

## SAS Life Science Analytics Framework Macro API 2.5

Installation Qualification / Operational Qualification Checklist

Install LSAF SAS Macro API 2.5

Version 1.00 Date August 2021

## Checklist A: "Install LSAF SAS Macros"

*Note:* This checklist assumes you have completed an installation of LSAF Java API 2.5.

*Prerequisites:* You will need to set the following property in the **lsaf.properties** configuration file on any tcServer instance that is running:

## sassession.enable.trusted.connections=true

Checklist A: "Install LSAF SAS Macros"		Corresponding Document: None	
#	Activity	Expected Results	Actual Results
A1.	Login to an admin PC.	Windows display appears.	
A2.	Using the putty tool, create an <b>ssh</b> connection from the admin PC to the <b>SAS server</b> and login as <b>sasadmin</b> .	You're prompted for the password.	
A3.	Enter the <i>password</i> for sasadmin.	You're logged into SAS server.	
A4.	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/ <servername>_lsafmacro2.5_<da te="">.txt</da></servername>	System should indicate script has started.	
A5.	From the admin PC, download the LSAF Java API 2.5 Client distribution from the SAS Technical Support site. After the distribution has been downloaded, use the WinSCP2 tool to copy the file to /sso/sfw/installers on the SAS server. Transfer it as a binary file using the sasadmin userid.  lsaf-java-api-client-2.5.zip	The file is transferred to the SAS server.	

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A6.	From the admin PC, download the LSAF Macro 2.5 distribution from the SAS Technical Support site.  After the distribution has been downloaded, use the WinSCP2 tool to copy the file to /sso/sfw/installers on the SAS server. Transfer it as a binary file using the sasadmin userid.  Isaf-sas-macro-2.5.zip	The file is transferred to the SAS server.	
A7.	Stop the Object Spawner by typing /sso/biconfig/940/Lev1/ObjectSpawner/ObjectSpawner.sh stop	The Object Spawner is stopped.	
A8.	Type ps –ef   grep sasadmin	The following process should <b>not</b> be running:  /bin/sh -p /sso/biconfig/940/Lev1/ObjectSpawner/ObjectSpawner.sh start2_tag	
A9.	Type cd /sso/sfw/sas/940/SASFoundation/9.4	Navigate to that directory.	
A10.	Type mkdir lsafapi	Directory is created.	
A11.	Type cd Isafapi	Navigate to that directory.	
A12.	Type unzip –q /sso/sfw/installers/lsaf-java-api- client-2.5.zip	Contents of zip file are extracted.	
A13.	Type unzip –q /sso/sfw/installers/lsaf-sas-macro- 2.5.zip	Contents of zip file are extracted.	
A14.	Type ls –al	You see the following directories created:  lsaf-java-api-client-2.5 lsaf-sas-macro-2.5	
A15.	Type cd lsaf-java-api-client-2.5	Directory is changed.	
A16.	Type touch lsaf_api_client.log	The file is created.	
A17.	Type chmod 777 lsaf_api_client.log	Permissions are updated.	
A18.	Type cd /sso/biconfig/940/Lev1/LSAFApp/WorkspaceServ er	Navigate to that directory.	
A19.	Type vi sasv9_usermods.cfg	File is opened for edit.	

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A20.	After the comment block, add the following lines:  -append sasautos  "/sso/sfw/sas/940/SASFoundation/9.4/Isafapi/Isaf- sas-macro-2.5/sasmacros"  -JREOPTIONS (  - Dsas.app.class.dirs=/sso/sfw/sas/940/SASFoundati on/9.4/Isafapi/Isaf-java-api-client- 2.5/lib:/sso/sfw/sas/940/SASFoundation/9.4/Isafapi /Isaf-sas-macro-2.5/lib	File is modified.	
	Dsession.strategy.classname=com.sas.lsaf.client.i mpl.TrustedContextSessionStrategyImpl -Dsas.lsaf.macros.trusted=true - Dlog4j2.configurationFile=/sso/sfw/sas/940/SASFo undation/9.4/lsafapi/lsaf-java-api-client- 2.5/log4j2.properties )		
	/* this prevents a classpath not set warning from javaobj */ -SET CLASSPATH !CLASSPATH  Note: Copy and paste this text from the sasv9_usermods.txt file in our staging area.		
A21.	Hit <b>Esc</b> and type :x to save the file.	File is saved with changes made.	
A22.	Type more sasv9_usermods.cfg	Verify that changes have been saved.	
A23.	Start the Object Spawner by typing /sso/biconfig/940/Lev1/ObjectSpawner/ObjectSpawner.sh start	Object Spawner is started and system displays:  Spawner is started (pid <i>nnnnn</i> )	
A24.	Type ps –ef   grep sasadmin	The following process should be running:  /bin/sh -p /sso/biconfig/940/Lev1/ObjectSpawner/ObjectSpawner.sh start2_tag	

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A25.	Hit <b>Ctrl-D</b> to stop the script command.	System indicates script stopped running.	
A26.	Type exit	The sasadmin userid is logged off the SAS server.	
A27.	Repeat <b>steps A1 – A26</b> to deploy the LSAF SAS Macros to any additional SAS processing servers.	Steps repeated as necessary.	

Signature below indicates completion of Checklist A, items $A1 - A27$ , above.			
Name (print or type):	Sign-off:	Date:	