SAS® Life Science Analytics Framework SAS Macro API 2.1
Release Notes
April 15, 2019

The SAS® Life Science Analytics Framework Macro API 2.1 is available for use with SAS® Life Science Analytics Framework Java API 2.1.

This 2.1 release offers the equivalent functionality as the previous release with additional macros to support the functionality available in Life Science Analytics Framework 5.1.

The table below highlights the changes for the SAS® Life Science Analytics Framework Macro API in release 2.1. For a detailed list of changes, see the SAS® Life Science Analytics Framework Macros 2.1 changes spreadsheet.

Change	Description
Packaging	All macros with the prefix SASDRUGDEV_ have been deprecated with this release.
Return codes	The list of error codes that are returned from all macro calls has been simplified.
Log messaging	The log messages for all macros have been rearranged to report the success or failure of the macro run first. Only that first line is flagged as ERROR for macros that fail. The other lines are flagged as a NOTE.
Documentation	The "java doc" style documentation that is provided with the macros has been restructured to categorize the macros around Life Science Analytics Framework functional areas such as RepositoryService andWorkspaceService.
Boolean return values	Macros that set a Boolean value macro variable do not fail when given invalid parameters. For example, in the calls below, the _lsafIsVersioned_ macro variable is set to 0 with no error message displayed in the log. • %lsaf_isversioned(lsaf_path=<_file that does not exist in repository_>); • %lsaf_isversioned(lsaf_path=</SAS/an??Invalid&^%$Path.txt>); Errors are reported only for missing required parameters.
Context support	All macros that support the specific context types Organization, Project, and Analysis have been deprecated with this release. Support for the dynamic context structure introduced in Life Science Analytics Framework 5.x is available through new macros that service the Life Science Analytics Framework repository and item types.
System	The _lsaf_getConfiguration_ macro is renamed to _lsaf_getapiversions_. The current versions of Life Science Analytics Framework Macro API and the Life Science Analytics Framework Java API are printed to the SAS log. No data set is created, no macro variables are set, and no other information is retrieved.
Workspace	The terminology that references "object(s)" has been changed to "item(s)".

Change	Description
Repository	- The terminology that references "object(s)" has been changed to "item(s)". - The terminology for repository item versioning has been standardized across the macros. This includes both macro parameters and variables returned in data sets. - VersionType – any reference to MAJOR, MINOR, or CUSTOM. - Version – any reference to an actual version number (such as 2.1). This was "versionLabel" in previous releases. - EnableVersioning – any flag that indicates whether a new file in the repository has versioning enabled. - The macro *lsaf_markforaddandcheckin* has been deprecated in compliance with the functionality made available with SAS® Life Science Analytics Framework Java API 2.1. The new macro *lsaf_markworkspaceitemforadd* and existing macro *lsaf_checkin* can be used as separate calls to reproduce the behavior. - The destination path for both *lsaf_copy* and *lsaf_move* must be full paths. In previous releases, only the destination folder was expected. - The data set created by *lsaf_getversions* has been modified to report only the properties that are specific for a file version, not the file. For example, the variables isCheckedOut and isLocked, among others, have been removed because they refer to the file item, not a specific version of that file.
Jobs	The option to includeSubfolders with job parameter FOLDER types has been added. This affects macros that report and update parameters on a job, macros that support submitting jobs with override values, and the process flow setup macros that support job elements.
Privileges	The macros that support privileges applicable at the context level have been rebranded as Scoped Privileges. The macros that support privileges applicable to a user at the system level have been standardized as Global Privileges.
Roles	The macros supporting context roles have been refactored to reflect the changes made for SAS® LSAF Java API release 2.1.
Process Flows	- All macros for to retrieve and to update process flow setup elements have been renamed to reflect the underlying structure surfaced through SAS® Life Science Analytics Framework Java API release 2.1. - Additional macros to support process flow definitions and active tasks have been added. - The option to create a manifest prior to deleting the process flow has been removed from macro *lsaf_deleteprocessflow* in compliance with the functionality made available through SAS® LSAF Java API release 2.1. The macro *lsaf_createprocessflowmanifest* should be called as a separate operation.
Process Flow Definitions	The macros (new and existing) that report information that pertains to process flow definitions support the new Life Science Analytics Framework 5.x context structure.
Recycle Bin	The macros that support the recycle bin have been refactored for simplification and to align with the functionality supported in Life Science Analytics Framework 5.x.

Change	Description
Types	New macros have been added to support the new dynamic context functionality introduced in in Life Science Analytics Framework 5.x.