

SAS Life Science Analytics Framework Java API 1.8.1

Installation Qualification / Operational Qualification Checklist

Install LSAF Java API 1.8.1

**Version 1.00**

**Date May 5, 2017**

Checklist A: “Install LSAF Java API”

***Note:*** This checklist assumes you have completed an installation of LSAF 4.7.1 and are installing the LSAF Java API.

| Checklist A: “Install LSAF Java API” | | **Corresponding Document:** *None* | |
| --- | --- | --- | --- |
| ***#*** | ***Activity*** | ***Expected Results*** | ***Actual Results*** |
|  | Login to an admin PC. | Windows display appears. |  |
|  | Using the putty tool, create an **ssh** connection from the admin PC to the **web server** and login as **webtrust**. | You’re prompted for the password. |  |
|  | Enter the *password* for webtrust. | You’re logged into web server. |  |
|  | Use the **script** command to capture commands that are typed in the Unix window. The syntax is **script /var/staging\_logs/<***servername***>\_lsafapi1.8.1\_<***date***>.txt** | System should indicate script has started. |  |
|  | From the admin PC, download the **LSAF Java API 1.8.1** distribution from the SAS Technical Support site. After the distribution has been downloaded, use the WinSCP2 tool to copy the file to **/home/webtrust/Installs** on the web server. Transfer it as a **binary** file using the **webtrust** userid.  **lsaf-java-api-server-1.8.1.zip**  ***Note***: In a clustered web server environment, this file needs to be copied to each web server in the cluster. | The file is transferred to the web server. |  |
|  | Type **cd /sso/sfw/tcServer** | Navigate to that directory. |  |
|  | Type **./tcruntime-ctl.sh sddserver1 stop** | System displays:  Instance is running as PID=29796, shutting down...  Instance is running PID=29796, sleeping for up to 60 seconds waiting for shutdown  Instance shut down gracefully |  |
|  | Type **ps –ef | grep webtrust** | You should not see the tcserver process running. |  |
|  | Type **cd sddserver1/logs** | Navigate to the /sso/sfw/tcServer/sddserver1/logs directory. |  |
|  | Delete or rename the **sdd\_info.log** and **catalina.out** files. | Log files are deleted or renamed. |  |
|  | Type **ls –al** | Verify that log files have been renamed or deleted. |  |
|  | Repeat **steps A6 – A11** for the remaining tcServers.  ***Note:*** You do not have to stop the **sddserveradmin** server.  ***Note***: In a clustered web server environment, steps A6 – A12 must be performed on each web server in the cluster. | The tcServers are stopped with the exception of the sddserveradmin server. |  |
|  | Type **cd /home/webtrust/Installs** | Navigate to that directory. |  |
|  | Type **unzip** **lsaf-java-api-server-1.8.1.zip** | The contents of the zip file are extracted. |  |
|  | Type **ls -al** | You will see an lsaf-java-api-server-1.8.1 directory that was created in the previous step. |  |
|  | Type **cd lsaf-java-api-server-1.8.1** | Navigate to that directory. |  |
|  | Type **ant clean** | System displays:  Buildfile: /home/webtrust/Installs/lsaf-java-api-server-1.8.1/build.xml  clean:  clean-server1:  do-clean:  [echo] Clean previous Java API distribution in /sso/sfw/tcServer/sddserver1/webapps/lsaf  [delete] Deleting /sso/sfw/tcServer/sddserver1/webapps/lsaf/WEB-INF/lib/sas.hls.drug.api.client.jar  [delete] Deleting /sfw/tcServer/sddserver1/webapps/lsaf/WEB-INF/lib/sas.hls.drug.api.server.jar  clean-server2:  clean-server3:  clean-server4:  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  BUILD SUCCESSFUL  Total time: 0 seconds |  |
|  | 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/lsaf  [copy] Copying 2 files to /sso/sfw/tcServer/sddserver1/webapps/lsaf/WEB-INF  [copy] Copying /home/webtrust/Installs/lsaf-java-api-server-1.8.1/WEB-INF/lib/sas.hls.lsaf.api.client.jar to /sso/sfw/tcServer/sddserver1/webapps/lsaf/WEB-INF/lib/ /sas.hls.lsaf.api.client.jar  [copy] Copying /home/webtrust/Installs/lsaf-java-api-server-1.8.1/WEB-INF/lib/sas.hls.lsaf.api.server.jar to /sso/sfw/tcServer/sddserver1/webapps/lsaf/WEB-INF/lib/sas.hls.lsaf.api.server.jar…  deploy-server5:  deploy-server6:  deploy-server7:  deploy-server8:  BUILD SUCCESSFUL  Total time: 0 seconds |  |
|  | Type **cd /sso/sfw/tcServer** | Navigate to that directory. |  |
|  | Type **./tcruntime-ctl.sh sddserver1 start** | System displays:  Using CATALINA\_BASE: /sso/sfw/tcServer/sddserver1  Using CATALINA\_HOME: /sso/sfw/tcServer/tomcat-8.0.9.B.RELEASE  Using CATALINA\_TMPDIR: /sso/sfw/tcServer/sddserver1/temp  Using JRE\_HOME: /usr/bin/jdk/jdk1.7.0\_67  Using CLASSPATH: /sso/sfw/tcServer/tomcat-8.0.9.B.RELEASE/bin/bootstrap.jar:/sso/sfw/tcServer/sddserver1/bin/tomcat-juli.jar  Using CATALINA\_PID: /sso/sfw/tcServer/sddserver1/logs/tcserver.pid  Tomcat started.  Status: RUNNING as PID=24943 |  |
|  | Type **ps –ef | grep webtrust** | System displays:  webtrust 25205 1 25 14:42 pts/0 00:00:03 /usr/bin/jdk/jdk1.7.0\_67/bin/java -Djava.util.logging.config.file=/sso/sfw/tcServer/sddserver1/conf/logging.properties -Djava.util.logging.manager=com.springsource.tcserver.serviceability.logging.TcServerLogManager -Xss256K -Xms4096M -Xmx4096M -XX:PermSize=256m -XX:MaxPermSize=256m -XX:NewSize=1g -XX:MaxNewSize=1g -XX:+UseConcMarkSweepGC -XX:+UseParNewGC -XX:+CMSScavengeBeforeRemark -XX:+CMSParallelRemarkEnabled -XX:CMSInitiatingOccupancyFraction=70 -XX:+DisableExplicitGC -XX:+UseCompressedOops -XX:+PrintGCDetails -XX:+PrintGCDateStamps -XX:+PrintFlagsFinal -Xloggc:/sso/sfw/tcServer/sddserver1/logs/gc\_v64-d78393-011\_01\_05\_2016\_1442.log -XX:+HeapDumpOnOutOfMemoryError -Djava.endorsed.dirs=/sso/sfw/tcServer/tomcat-8.0.9.B.RELEASE/endorsed -classpath /sso/sfw/tcServer/tomcat-8.0.9.B.RELEASE/bin/bootstrap.jar:/sso/sfw/tcServer/sddserver1/bin/tomcat-juli.jar -Dcatalina.base=/sso/sfw/tcServer/sddserver1 -Dcatalina.home=/sso/sfw/tcServer/tomcat-8.0.9.B.RELEASE -Djava.io.tmpdir=/sso/sfw/tcServer/sddserver1/temp org.apache.catalina.startup.Bootstrap start |  |
|  | Type **cd sddserver1/logs** | Navigate to the /sso/sfw/tcServer/sddserver1/logs directory. |  |
|  | 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.  2015-12-10 11:23:41,115 | INFO | TCIRA | Starting ProtocolHandler ["http-bio-8001"]  2015-12-10 11:23:41,118 | INFO | TCIRA | Server startup in 43242 ms  2015-12-10 11:23:47,408 | INFO | LSIRA | | | Starting Quartz Scheduler now, after delay of 10 seconds |  |
|  | Hit **Ctrl-C** to stop viewing this log file. | You no longer see the output of the log file. |  |
|  | Repeat **steps A19 – A24** to start up any additional sddservers.  ***Note***: In a clustered web server environment, steps A13 – A24 must be performed on all web servers in the cluster. | Steps repeated as necessary. |  |
|  | Hit **Ctrl-D** to stop the script command. | System indicates script stopped running. |  |
|  | Type **exit** | The webtrust userid is logged off the web server. |  |

***Signature below indicates completion of Checklist A, items A1 – A27, above.***

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