52.	Type cd sddserver1/logs	Navigate to the /sfw/tcServer/sddserver1/logs	
		directory.	
B53.	Type <b>tail –f catalina.out</b>	You will see the contents of the log file while	
		the server is starting up. Look for the	
	Note: Depending on how fast your server is, you may need to	following lines, indicating success start of	
	type tail -300 catalina.out	process.	
		Jan 13, 2012 4:54:23 PM	
		org.apache.catalina.startup.Catalina start INFO: Server startup in 36512 ms	
B54.	Hit <b>Ctrl-C</b> to stop viewing this log file.	You no longer see the output of the log file.	
B55.	Repeat steps B49 – B54 to start up any additional sddservers.	Steps repeated as necessary.	
B56.	Hit <b>Ctrl-D</b> to stop the script command.	System indicates script stopped running.	
B57.	Type <b>exit</b>	You're logged off the web server.	

Signature below indicates completion of Checklist B, items B1 – B57, above.

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