SAS® Life Science Analytics Framework SAS Macro API 2.5
Release Notes
June 2021

The SAS® Life Science Analytics Framework Macro API 2.5 is available for use with SAS® Life Science Analytics Framework Java API 2.5.

The tables below summarize the enhancements for this release.

Change Type	Description	Count
Added	New macro added in this release.	**56**
Updated	Macro name, input parameters, and/or returned results changed.	**25**
Deprecated	Replaced by new functionality. Marked for removal in future release.	**5**
Removed	Macro no longer available in this release.	**1**

Functional Area	**Description**
General	Macro documentation: The documentation for the macros has been removed from the SAS® Macros installation file and is now available on the SAS® Help Center. Operational issue: Delays have been noticed when changing the status of a process flow or process flow task. This may cause issues with the runs of subsequent macros that rely the state of a process flow or task. It is recommended that a sleep routine be added to your programs if this issue is encountered.
Audit	Updated: • lsaf_getauditactions – Extended length of variable displayName
Authentication	Updated: • lsaf_logout – Forced session logout to prevent session timeout.
Autoflow	The new AutoFlowService provides the macro to automatically create process flows from an auto flow source object such as a TLF. As of SAS® Life Science Analytics Framework 5.3, TLF is the only item from which process flows can be automatically created. • lsaf_createautoflow

Functional Area	Description
JobManifest	Updated all macros in this service to: • include a source location parameter to allow access to job manifests in both the workspace and repository. • Standardized data sets to contain jobManifestLocation, jobManifestPath, jobManifestVersion variable. This involved variable renames in some of the data sets. Additional Update: • lsaf_getjobmanifestinfo – Added variables recordType and recordSortOrder and changed default sort order of output data set.
ProcessDefinition	Added new macro: • lsaf_getprocessdefelements Updated: • lsaf_getallprocessdefinitions – Extended length and description of context variable. • lsaf_getprocessdefsbytype - Extended length and description of context variable.
ProcessDefinition Mapping	The new ProcessDefinitionAutoflowService provides macros to support mapping process definition element attributes with TLF attributes in order to automatically create a process flow from a TLF. As of SAS® Life Science Analytics Framework 5.3, TLF is the only item from which process flows can be automatically created. • lsaf_cleardefelementmappings • lsaf_cleardefinitionmappings • lsaf_defautoflowenabled • lsaf_defmappingiscomplete • lsaf_getdefinitionmappings • lsaf_getdefsmappedforautoflow • lsaf_setdefautoflowenabled • lsaf_updatedefinitionmappings
ProcessFlow	Added: • lsaf_getprocessflowsbyquery Updated: • lsaf_getprocessflowsbyquery – added processFlowId to output data set. • lsaf_getmyprocessflows – added processFlowId to output data set. • lsaf_getprocessflowdata – Updated data of type DATE to be returned in DATETIME20. format. • Lsaf_getprocessflowproperties – added autoflowSource and autoflowType to output data set. Deprecated in 2.5; Marked for removal in future release. • lsaf_getprocessflows - Replaced by lsaf_getprocessflowsbyquery • lsaf_getmyprocessflows - Replaced by lsaf_getprocessflowsbyquery
ProcessFlowTask Service	Added: • lsaf_assignpfusertask • lsaf_claimpfusertask • lsaf_clearpfusertaskcandidates

Functional Area	Description
	• lsaf_completeusertask • saf_getpftasksbyquery • lsaf_getpfusertaskcandidates • lsaf_getpfusertaskcompletiondata • lsaf_getpfusertaskhistory • lsaf_getpfusertaskproperties • lsaf_getpfusertaskstatus • lsaf_setpfusertaskcompletiondata • lsaf_startpfusertask • lsaf_updatepfusertaskcandidates • lsaf_updatepfusertaskproperties Updated: • lsaf_getcompleteddetails: Added variables taskId, elementCreatedSasFormat, elementCompletedSasFormat, and recordTypeSortOrder and changed default sort order of the output data set.
Query	Updated: • lsaf_querycontextmembership – allow lsaf_querydatasetquery parameter to be optional • lsaf_querydistcontextmembership – allow lsaf_querydatasetquery parameter to be optional
Repository	Added: • lsaf_deleteversion Updated: • lsaf_checkin – added parameter to allow versioning of new files.
Resource Utilization	The new ResourceUtilizationService provides macros to report the utilization information for the repository, workspace, and transient workspace. • lsaf_getadminrepoutilization • lsaf_getadmintransutilization • lsaf_getadminwsutilization • lsaf_getresourceutilization • lsaf_getuserrepoutilization • lsaf_getusertransutilization • lsaf_getusesrwsutilization
Schedule	Updated: • lsaf_getallschedules – fixed label for owner variable • lsaf_getmyschedules – fixed label for owner variable
Session	Deprecated in 2.4; Marked for removal in future release. • lsaf_getmysessions – replaced by lsaf_getsessionsbyquery • lsaf_getsessions – replaced by lsaf_getsessionsbyquery • lsaf_getusersessions – replaced by lsaf_getsessionsbyquery

Functional Area	Description
	Updated: • lsaf_getsessionsbyquery - Added limitReached value to log, fixed label for variable clientId.
StudyTlf	The new StudyTlfService provides macros to manage the tables, figures, and listings (TLFs) in a study. • lsaf_deletestudytlf • lsaf_getstdytlfstitlesandfooters • lsaf_getstudytlfanaysisresults • lsaf_getstudytlfid • lsaf_getstudytlfproperties • lsaf_getstudytlfresultdatasets • lsaf_getstudytlfsections • lsaf_getstudytlfsinfo • lsaf_studytlfautoflowenabled • lsaf_studytlfexists • lsaf_updatestdytlftitlesfooters • lsaf_updatestudytlfproperties • lsaf_updatestudytlfproperty Note: The result identifier field for an analysis result is unique within a TLF, so it is possible to have multiple results with the same result identifier within a study that has multiple TLFs. Therefore, please be aware that the data set returned from the lsaf_getstudytlfresultdatasets macro may contain analysis data sets for more than one TLF result. This will be addressed in a future release.
TlfTemplate	The new TlfTemplate service provides macros to manage the global TLF templates. • lsaf_createglobaltlftemplate • lsaf_exportglobaltlfs • lsaf_exportglobaltlfstoworkspace • lsaf_getglobaltlftemplates • lsaf_gettlftemplateid • lsaf_importglobaltlfs
User	Removed deprecated macro: • lsaf_updateuserinfo – replaced by lsaf_updateuserproperties introduced in SAS Macros API 2.3. Updated: • lsaf_userexists – added value of _lsafUserExists_ macro variable to the log.
Workspace	Added: • lsaf_copyworkspaceitem • lsaf_moveworkspaceitem • lsaf_renameworkspaceitem • lsaf_createworkspacefile