The SAS® Life Science Analytics Framework API 2.3 is available for use with SAS® Life Science Analytics Framework 5.2.x.

This release offers enhanced querying functionality for these areas: audit, repository, reycle bin, and membership. A summary of the updates is listed below.

Update	Description
Enhanced Query Services	SAS® Life Science Analytics Framework API 2.3 has introduced a new set of query services that provides a better performing and flexible way to query audit trail and repository content. The output of these queries is written directly to a file. No paging is required. Each query service method takes a query object that lets you specify columns, set complex constraints, and define ordering options. The output file format is csv which can be consumed for further processing. The default row limit for query output is one million. More information on each query service is below.
Audit Querying	The AuditQueryService provides the following methods to query the audit trail: • **executeAuditEntryQuery** – includes audit entries only • **executeAuditEntryDetailQuery** – includes audit entries and their detail records The global privilege, VIEW AUDIT HISTORY, is required to run these queries.
Repository Querying	The RepositoryQueryService provides the following methods for querying repository content. Each query has columns that are specific to that type. • **executeRepositoryItemQuery** – includes files and containers • **executeRepositoryFileQuery –** includes files only, one row per file, with information pertaining to the latest version • **executeRepositoryFileVersionQuery** – includes files only and lists each version individually if it is versioned • **executeRepositoryContainerQuery** – includes containers only This is a privileged service that requires Administrative Mode authorization.

Update	Description
Reycle Bin Querying	The RecycleBinQueryService is very similar to the RepositoryQueryService except that it queries content in the recycle bin instead of the repository. Each query has columns that are specific to that type. • **executeRecycleBinItemQuery** – includes files and containers • **executeRecycleBinFileQuery –** includes files only, one row per file, with information pertaining to the latest version • **executeRecycleBinFileVersionQuery** – includes files only and lists each version individually if it is versioned • **executeRecycleBinContainerQuery** – includes containers only This is a privileged service that requires Administrative Mode authorization.
Context Membership Querying	The ContextMembershipQueryService provides methods for querying membership information at a context. These queries can be executed with no constraints to see the complete membership of a context. You can specify the scope of these queries to be for assigned members or defined members. The default is all members. • **executeContextMembershipQuery** – includes all members (users and groups) and their full lineage • **executeDistinctContextMembershipQuery** – includes a list of distinct members, each member is included only once in the output This is a privileged service that requires Administrative Mode authorization.
Relative Path Handling With Job Parameter Values	Jobs can be defined with parameters that have default values. When you submit a job, you can override those default parameter values. Parameter overrides can be provided anywhere a job can be specified, including: • Job submission • Schedule • Process flow (job task) Prior to this API release, if you provided a relative path for a file or folder parameter as an override value, the path was not getting resolved. It will now be resolved to an absolute path before the override value is saved or submitted.
TypeService Updates	The following methods were added or updated in TypeService: • getTypesByCapability (added) • isTypeCapable (added) • getTypes – (updated) – context type now returned in type list