Kaltura's Entitlement Infrastructure Bulk Services

Version: Falcon



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Preface

This preface contains the following topics:

- About this Guide
- Audience
- Document Conventions
- Related Documentation

About this Guide

This guide provides an in-depth description of bulk services provided by Kaltura for supporting bulk management of end-users, categories and content entitlements.



NOTE: Please refer to the official and latest product release notes for last-minute updates Technical support may be obtained directly from: Kaltura Support.

Contact Us:

Please send your documentation-related comments and feedback or report mistakes to http://knowledge.kaltura.com/report-issues.

We are committed to improving our documentation and your feedback is important to us.

Audience

This guide is primarily intended for those who want to understand Kaltura's options for creating; updating or deleting entitlement related information in bulk, using Kaltura's CSV formatted schemas.

Specifically the information about managing end-users, categories and content entitlements in bulk, in this guide may be useful to:

- MediaSpace Administrators responsible for supporting their organizational media portal.
- IT and Identity Management Experts responsible for integrating information from their organization users/groups directories with MediaSpace authorization and channel entitlements settings.
- **Developers and Partners** who want to add content entitlement controls to their proprietary Kaltura based applications/web-sites.

Document Conventions

Kaltura uses the following admonitions:

- Note
- Workflow



NOTE: Identifies important information that contains helpful suggestions.



Workflow: Provides workflow information.

Prerequisites

Some background information about the Kaltura Platform and about the Kaltura MediaSpace application are required and familiarity with the Kaltura's Entitlement Infrastructure – Information Guide. In addition, you should familiarize yourself with Content Entitlements and Channel's functionalities added in Kaltura MediaSpace 4.0.

Related Documentation

In addition to this guide, the following product documentation is available:

- Kaltura MediaSpace™ Setup Guide
- Kaltura MediaSpace™ Channels and Permissions Planning Guide

Introduction to Kaltura's Entitlement Infrastructure - Bulk Services

Kaltura provides bulk services and three CSV formatted schemas for enabling automatic setup and on-going updates for end-user's details and content entitlement settings. The bulk services described in this guide can be used to streamline the setup and administration of Kaltura MediaSpace™ based media portals, and may also be used for convenient submission of bulk operations on the following entitites:

- End-user accounts
- Content categories
- End-user entitlements to content in categories

General Guidelines

The following guidelines are applicable to all entitlement related CSV formatted schemas:

- Lines that begin with a # character will not be processed.
- The first line for processing (fields' definition line) should start with an * sign and should include the field names to be populated via the CSV, according to the defined schema of each CSV format. Mandatory fields must be present. The field order may be set as needed.
- Each line for processing within the CSV should include a comma separated list of values ordered by the field ordering set in the fields' definition line.
- Each line for processing within the CSV will apply an action on a single Kaltura object. For example: each line in the categories CSV will apply the action to a single category.
- The CSV may be submitted from the KMC (through the Upload menu) or via a script, by utilizing Kaltura's API.
- Prior to processing the CSV file, its format is validated. When a mandatory field is missing, the bulk job will fail and processing will not start.
- Bulk job tracking as well as downloading bulk job related files (the original CSV and log files) are done through the KMC using the Bulk Upload Log feature under the Upload Control page.
- Email notifications on the completion of bulk upload processing including completion status and a direct link to the log file, can be configured by Kaltura per request.
- There is no limitation on the supported number of lines within each CSV. The overall processing time of each CSV file is affected by the number of lines included in it.
- The following special characters can be populated within text fields via the CSV file:
 %?.:; & > @!\$^~ = []{}| <
 - See special exceptions within each schema description.
- The CSV examples included in this guide are displayed in screens from MS Excel for better clarity.

End-Users CSV

The End-Users CSV may be used for the provisioning, updating or deleting a large amount of enduser accounts in Kaltura.

This section contains the following topics about the End-Users CSV:

- Purpose and Usage
- Schema Description
- Examples of End-Users CSV

Purpose and Usage

The end-users CSV for bulk operation may be useful for:

- Creating multiple end-user accounts. For example:
 - Pre-provisioning of MediaSpace user accounts when user authentication and/or user authorization to access MediaSpace with a specific role should be controlled and managed in Kaltura and not through a SSO/authentication integration.
 - Creating a user list for enabling the selection of MediaSpace's Channel members from a full list of users managed in Kaltura.
- An on-going scheduled process for synchronizing the user accounts managed in Kaltura with the organization user directory.



NOTE: For an efficient on-going CSV based synchronization process, only new user accounts and user accounts that require updating or deletion should be included within the CSV.



NOTE: The end-users CSV is designed for managing end-user accounts. KMC user accounts are managed separately via the KMC Administration tab.

Schema Description for the End-Users CSV

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|-------------------|------------------------|---|---------|--|
| action | Optional | Kaltura's numeric value for the action to apply on a specific user account. | 1= Add | KalturaBulkUploadAction |
| | | CSV lines with different actions can be combined into a single CSV file. Only fields that are relevant to the CSV action will be used. | | |
| | | The supported action types and their numeric values are: | | |
| | | 1=Add - to add a new user account | | |
| | | 2=Update - to update an existing user account | | |
| | | 3=Delete – to delete an existing user account | | |
| | | 6=Add or Update – to add a new user account or update an existing account when the provided user ID is already available in Kaltura. User accounts may be automatically created in Kaltura upon different cases. It is therefore recommended to use option 6 when adding new user accounts. | | |
| userld | Mandatory | The user's unique identifier. | | Text Field. |
| | | | | Minimum length: 3 characters Maximum length: 100 Characters |
| | | | | Only the following special characters are supported as part of the userId: |
| | | | | @- |
| firstName | Optional | The user's first name. | | Text Field. Maximum length: 40 |

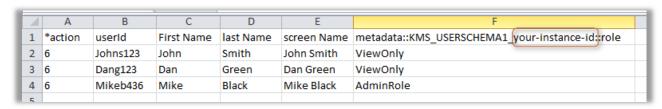
| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|-------------------|------------------------|---|---------|--|
| | | | | Characters |
| lastName | Optional | The user's last name. | | Text field. Maximum length: 40 Characters |
| screenName | Optional | The user's Screen Name as it will appear in the KMC. | | Text field. Maximum length: 100 Characters |
| email | Optional | The user's email address. | | Text field. Maximum length: 100 Characters |
| tags | Optional | The tags to be added to the user account. Multiple tags can be separated by commas, while the entire field should be wrapped with double quotation marks (for example: "tag1, tag2). When the CSV is created in a simple text editor or by a script - the wrapping quotation marks should be added explicitly. When CSV is created with a spread sheet editor (for example: MS Excel) this wrapping is automatically generated when saving to a CSV format with no need for manual editing. | | Text Field |
| gender | Optional | The tag values cannot include commas. Kaltura's numeric value for gender | | KalturaGender |
| gender | Optional | | | KalturaGender |
| | | 1=Male | | |
| | | 2=Female | | |
| country | Optional | A free text field for populating a user's country. | | Text field. No format validation. Maximum length: 16 Characters |
| state | Optional | A free text field for populating a user's state. | | Text field. No format validation. Maximum length: 2 Characters |
| city | Optional | A free text field for populating a user's city. | | Text Field. No format validation. Maximum length: 30 characters |
| zip | Optional | A free text field for populating a user's zip code. | | Text Field. No format validation. |

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|---|------------------------|--|---------|-------------------------------|
| | | | | Maximum length: 10 characters |
| dateOfBirth | Optional | The users date of birth. | | YYYY-MM-DD |
| partnerData | Optional | The partnerData user attribute is managed only via API. | | Text field |
| Custom Data | Optional | Custom data fields that are set to extend the Kaltura User object can be populated via the CSV by defining the fields in the following formats: | | |
| | | metadata::the-schema-system-name::the-schema-field-name | | |
| | | Multiple custom data schemas and fields can be populated via the CSV. | | |
| | | Values of custom data fields that have multiple values should be separated with a the following delimiter: , | | |
| | | Note: When updating custom data fields to an existing user account, a new metadata XML is automatically created. For preventing overriding existing values, all custom data fields that are set for the user should be provided in the CSV as part of the update action. | | |
| | | Custom data schemas and fields that apply to the KalturaUser Object are managed only via the Kaltura API. | | |
| MediaSpace Spe | cific User Value | es | | |
| MediaSpace User Role (MediaSpace 4.0) | Optional | This field is applicable only when a user is authorized to a specific MediaSpace role through Kaltura and not through SSO/authentication integration. | | |
| | | The MediaSpace user role is managed as a user custom data in a standard MediaSpace custom data schema created automatically when MediaSpace is installed. | | |
| | | The system name of MediaSpace Custom data schema is: | | |
| | | KMS_USERSCHEMA1_Your MediaSpace InstanceId | | |
| | | The name of the role field within this schema is: role | | |

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|-----------------------------|------------------------|--|---------|-----------------------|
| | | The populated values that should be the same as defined in the MediaSpace configuration. | | |
| | | Example: when the MediaSpace InstanceId is set to: "MyVideoPortal" | | |
| | | and one of the standard MediaSpace roles was named: "ViewOnly" | | |
| | | The custom data field name in the CSV should be: | | |
| | | metadata::KMS_USERSCHEMA1_MyVideoPortal::role | | |
| | | and the populated value for view only MediaSpace users should be set to : "ViewOnly" | | |
| MediaSpace User password | Optional | This field is applicable only when user authentication is handled by Kaltura and <u>not</u> through SSO/authentication integration. | | |
| | | For setting a user password as part of the bulk creation of MediaSpace user accounts, a sharper-password sharper-password should be populated as part of the partner-pata field. | | |
| | | The MediaSpace password should include at least 6 characters. | | |
| | | Example: when a user's password should be set to: MyPass123%, the following value should be populated into the partnerData field within the CSV for the user's record: | | |
| | | pw=ecc94cd2e13ec3ae3ea30bda01e4fe715f9f9d20 | | |
| | | You can also set the password manually from the User Management page in the MediaSpace configuration panel. | | |

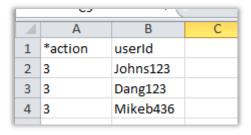
Examples of End-Users CSV

Bulk Provisioning/updating of Media Space's User Accounts with a Role*



^{*} Users are authenticated through SSO integration. Authorization to access to MediaSpace with a specific role is managed by Kaltura. The role's metadata field name and possible values are specific per MediaSpace configuration.

Bulk Deletion of Specific MediaSpace User Accounts



Categories CSV

The Categories CSV may be used for creating, updating or deletion of, a large amount of categories.

This section contains the following topics about the Categories CSV:

- Purpose and Usage
- Schema Description
- Examples of the Categories CSV

Purpose and Usage

The categories CSV for bulk operation may be useful for:

- Creating multiple categories for any applicative use. For example:
 - Creating multiple categories for the initial setup of Media Space's galleries and channels
 - Creating multiple categories for a Kaltura based website integration
- An on-going scheduled process for the syncing categories managed in Kaltura with a respective external structure. For example:
 - A scheduled daily sync process for syncing MediaSpace group channels with groups managed in the organization.
 - An automatic sync of Kaltura's categories with the taxonomy of an external CMS



NOTE: For an efficient on-going CSV based sync processes, only new categories and categories that require updating or deletion should be included within the CSV.



NOTE: Content entitlement related attributes can be populated via the CSV only in accounts that are set to support entitlements and for categories under a category tree branch that is set to have entitlement settings.

Schema Description for Categories CSV

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|----------------|---------------------------------|---|---------|---|
| action | Optional | Kaltura's numeric value for the action to apply on a specific category. | 1= Add | KalturaBulkUploadAction |
| | | CSV lines with different actions can be combined into a single CSV file. Only fields that are relevant to the CSV action will be used. | | |
| | | The supported action types and their numeric values are: | | |
| | | 1=Add - to add a category | | |
| | | 2=Update - to update an existing category | | |
| | | 3=Delete – to delete an existing category | | |
| | | 6=Add or Update – to add or update a category when the given categoryId or referenceId are already available in Kaltura. | | |
| name | Mandatory in add actions | The name of the category. When the category name includes the > character it will automatically be replaced with _ (underscore character). | | Text Field. Maximum length: 128 Characters |
| relativePath | Optional | The category-tree path in which the category is located or should be created. Each category level within the path should be separated by the '> 'character. | | Text Field. Unlimited length |
| | | Note: The provided path must exist prior to processing the CSV line, or created in a higher CSV line. | | |
| categoryld | Optional | The Kaltura internal and unique identifier of the category. The categoryld field is used in the CSV for identifying a category that requires updating or needs to be deleted. | | Integer |
| | | In an 'update' or a 'delete' action, either the categoryld or the referenceld field must be provided for identifying the category to which the action should apply. | | |

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|----------------|------------------------|---|---------|---|
| | | In 'add' actions the categoryld field will be ignored. | | |
| referenceId | Optional | A possible identifier of the category based on an identifier from an external system that can relate the category to an external entity it represents or related to. | | Text Field. Maximum length: 512 Characters |
| | | In an 'update' or a 'delete' action, either the categoryld or the referenceld field must be provided for identifying the category to which the action should apply. | | |
| | | In 'add' actions the referenceld will be populated into the new category. | | |
| | | Note: The uniqueness of the referenceld field is not verified nor managed in Kaltura. It is recommended to use logic that maintains this uniqueness for being able to reference bulk actions and API calls to a specific category. | | |
| | | In case multiple categories with the same referenceld exist in the account, any update/delete action will be committed only to a single category. | | |
| tags | Optional | The tags to be added to the category. Multiple tags can be separated by commas, while the entire field should be wrapped with double quotation marks (e.g. "tag1, tag2). When the CSV is created in a simple text editor or by a script - the wrapping quotation marks should be added explicitly. When CSV is created with a spread sheet editor (e.g. MS Excel) this wrapping is automatically generated when saving to a CSV format with no need for manual editing. | | Text Field. Unlimited length |
| | | Tag values cannot include commas. | | |
| description | Optional | A description of the category and its applicative/administrative purpose. | | Text Field. Unlimited length |
| | | When the CSV is created in a simple text editor or by a script,we recommend that you addi wrapping quotation marks for whenthe description includes commas. | | |

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|----------------------|------------------------|--|-----------------------|-------------------------|
| Custom Data | | Custom data fields that are set to extend the Kaltura Category object can be populated into a category by defining the fields in the following formats: | | |
| | | metadata::the-schema-system-name::the-schema-field-name | | |
| | | With this format multiple custom data schemas and fields can be populated via the CSV. | | |
| | | Custom data schema and fields system names are available in the custom data setting page in the KMC. | | |
| | | Values of custom data fields that have multiple values should be separated with a the following delimiter: , | | |
| | | Note: When updating custom data fields to an existing category, a new metadata XML is automatically created. For preventing overriding existing values, all custom data fields that are set for the user should be provided in the CSV as part of the update action. | | |
| Entitlements Setting | S | | | |
| privacy | Optional | The numeric value of the Content Privacy option to set for the category as part of its entitlements settings. | 1 = No Restriction | KalturaPrivacyType |
| | | This option is enabled only in accounts that are configured to support end-user entitlements to content and for categories that were set to have entitlement settings. | | |
| | | The supported action types and their numeric values are: | | |
| | | 1= No Restriction | | |
| | | 2 =Requires Authentication | | |
| | | 3= Private | | |
| appearInList | Optional | The numeric value of the Category Listing option to set for the category as part of its entitlements settings. | 1 = No Restriction | KalturaAppearInListType |
| | | The setting of this option is enabled only in accounts that were configured to support Content Entitlements and in categories that | | |

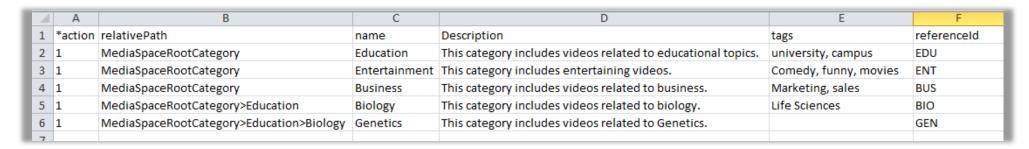
| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|--------------------|------------------------|---|-----------------------|--|
| | | have entitlement settings. | | |
| | | The supported action types and their numeric values are: | | |
| | | 1= No Restriction | | |
| | | 3= Private | | |
| contributionPolicy | Optional | The numeric value of the ContributionPolicy option (who can add content to the category) to set for the category as part of its entitlements settings. | 1 = No Restriction | KalturaContributionPolicyType |
| | | The setting of this option is enabled only in accounts that were configured to support Content Entitlements and in categories that have entitlement settings. | | |
| | | The supported action types and their numeric values are: | | |
| | | 1= No Restriction | | |
| | | 2= Private | | |
| inheritanceType | Optional | The numeric value of user permissions inheritance option (Inherit End-User Specific Permissions from Parent Category) to set for the category as part of its entitlements settings. | 2=No | KalturaInheritanceType |
| | | The setting of this option is enabled only in accounts that were configured to support Content Entitlements and in categories that have entitlement settings. | | |
| | | The supported action types and their numeric values are: | | |
| | | 1= Yes. inherit specific end-user permissions from parent category | | |
| | | 3= No. | | |
| owner | Optional | The userId of the category's owner. | | Text Field. |
| | | | | Minimum length: 3 characters Maximum length: 100 Characters |
| | | | | Only the following special characters are supported as part of |

Categories CSV

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|----------------------------|------------------------|--|-------------------------------------|-------------------------------------|
| | | | | the userId: |
| | | | | @- |
| defaultPermission Level | Optional | The numeric value of the default permission Level the end-users should be granted for the specific category (unless other permission level was specified explicitly via CSV or API). The supported values are: | 3=Member | KalturaCategoryUserPermissionLe vel |
| | | 0=Manager | | |
| | | 1=Moderator | | |
| | | 2=Contributor | | |
| | | 3=Member | | |
| moderation | Optional | Indicates whether content should be moderated in the application before it is added to the category. | 0=moderati on is not required | Boolean |

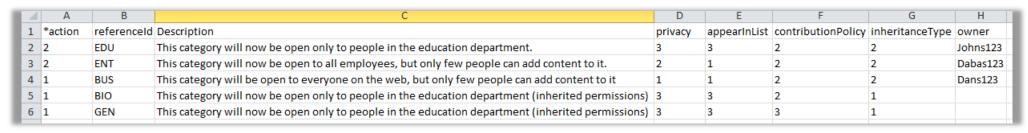
Examples of the Categories CSV

Bulk Creation of Categories – Basic Metadata Only



Updating Existing Categories with a Few Entitlement Settings

This example uses the referenceld as the category identifier.



End-User Entitlements CSV

The End-User Entitlements CSV is used for setting, updating or deleting specific end-user permissions to categories. The end-user permission to a category is set to a specific user ID and with a defined permission level.

End-user entitlements can be set to multiple categories through a single CSV file.

This section contains the following topics about the End-User Entitlements CSV:

- Purpose and Usage
- Schema Description
- Examples of End-User Entitlements CSV

Purpose and Usage

The End-user entitlements bulk operation may be useful for the following cases:

- Creating multiple end-user permissions for the initial setup of MediaSpace group channels based on users' membership in organizational units.
- An on-going scheduled process for syncing end-user permissions to MediaSpace group channels with group membership's information saved in an organizational system.
 - All user permissions created via this bulk service are set to an automatic "update method". When an on-going sync process is activated on a regular basis it is possible to manually override the automatically created user permissions from the KMC or MediaSpace for granting different permission levels to some users in the group. In this case the specific user permissions will be set to a manual "update method", for example, group managers, and will not be overridden by upcoming executions of the end-user entitlements bulk service.



NOTE: For an efficient on-going CSV based sync processes - it is recommended that only new user permissions and user permissions that require updating or deletion, based on recent changes in organizational structure will be included within the CSV and not the entire group directory

Schema Description for End-User Entitlements CSV

The following table includes descriptions for all end-user attributes supported by Kaltura. CSV examples targeted to MediaSpace user-management only are available below.

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|---------------------|------------------------|---|---------|--|
| action | Optional | Kaltura's numeric value for the action to apply for specific enduser permission to a category. | 1= Add | KalturaBulkUploadAction |
| | | CSV lines with different actions can be combined into a single CSV file. Only fields that are relevant to the CSV action will be used. | | |
| | | The supported action types and their numeric values are: | | |
| | | 1=Add - to add specific end-user permission to a category | | |
| | | 2=Update – to update a specific end-user permission to a category | | |
| | | 3=Delete – to delete a new specific end-user permission to a category | | |
| | | 6=Add or Update – to add or update a specific end-user permission to a category. | | |
| categoryld | Optional | The Kaltura internal and unique identifier of the category. The categoryld field is used in the CSV for identifying the category to which the specific end-user permission should be added/updated/deleted. | | Integer |
| | | This field is optional but either the categoryld or the referenceld fields must be provided for identifying the category to which the action should apply. | | |
| categoryReferenceId | Optional | A possible identifier of the category from an external system. The categoryReferenceId field is used in the CSV for identifying the category to which the specific end-user permission should | | Text Field. Maximum length: 512 Characters |

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|-----------------|------------------------|--|-------------|--|
| | | be added/updated/deleted. | | |
| | | This field is optional, but either the categoryld or the categoryReferenceId fields must be provided for identifying the category to which the action should apply. | | |
| | | The uniqueness of categoryReferenceId field is not verified nor managed in Kaltura. It is recommended to use a logic that maintains this uniqueness for being able to reference bulk actions and API calls to a specific category. | | |
| | | In case of multiple categories with the same categoryReferenceId exist in the account, CSV update/delete actions will be committed only to a single category. | | |
| userld | Mandatory | The identifier of the end-user to which the category permission | | Text Field. |
| | | should be added/updated/deleted for. When the user account is not yet set in Kaltura it will be created as part of this bulk service with the given userId | | Minimum length: 3 characters Maximum length: 100 Characters |
| | | | | Only the following special characters are supported as part of the userId: |
| | | | | @- |
| permissionLevel | Optional | The numeric value of the permission Level the end-user should be granted for the specific category. The supported values are: | 3=Member | KalturaCategoryUserPermissio nLevel |
| | | 0=Manager | | |
| | | 1=Moderator | | |
| | | 2=Contributor | | |
| | | 3=Member | | |
| updateMethod | Optional | The numeric value of the update method the end-user permission to the category should be updated. The supported | 1=Automatic | KalturaUpdateMethodType |

End-User Entitlements CSV

| Parameter Name | Mandatory/ Optional | Description | Default | Type and Restrictions |
|----------------|------------------------|---|----------|---------------------------|
| | | values are: | | |
| | | 0=Manual | | |
| | | 1=Automatic | | |
| status | Optional | The numeric value of the status of the end-user permission to the category. The supported values are: | 1=Active | KalturaCategoryUserStatus |
| | | 1=Active | | |
| | | 3=Deactivated (update actions only) | | |

Examples of End-User Entitlements CSV

Adding/Updating Permissions to 2 Categories

This example uses the referenceld as the category identifier.

| 1 | Α | В | С | D |
|----|---------|---------------------|-------------|-----------------|
| 1 | *action | categoryReferenceId | userId | permissionLevel |
| 2 | 6 | EDU | danba1 | 0 |
| 3 | 6 | EDU | johnc3 | 2 |
| 4 | 6 | EDU | mikea2 | 2 |
| 5 | 6 | EDU | sharonyd1 | 2 |
| 6 | 6 | EDU | johnathans2 | 2 |
| 7 | 6 | ENT | lenar56 | 0 |
| 8 | 6 | ENT | donr523 | 3 |
| 9 | 6 | ENT | ronw3556 | 3 |
| 40 | | | | |

Deleting End-user Permissions from Specific Categories

This example uses the referenceld as the category identifier.

