SAS® Drug Development API 1.5
Release Notes
March 20, 2013

The SAS® Drug Development (SDD) API release 1.5 is available for use with SDD Version 4.2.1.

The table below describes changes to the SDD API in release 1.5:

Reference #	Title	Description
US4437	Export Audit Trail	Added AuditService to query audit trail entries.
US5397, US5398	Lock and Unlock File	Added lockFile and unlockFile methods to the RepositoryResourceService.
US4435	Batch checkin and checkout	Added BatchRepositoryResourceService which allows file and container paths to be specified for checkin and checkout. If a container path is specified, all files within that container will be included.
US4738	Event subscription	Added SubscriptionService to support creating subscriptions to select events for generating notifications.
US5917	Download as zip	Added BatchRepositoryResourceService and BatchWorkspaceResourceService which allows files and container paths to be specified for download to a zip file. If a container path is specified, all files within that container will be included.
US5918	Upload and expand	Added BatchRepositoryResourceService and BatchWorkspaceResourceService which allows a compressed file to be uploaded and expanded into the repository.
DE2125	InvalidMemberException no longer thrown in certain cases	InvalidMemberException is no longer thrown in the MembershipService removeMember method if a group is attempted to be removed from the context in which it was created.
	Deprecated methods removed	All deprecated methods have been removed. Please update existing code using deprecated methods.

The following changes were made to functionality delivered in Release 1.4:

Reference #	Title	Description

US5688	Compatibility updates for SDD 4.2	Code changes in SDD 4.2 required changes to the API code base. They are:
		• MembershipService – the removeMember and removeMembers methods throw an additional exception, InvalidMemberException. It is thrown when the member for removal is not an assigned member.
		• MembershipService – optimistic locking has been put in place for updateMembership which means if you try to update a membership and that membership is not the same one you got from the server (it was updated since you retrieved it), a runtime exception will be thrown.
		• MembershipService – getAssignedMembers in API 1.3 returned assigned and unassigned members. In API 1.4, getAssignedMembers returns only explicitly assigned members. To get all members, assigned and unassigned, use getMembership(<context>).getMembers().
		• MembershipDescriptor – the context field type has changed from MembershipContext to ObjectIdentity. This is consistent with the context fields on GroupDescriptor and RoleDescriptor.
		• GroupService – the createGroup and updateGroup methods throw an additional exception, InvalidGroupMemberException. PrincipalNotFoundException is no longer thrown. InvalidGroupMemberException is thrown if a member is not found or a member is not a member of the current context.
		• GlobalPrivilegeAssignmentService - no code changes were made but getAvailablePrivileges now reflects global privilege changes in SDD 4.2. They are:
		   o Access WebDAV privilege added.
		   o Administer Work Items privilege removed.
		• PrivilegeService – no code changes were made to this method but the getAvailablePrivileges method now reflects the scoped privilege changes in SDD 4.2 for work item contexts. They are:
		   o Administer Work Items privilege added.
		   o Manage Work Items privilege added.

US5689	Support run-as functionality for jobs	The JobService has two new methods, getRunAsOwner and setRunAsOwner, which reflects the ability to set the run-as owner flag. This flag was introduced in SDD 4.2. By default, when a job is created, this value is false, and jobs are run as the submitter. Because the default in 4.1.1 was to run jobs as the owner, any 4.1.1 jobs migrated to 4.2 will have this flag set to true.

The following changes were made to functionality delivered in Release 1.3:

Reference #	Title	Description
US5396	Get, Set and Update Permissions	Added AclService and com.sas.security.acl package to support the getting and modification of permissions on repository containers and objects.
US5399	Schedule Job	Added ScheduleService and com.sas.hls.schedule package to support the scheduling of objects which support the Schedulable interface.
US5482a	Update user, project and analysis.	Added update methods to the userService, projectService, and analysisService. This includes the ability to lock and unlock a user account, and to change the state of a project or analysis.
US5492b	Get Reachable Groups	Added the getAllReachableGroupsByMember and getReachableGroups-ByMember methods to the groupService so that non-direct group membership can be accessed via the API.
US4353	Rename object or folder	Added rename methods to the RepositoryResourceService and WorkspaceResourceService to enable the renaming of existing objects or folders.
US4736	Mark for add (single file)	Added the markForAddAndCheckinFileFromWorkspace method to the WorkspaceResourceService.
US4442	Manage Recycle Bin	Added RecycleBinService and com.sas.hls.recyclebin package to manage deleted items that the current user can access.

The following changes were made to functionality delivered in Release 1.2:

Reference #	Title	Description
US4578-a	Create, Rename, Delete Project	Added ProjectService and com.sas.drug.project package to manage the life cycle of a project.
US4578-b	Create, Rename, Delete Analysis	Added AnalysisService and com.sas.drug.analysis package to manage the life cycle of an analysis.
US4351, US4966	Copy File, Copy Folder	Added the ability to copy files and folders to workspace and repository resource services. WorkspaceResource and RepositoryResource objects now implement a marker interface "com.sas.hls.resource.Resource" which serves as a common parent for all resources in SAS Drug Development.
US4359	Create User, Delete User Reset User Password	Added UserService and com.sas.hls.security.user package to support the creation and deletion of users. This service also supports resetting a user's password.
US4354, US4355, US4356	Create, Update, and Delete Group	Added GroupService and com.sas.hls.security.group package to manage groups within SAS Drug Development. Groups in SAS Drug Development are scoped to a context where a context is a location where a group can be defined such as Organization, Project or Analysis.
US5060	Assign Principals to Membership context	Added com.sas.hls.security.membership, com.sas.hls.security.principal, and com.sas.hls.organization packages and MembershipService to manage the membership of contexts. Principals may be assigned to membership contexts such as Organization, Project or Analysis.
US5071	Assign Global Privileges to Principals	Added GlobalPrivilegeAssignmentService to manage assignment of global privileges granted to users. These privileges are defined globally and not scoped to a context.
US4350, US4349	Create, Update Job	Added JobService and com.sas.hls.job packages to support the creation and modification of jobs in the workspace and repository. *Note: Deletion of jobs may be performed using WorkspaceResourceService or RepositoryResourceService.*
US5123	Job Execution	Added JobExecutionService to support execution of jobs in the workspace or in the repository. The current status of the submitted job can also be obtained.
US5127, US5128	Role Definition Role Assignment	Added RoleDefinitionService, RoleAssignmentService, PrivilegeService and com.sas.hls.security.role and com.sas.hls.security.privilege packages for managing role definition and assignment. RoleDefinitionService enables defining roles in SAS Drug Development at a context and inheriting roles from parent contexts through assignment of the defined roles to child contexts. A Role context can be an Organization, Project or Analysis. RoleAssignmentService enables assignment of Principals to roles assigned to a context. PrivilegeService provides a way to get the set of context-specific privileges available for defining roles at a context.

The following changes were made to functionality delivered in Release 1.1:

Reference #	Title	Description
DE1559	DBCS characters and encoding issues in resource services	Resource file names and version comments containing DBCS characters were not handled correctly in 1.1. This problem has been addressed. *Note: End users must not perform any encoding or decoding of method parameters. Any previous reference to the UriAndPathUtils class (formerly shipped with the API) should be removed.* ***For this reason, com.sas.hls.utils.UriAndPathUtils has been removed from the API.***
DE1350	createParentFolders not honored in some cases	The createParentFolders option was not honored in some file creation methods in workspace and repository resource services. This problem has been addressed.
	RepositoryResourceService method name change	Method createContainer has been changed to createFolder.