Kaltura Video Navigator for ECM Quick Start Guide

Version: 1.0

Kaltura
open source video

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Preface

This preface contains the following topics:

- About this Guide
- Audience
- Document Conventions

About this Guide

This guide describes how to use the Kaltura Video Navigator (On-Premise) deployed within your organization's environment. We've designed the solution to fit naturally into the ECM environment. All of the instructions are standard ECM actions. If you are an ECM designer or user, this solution and these instructions are very similar to the other solutions you are familiar with.

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

Contact Us:

Please send your documentation-related comments and feedback or report mistakes to knowledge@kaltura.com. We are committed to improving our documentation and your feedback is important to us.

Audience

This guide is intended for IBM ECM site designers, site owners and site users.

Document Conventions

Kaltura uses the following admonitions:

- Note
- Workflow

NOTE: Identifies important information that contains helpful suggestions.

Workflow: Provides workflow information.

1. Step 1
2. Step 2

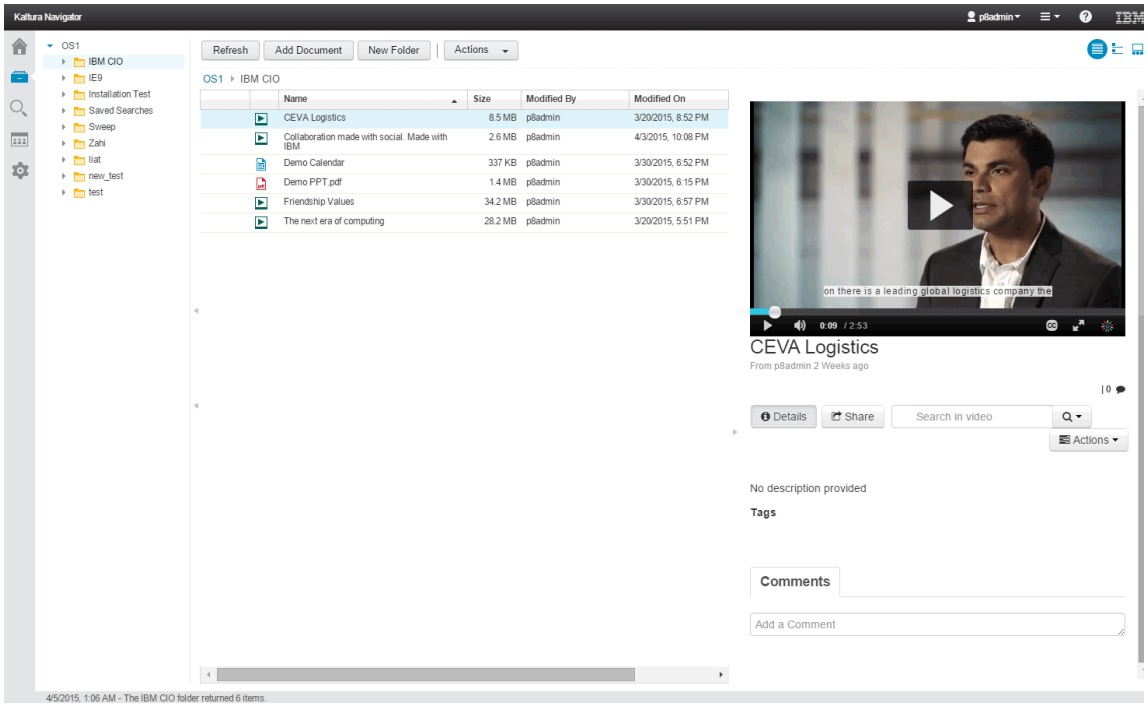
SECTION 1

Introduction to the Kaltura Video Navigator

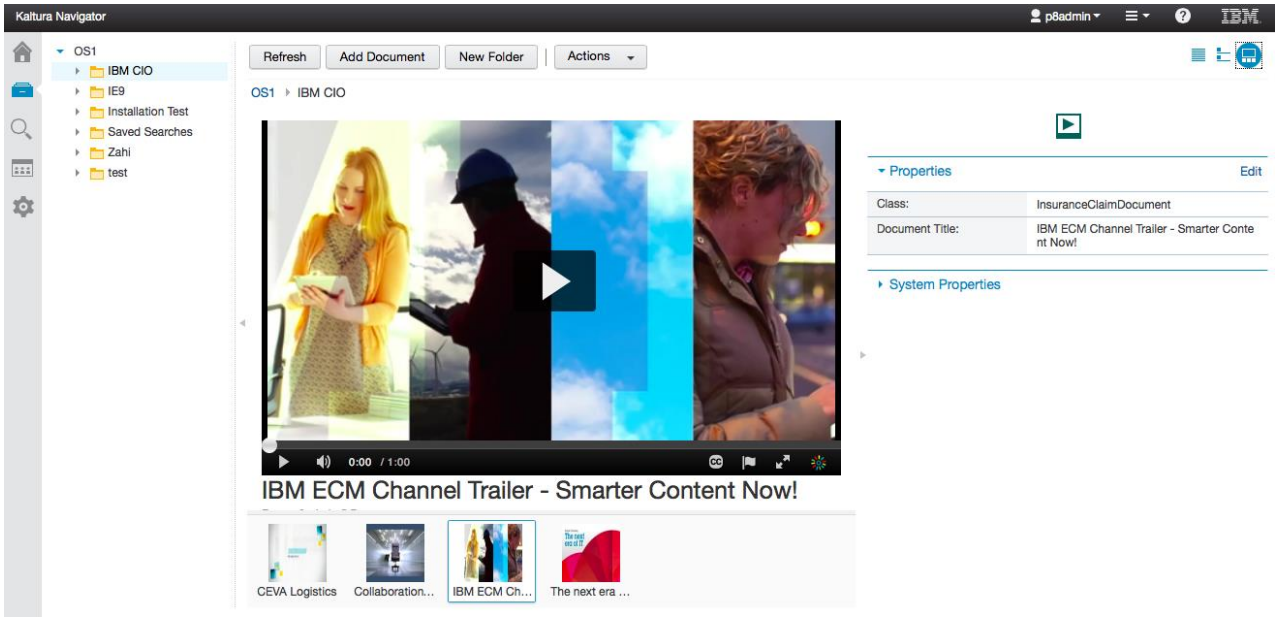
The Kaltura Video Navigator is used to add Kaltura video playback and management to the ECM suite, specifically to the Content Navigator and FileNet components. After installing the Kaltura Video Navigator**,** see the Kaltura Video Navigator for ECM Deployment and Installation Guide, the preview and view of video content within the IBM Content Navigator (ICN) changes. Video is immediately playable from within the IBM Content Navigator, after the installation parameters have been configured for the document classes to benefit for streaming video,

When you select a video in the IBM Content navigator, the video is displayed in an iframe (on the right). The Kaltura Video Navigator display replaces the legacy display that downloads the video locally.

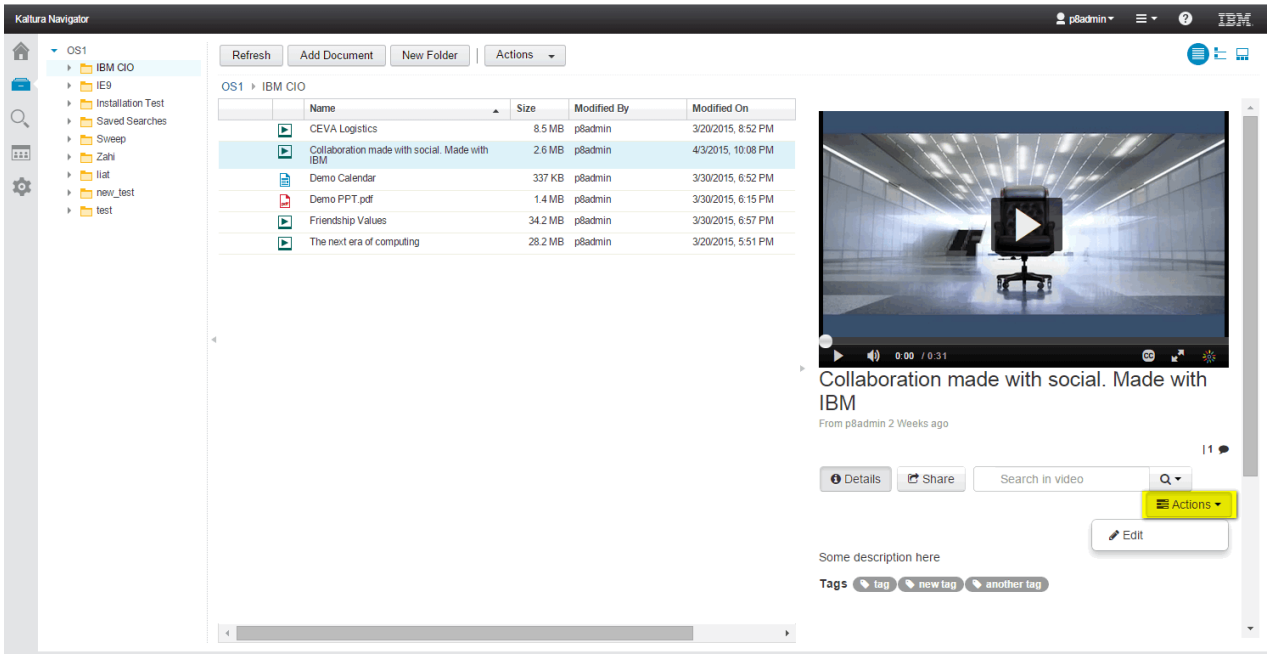
NOTE: The process for viewing unselected document classes, whereby videos are downloaded, remains the same,



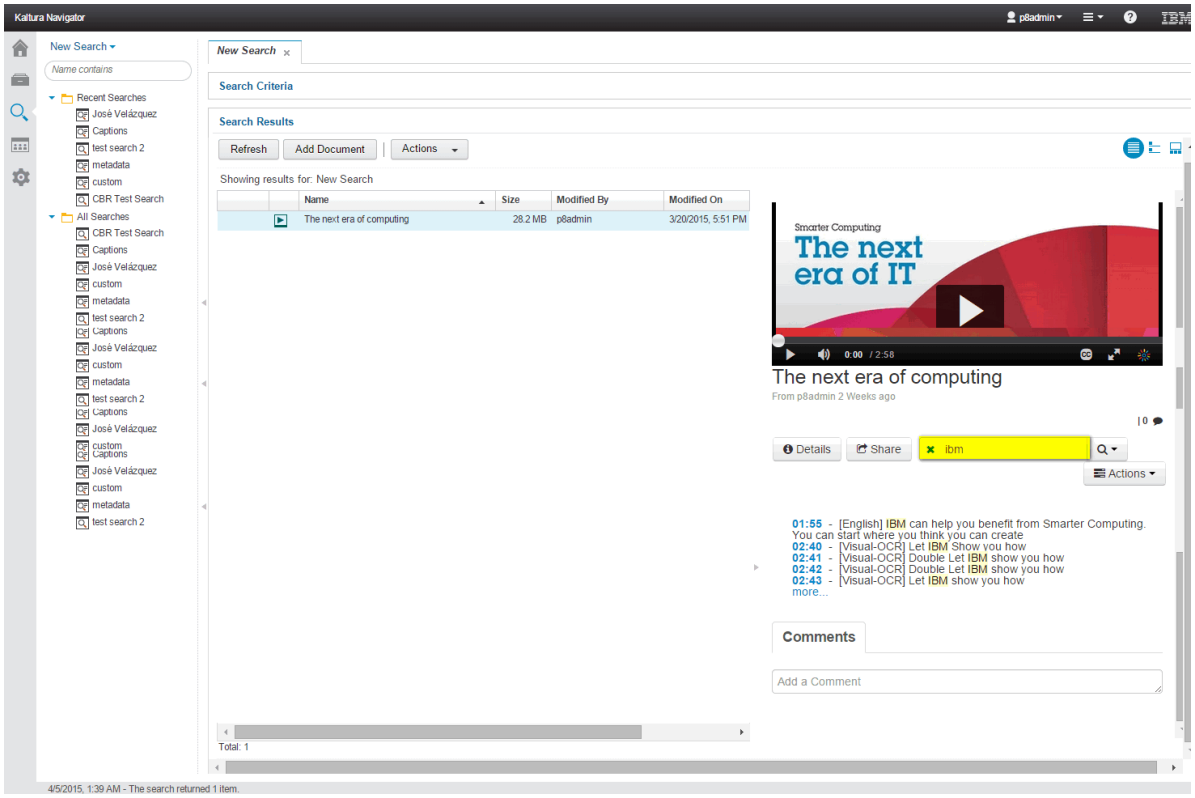
The following graphic displays the filmstrip view for Kaltura Video Navigator videos within the IBM Content Navigator.



The Actions drop down menu allows you to edit the some of the video's components.



You can also use the advanced search capabilities to search results that include enriched metadata, for example captions, OCR, and all other parameters that are indexed within the IBM ECM Index.


Kaltura Navigator
p8admin
New Search
Name contains
Recent Searches
José Velázquez
Captions
test search 2
metadata
custom
CBR Test Search
All Searches
CBR Test Search
Captions
José Velázquez
custom
metadata
test search 2
Captions
José Velázquez
custom
metadata
test search 2
Captions
José Velázquez
custom
Captions
José Velázquez
custom
metadata
test search 2
New Search
Search Criteria
Search Results
Refresh
Add Document
Actions
Showing results for: New Search
Name
Size
Modified By
Modified On
The next era of computing
28.2 MB
p8admin
3/20/2015, 5:51 PM
Total: 1
Smarter Computing
The next era of IT
0:00 / 2:58
The next era of computing
From p8admin 2 Weeks ago
Details
Share
ibm
Actions
01:55 - [English] IBM can help you benefit from Smarter Computing. You can start where you think you can create
02:40 - [Visual-OCR] Let IBM Show you how
02:41 - [Visual-OCR] Double Let IBM show you how
02:42 - [Visual-OCR] Double Let IBM show you how
02:43 - [Visual-OCR] Let IBM show you how
more...
Comments
Add a Comment
4/5/2015, 1:39 AM - The search returned 1 item.

SECTION 2

Interacting and Managing your Media

This section describes the permissible actions you can perform from within the video iFrame: Your ECM administrator enables roles and permissions for the Kaltura Video Navigator and editing capabilities depend on your permissions.

Contact your ECM administrator to be certain that you are able to access the editing tabs for your media.

If you have editing permissions for the Media, you can:

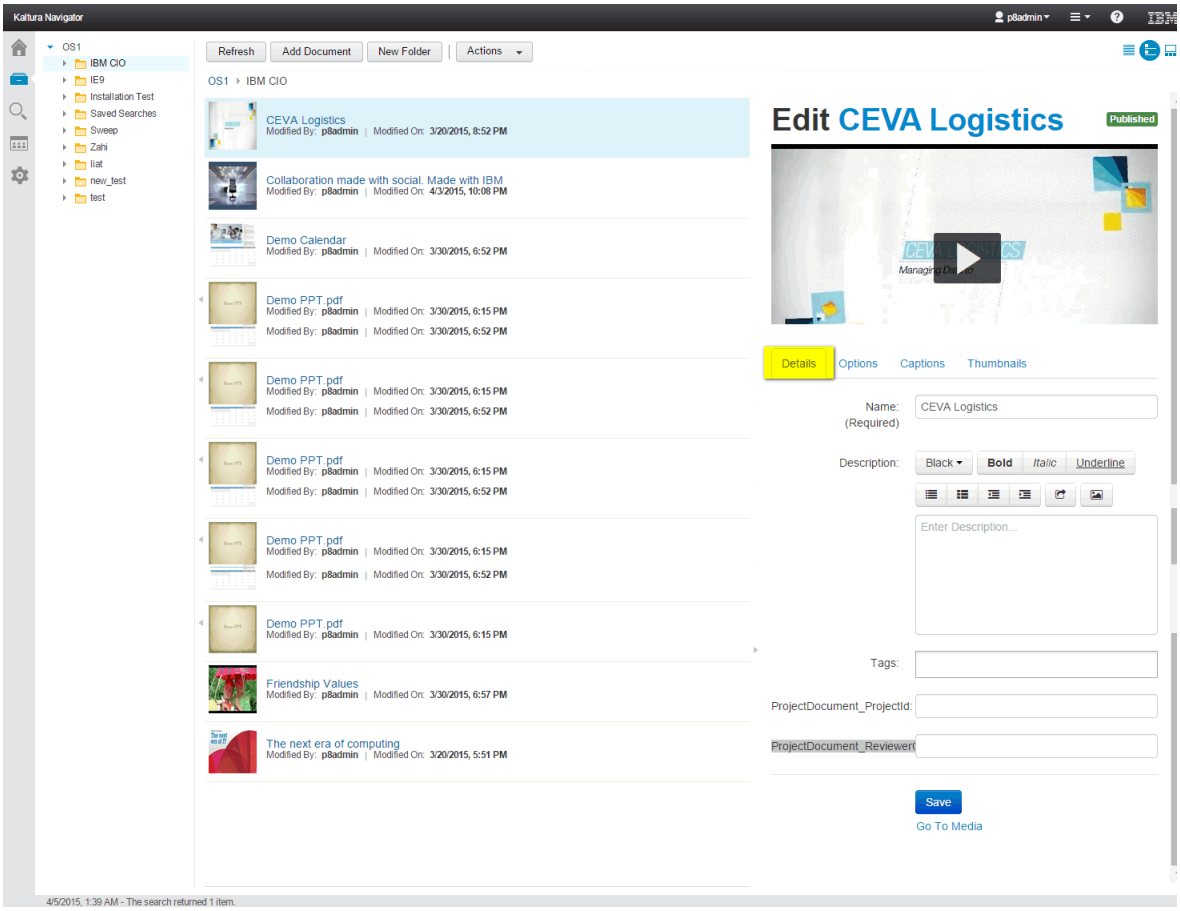
- Edit the Media
- Disable and Close Comments
- Upload and Manage Captions
- Set and Modify Thumbnails

Editing Media

To edit the media metadata

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Details tab.
3. Edit information about the parameters associated with the document class:
    - Name
    - Description
    - Tags - The Tags field automatically completes values from tags that already exist in your application and consolidate taxonomy and improve discoverability of your content.
    - Any other unique fields associated with the document class, for example:
        - Project Document_ProjectId
        - ProjectDocument_ReviewerComments
4. Click Save

    The modifications are synchronized to IBM ECM.



Disabling and Closing Comments

For each of your media items, you can:

- Disable the comment feature.
- Prevent additional comments.

Comments (and other Metadata) are synchronized across all Kaltura Applications sharing the cloud media repository with IBM ECM – for example IBM Connections.

To disable comments on a media item

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Options tab.
3. Check the Disable comments for this media checkbox.
4. Click Save.

The Comments tab is not displayed on the media page.

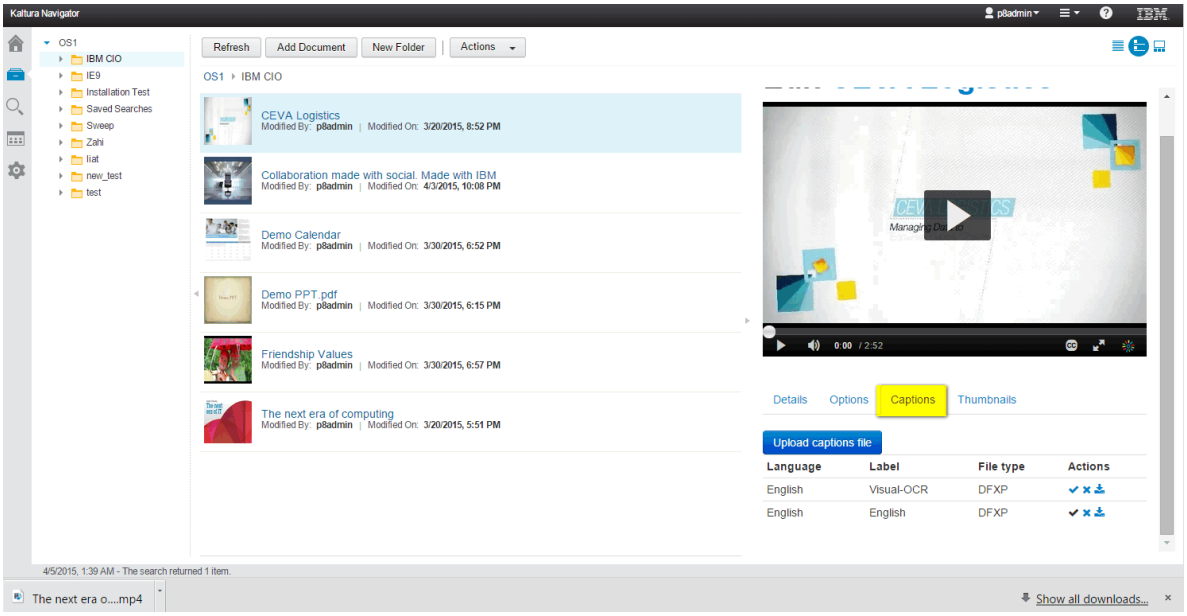
NOTE: Comments that were entered before you disable the comment feature are re displayed if you re enable comments.

To prevent additional comments on a media item

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Options tab.
3. Select the Options tab and select the Close discussion checkbox.

On the Comments tab of the media page, Comments closed is displayed and the Add a Comment field is not displayed.

4. Click Save.



Uploading and Managing Captions

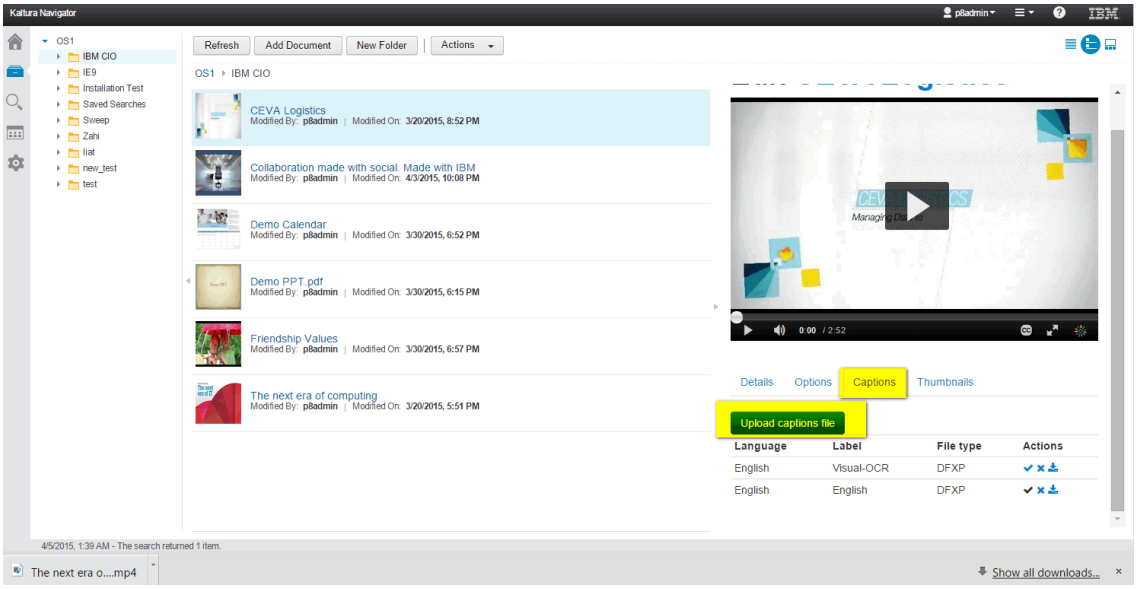
You can upload caption files for your media items and manage the captions. Users can search the caption texts.

Uploading Captions

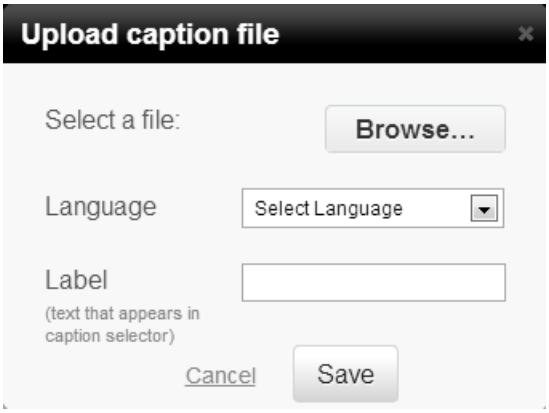
Captions may be uploaded manually or generated automatically via Kaltura's media enrichment ecosystem. Captions are synchronized from Kaltura to the IBM ECM index, to allow in-video search and ranking according to the IBM ECM search engine.

To upload captions

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Captions tab.
3. Click Upload captions file.



The following dialog box is displayed:



4. Click **Browse** and select an SRT or DFXP caption file.
5. Select the caption language.
6. Enter a label to display for the file in the caption selector.
   The caption selector displays caption options in the media player.
7. Click **Save** to upload the file.
   The file is added to a table on the media page's Captions tab.

NOTE: To upload another file, click **Upload captions file** again and repeat this process.

Managing Captions

After you upload captions for a video, in the caption table you can:

- Change the default caption file.
- Delete a caption file.
- Download a caption file.

To modify the language or the caption selector label

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Captions tab.to display the caption table.

3. In the caption table, click **Change** and do the following:
   - To change the language, select a new language in the Language column.
   - To change the label, enter new text in the Label column.
4. Click **the disk icon** to update the values.

To change the caption file used by default in the media player

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Captions tab.
3. In the caption table, click on the checkmark icon in the right column of a caption row to **Set as default**.

To delete a caption file

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Captions tab.
3. Click on the “x” icon to **Delete**.
4. In the Confirm Remove window, click **Yes** to remove the caption file.

To download a caption file

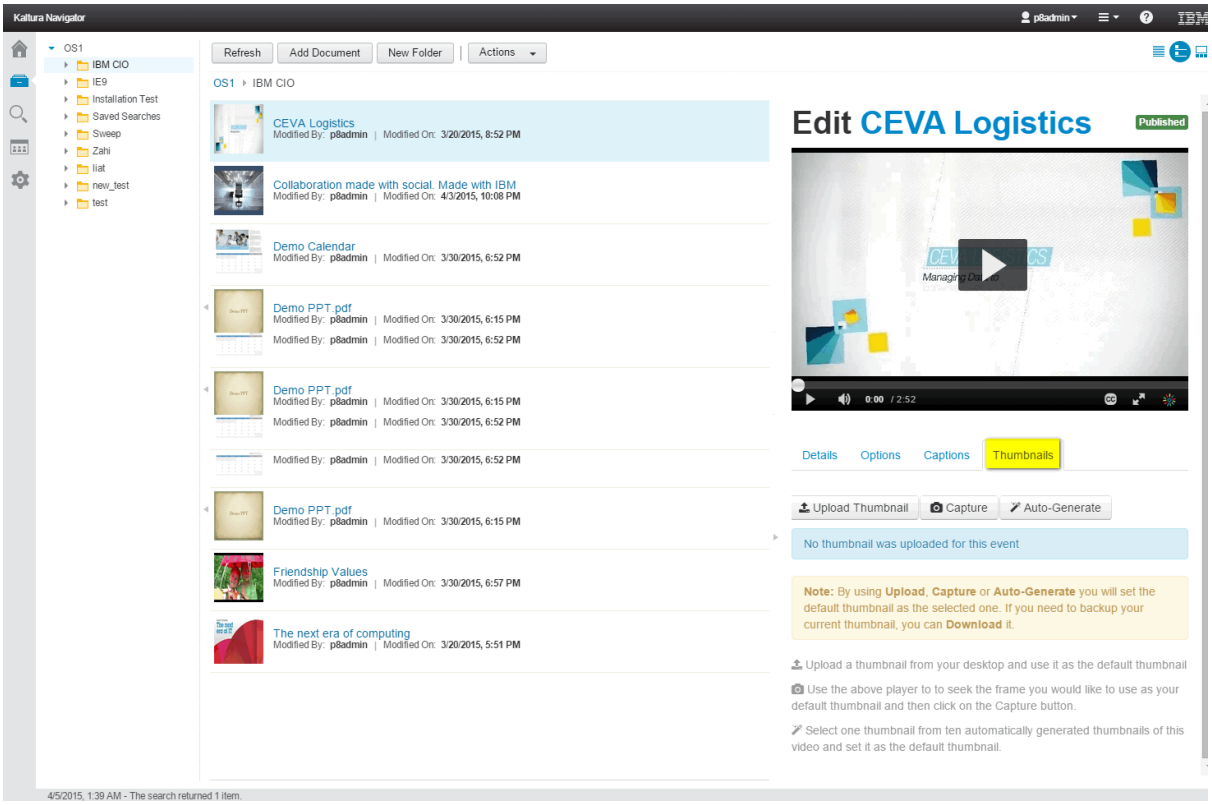
1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Captions tab.
3. Click the **Download icon**.

The captions file is downloaded.

Setting and Modifying Thumbnails

There are following options are available for setting and managing a thumbnail for your content:

- Upload a thumbnail from your desktop and use it as the default thumbnail.
- Use the player to select the frame you want to use as your default thumbnail and then click on the Capture button.
- Select one thumbnail from ten automatically generated thumbnails of the selected video and set it as the default thumbnail.



Selecting a Thumbnail

Thumbnails are displayed in both the IBM ECM file picker as well as in the video player initial screen. Thumbnails are generated by Kaltura and synchronized to the ECM.

To upload a thumbnail from your desktop

4. Select a media thumbnail or title and select Edit from the Actions drop down menu.
5. Click on the Thumbnails tab.
6. Click Upload Thumbnail.
7. Upload a file from your desktop and click Open.

To grab a frame from the content as a thumbnail

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Thumbnails tab and click **Play**.
3. Click Capture (camera icon) at the frame that you want to use as a thumbnail.
   The captured frame is saved automatically and used for the thumbnail.

To select an automatically generated thumbnail

1. Select a media thumbnail or title and select Edit from the Actions drop down menu.
2. Click on the Thumbnails tab.
3. Click Auto Generate.

APPENDIX A

Architecture

This appendix describes the Kaltura Video Navigator architecture.

The Kaltura Video Navigator is comprised of the following components installed on the ECM side:

- Kaltura Video Navigator - A content Navigator plug-in: The Content Navigator add-on renders a video player frame within the Content Navigator. For more information about the Kaltura Player, see the Universal Studio Information Guide.
- Kaltura Event Handler - A FileNet add-on: This component takes charge of the Synchronization of video assets, after files are uploaded to FileNet and then to Kaltura to prepare to playback.
- Kaltura Web Handler – a custom REST service: This component receives notifications from the Kaltura platform side.

Related Articles

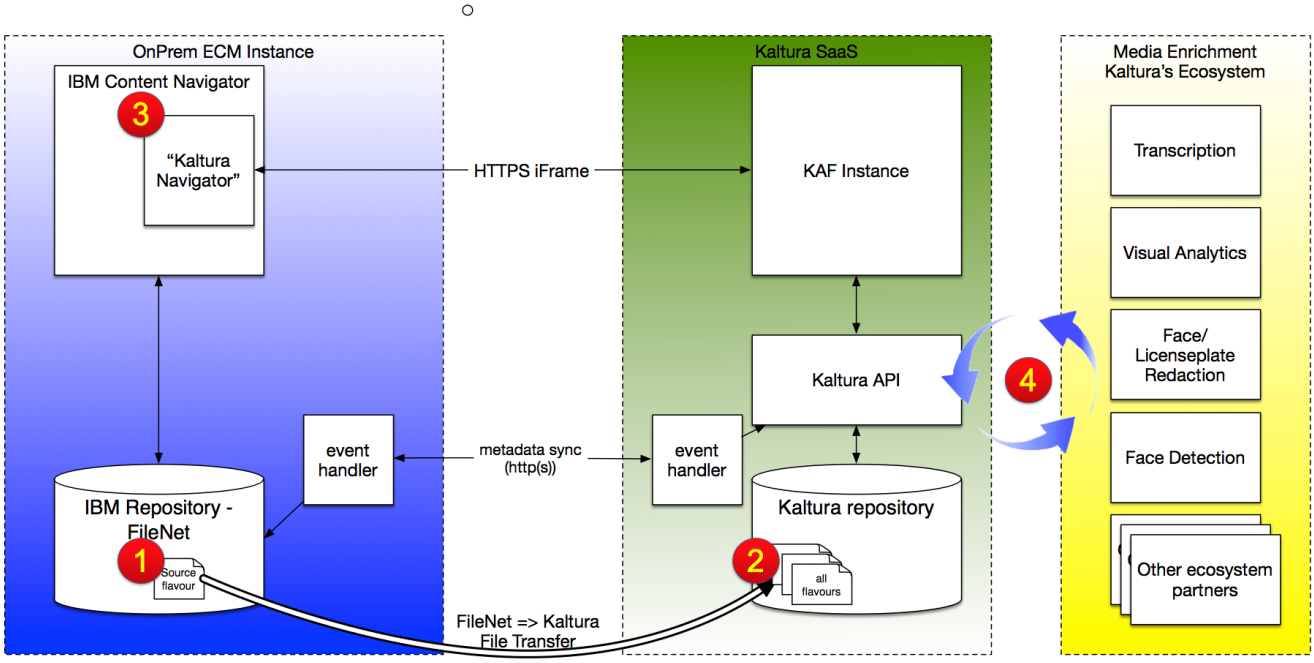
We suggest that you familiarize yourself with the following articles:

- The Kaltura Video Platform Architecture Overview
- Understanding the Kaltura Application Framework (KAF)
- Getting Started with the Kaltura Application Framework (KAF)
- What are the supported Transcoding formats for the SaaS edition?

Video Navigator for ECM Workflow

After you install the Kaltura Video Navigator for ECM, see the Kaltura Video Navigator for ECM Deployment and Installation Guide, your selected video document types are synchronized to Kaltura.

The following diagram illustrates the workflow:



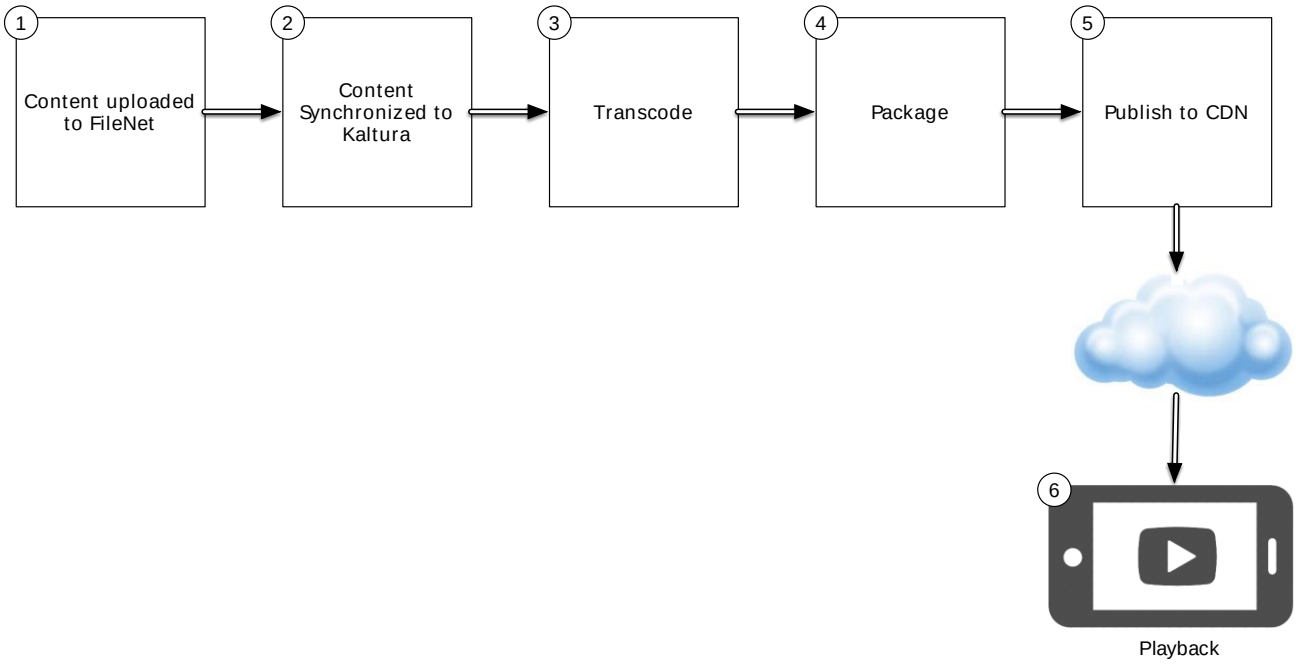
1. All source videos in your FileNet repository that are configured with a document class which is set to synchronize with Kaltura, will be synched. Synchronization is immediate for new content, or based on content-sweeps for existing content.
    - IBM content sweeps can be configured as per the repository configuration, to avoid overwhelming the network.
2. After a source asset is synchronized to Kaltura, the asset is transcoded to play back on any device
3. When the asset is ready for playback (transcoding is in parallel, as soon as the quickest flavor is ready – a notification is sent that a video entry is ready in Kaltura. Hereafter, whenever selecting a video in ECM, a Kaltura frame is rendered.
4. The content within Kaltura can be further enriched, asynchronously, to include: transcriptions, OCR, or any other capability from the Kaltura ecosystem.

Video Ingestion Workflow

Workflow:

1. Video is uploaded (or is already present) in FileNet.
2. Video is synchronized to Kaltura.
3. Video is transcoded - multiple bitrates are available for playback on any device in any network condition.
4. Video is packaged, allowing additional encryption to be applied (optional) and preparing it for internet delivery
5. Video is published to a CDN - internal in the organization or external content delivery network.
6. Video plays within the content navigator frame, on any device.

The following graphic provides more detail on the video ingestion workflow:



Design Principles

The Kaltura Video Navigator was designed to provide a native document type within the FileNet repository. Existing (configured) document classes are enhanced with Kaltura information enabling video playback. As a native document type, video is included seamlessly within any workflow in the case manager or other applications.

1. Video is a compound object:
    - Thumbnails – are created by the Kaltura platform, synchronized to ECM.
    - Transcriptions – are generated at the Kaltura platform side, by a selected transcription provider, and are indexed by the ECM full-text-search.
    - Metadata – document properties – is kept in sync (can be edited within the iFrame or without)
2. Integration at an object store level:
    - The Kaltura integration is done on an object store level in FileNet. This allows configuring many Kaltura instances (separate media silos) on one ECM instance, if so desired, and promotes seamless existing and new content synchronization
    - The integration can be easily enabled/disabled or configuration changed, if required.

APPENDIX B

Logging

This appendix provides information about logging.

Logging Principles

Java logging framework Apache Log4J is used for logging of all operations in all custom Kaltura integration modules.

Logging Levels

Kaltura modules' logging levels leverage Log4J's logging levels that are described in the following table. Logging level changes are done in the logging configuration file

Level	Description
OFF	The highest possible rank and is intended to turn off logging.
FATAL	Severe errors that cause premature termination.
ERROR	Other runtime errors or unexpected conditions.
WARN	"Almost" errors, other runtime situations that are undesirable or unexpected, but not necessarily "wrong".
INFO	Interesting runtime events (startup/shutdown).
DEBUG	Detailed information on the flow through the system.
TRACE	Most detailed logging information.

Logging Configuration

- Logging is configured through *kaltura-log4j.xml* configuration file located in *KALTURA_CONF_DIR*.
- By default, all logs are written to *KALTURA_CONF_DIR\logs* unless redefined in the logging configuration file.
- The following logs are written to and available:
  - *kaltura-all.log* - logs all operations from all custom Kaltura modules based on the logging level defined in the configuration
  - *kaltura-errors.log* - logs errors only from all custom Kaltura modules
  - *kaltura-event-handler.log* - logs all operations from Kaltura Event Handler module (documents sync, pre-processing, sweeps) based on the configured logging level
  - *kaltura-web-handler.log* - logs all operations from Kaltura Web Handler module based on the configured logging level
- Logging configuration consists of appenders (define layouts, rollover behavior, paths, etc.)

and loggers (define logging levels).

- To change the logging level, update it in the configuration file accordingly and restart corresponding application in the application server.

Default kaltura-log4j.xml Configuration File:

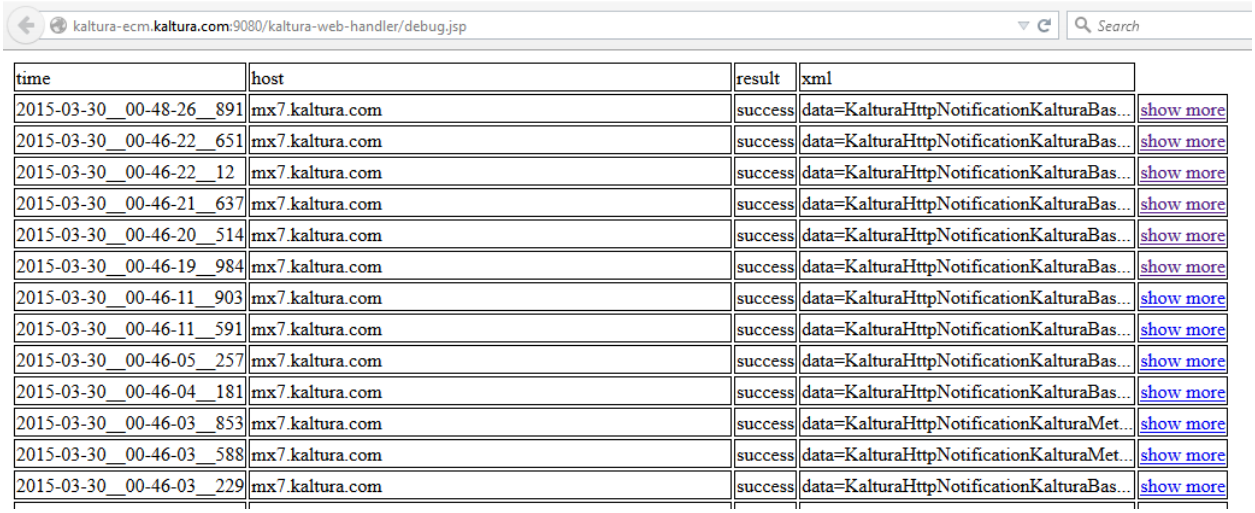
```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE log4j:configuration SYSTEM "log4j.dtd">
<log4j:configuration debug="true" xmlns:log4j='http://jakarta.apache.org/log4j/'>
    <appender name="console" class="org.apache.log4j.ConsoleAppender">
        <layout class="org.apache.log4j.PatternLayout">
            <param name="ConversionPattern"
                   value="%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n"/>
        </layout>
    </appender>
    <appender name="kaltura-errors" class="org.apache.log4j.RollingFileAppender">
        <param name="maxFileSize" value="10MB"/>
        <param name="maxBackupIndex" value="10"/>
        <param name="file" value="${kaltura.conf.dir}/logs/kaltura-errors.log"/>
        <param name="threshold" value="ERROR"/>
        <layout class="org.apache.log4j.PatternLayout">
            <param name="ConversionPattern"
                   value="%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n"/>
        </layout>
    </appender>
    <appender name="kaltura-all" class="org.apache.log4j.RollingFileAppender">
        <param name="maxFileSize" value="10MB"/>
        <param name="maxBackupIndex" value="10"/>
        <param name="file" value="${kaltura.conf.dir}/logs/kaltura-all.log"/>
        <layout class="org.apache.log4j.PatternLayout">
            <param name="ConversionPattern"
                   value="%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n"/>
        </layout>
    </appender>
    <appender name="kaltura-web-handler"
   class="org.apache.log4j.RollingFileAppender">
        <param name="maxFileSize" value="10MB"/>
        <param name="maxBackupIndex" value="10"/>
        <param name="file" value="${kaltura.conf.dir}/logs/kaltura-web-
   handler.log"/>
        <layout class="org.apache.log4j.PatternLayout">
            <param name="ConversionPattern"
                   value="%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n"/>
        </layout>
    </appender>
    <appender name="kaltura-event-handler"
   class="org.apache.log4j.RollingFileAppender">
        <param name="maxFileSize" value="10MB"/>
        <param name="maxBackupIndex" value="10"/>
        <param name="file" value="${kaltura.conf.dir}/logs/kaltura-event-
   handler.log"/>
        <layout class="org.apache.log4j.PatternLayout">
            <param name="ConversionPattern"
                   value="%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n"/>
        </layout>
    </appender>
    <logger name="com.kaltura.navigator.handler">
        <level value="DEBUG"/>
        <appender-ref ref="kaltura-web-handler"/>
    </logger>
    <logger name="com.kaltura.service.handler">
        <level value="DEBUG"/>
        <appender-ref ref="kaltura-event-handler"/>
    </logger>
    <logger name="com.kaltura" additivity="false">
```

```
        <level value="DEBUG"/>
        <appender-ref ref="kaltura-all"/>
        <appender-ref ref="kaltura-errors"/>
    </logger>
    <root>
        <level value="ERROR"/>
        <appender-ref ref="console"/>
        <appender-ref ref="kaltura-errors"/>
    </root>
</log4j:configuration>
```

Custom REST Service Logging

The custom REST service Kaltura Web Handler comes with additional debug logging accessible through the following URL:

http://<SERVER>:<PORT>/kaltura-web-handler/debug.jsp



time	host	result	xml	
2015-03-30__00-48-26__891	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-22__651	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-22__12	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-21__637	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-20__514	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-19__984	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-11__903	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-11__591	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-05__257	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-04__181	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more
2015-03-30__00-46-03__853	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaMet...	show more
2015-03-30__00-46-03__588	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaMet...	show more
2015-03-30__00-46-03__229	mx7.kaltura.com	success	data=KalturaHttpNotificationKalturaBas...	show more

APPENDIX C

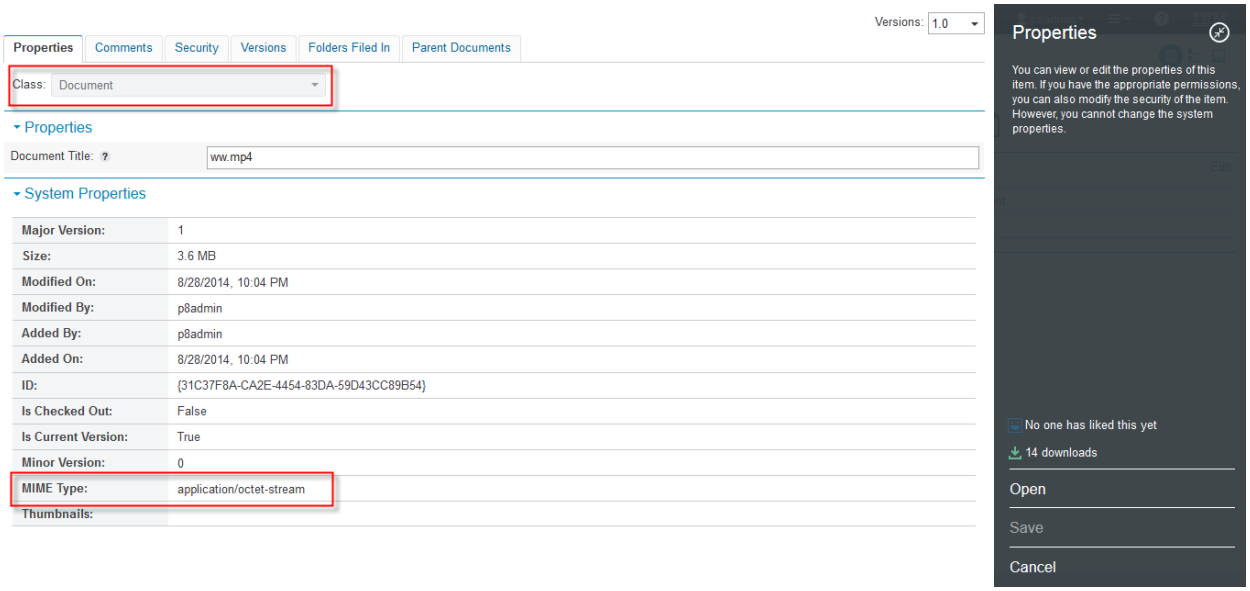
Troubleshooting

Detailed steps to troubleshoot and resolve the most common integration and synchronizations issues are provided in this appendix. It is assumed that ECM is properly configured for Kaltura integration as described in the Kaltura Video Navigator for ECM Deployment Installation Guide

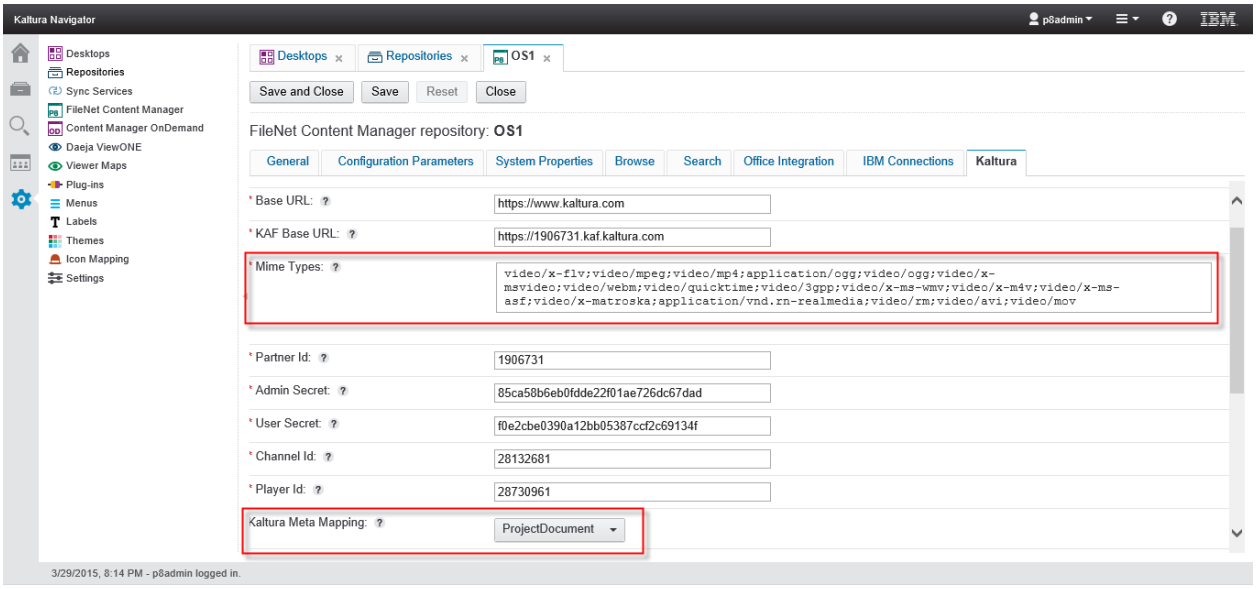
Issue: KAF Frame is Not Displayed for a Video

Actions

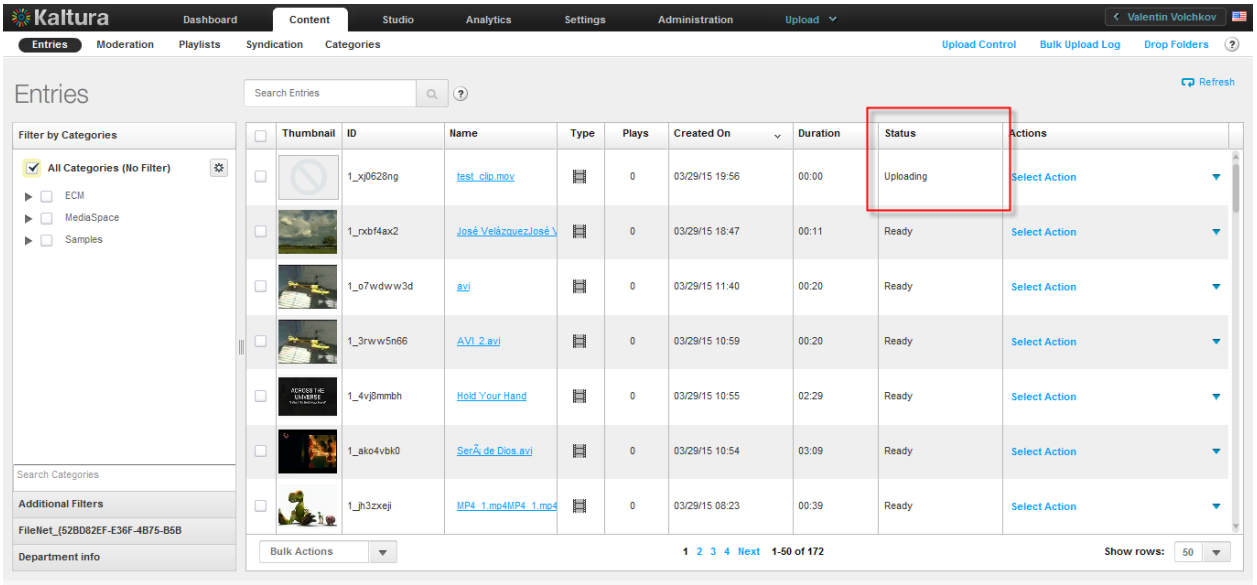
1. Validate if the video is a supported MIME type and class.
   a. Check the document properties in the Content Navigator.



   b. Compare the properties with the configuration in Kaltura frame.



2. Check if the video is synchronized.
   a. On the FileNet side, the Kaltura Id value should be set.
   b. On the Kaltura side, FileNet Ids should be set in the referenceId field of an entry.
3. Check logs in *KALTURA_CONF_DIR\logs* for any errors.
4. Validate new videos' status in KMC.

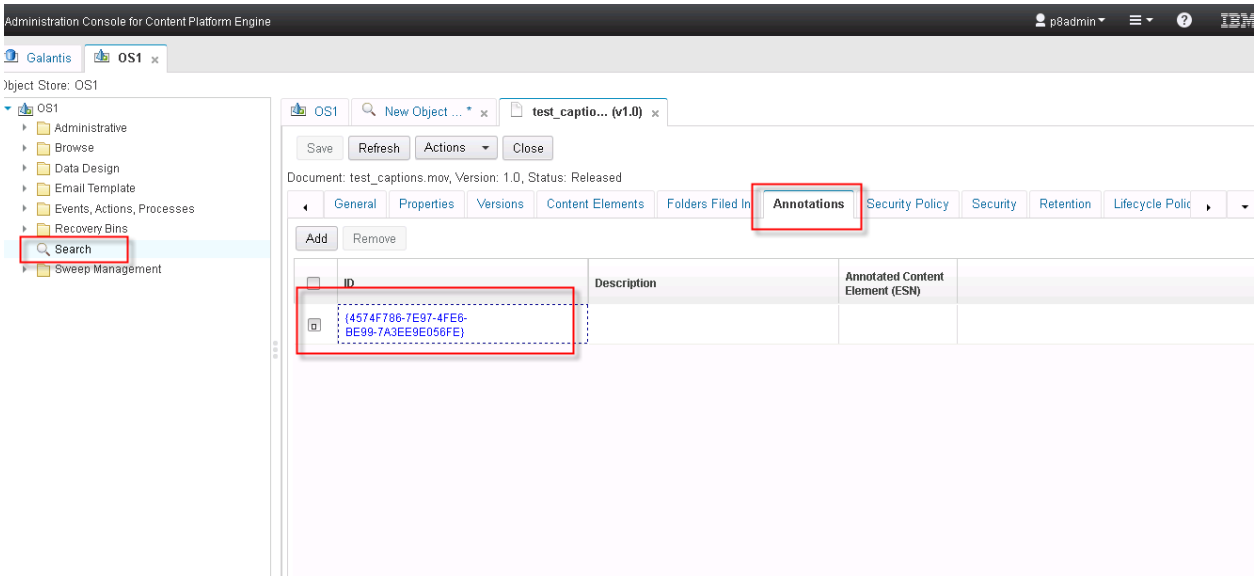


5. Re-synchronize videos using a sweep or Sync Document(s) to Kaltura action (if enabled) when the root cause is determined and/or issues are resolved.

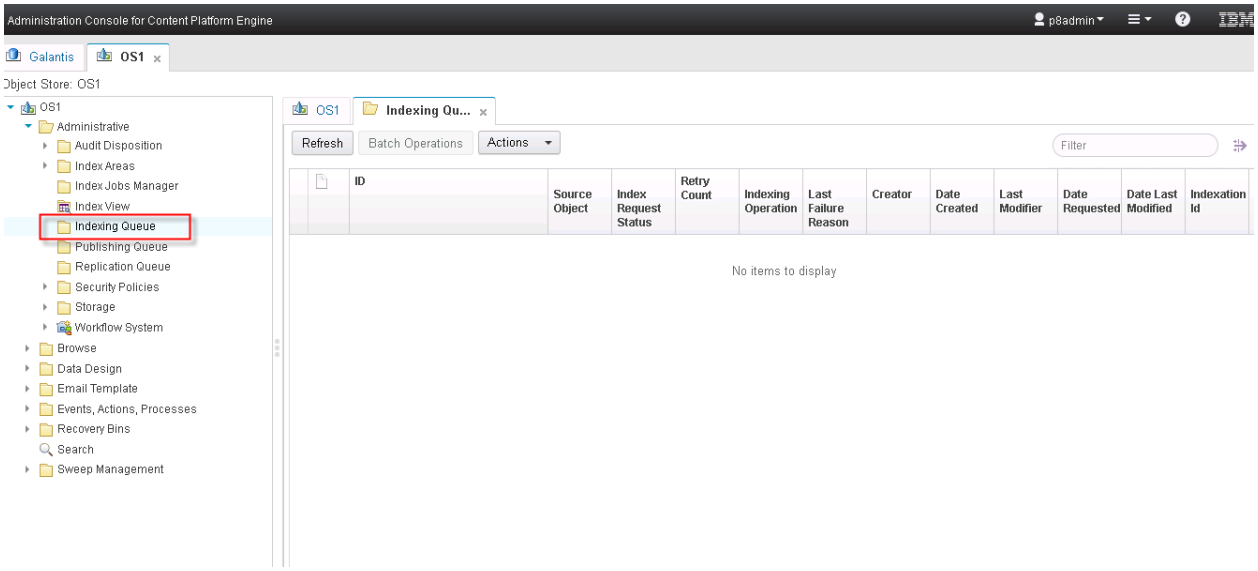
Issue: Searching Through Captions Returns no Results

Actions

1. Validate if the captions file is available (attached) in both KAF and FileNet.
   a. In FileNet ACCE, execute a search for the video document and validate that transcription annotation is attached to the object under the Annotations tab.



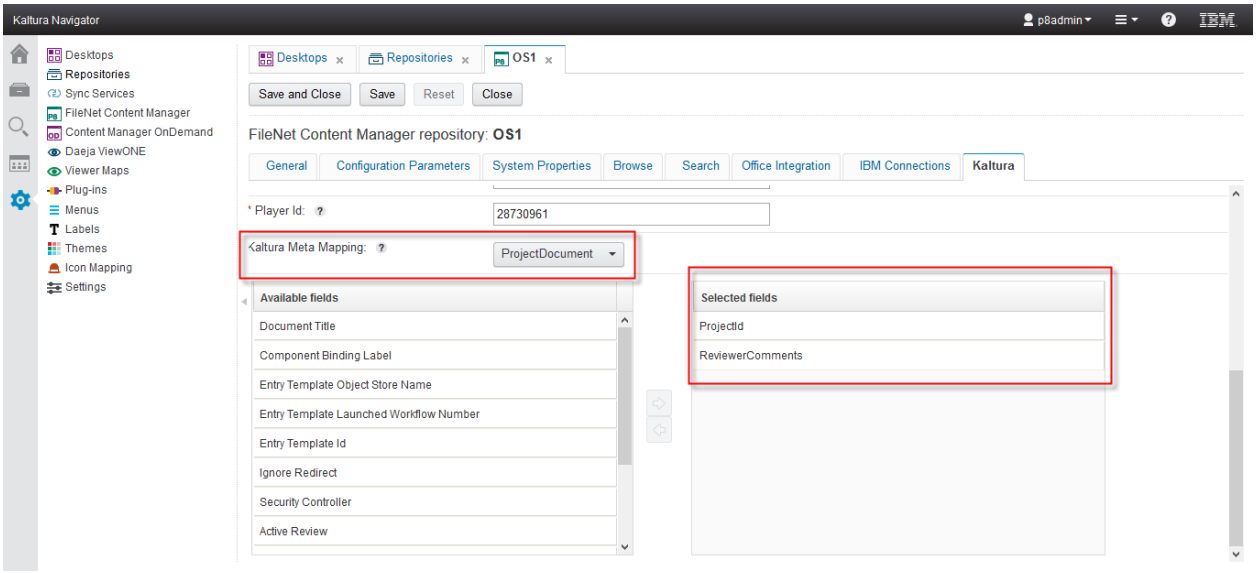
2. Validate requests in Kaltura web-handler.
   - Validate the status of captions sync request for the object in web handler's debug JSP page.
3. Check the indexing queue in the FileNet object store.



Issue: Metadata is Not Synchronized

Actions

1. Validate that proper mapping is done in Kaltura configuration frame in Content Navigator.



2. Check logs for any errors for sync from FileNet to Kaltura.
   - kaltura-errors.log
   - kaltura-event-handler.log
3. Validate web handler logs for sync from Kaltura to FileNet.
   - kaltura-web-handler.log
   - debug.jsp in kaltura-web-handler application
4. Check notifications configuration in Kaltura.
   - Each new metadata profile in Kaltura requires manual configuration of notifications for ECM synchronization.

Issue: Video Thumbnails are Not Displayed

Actions

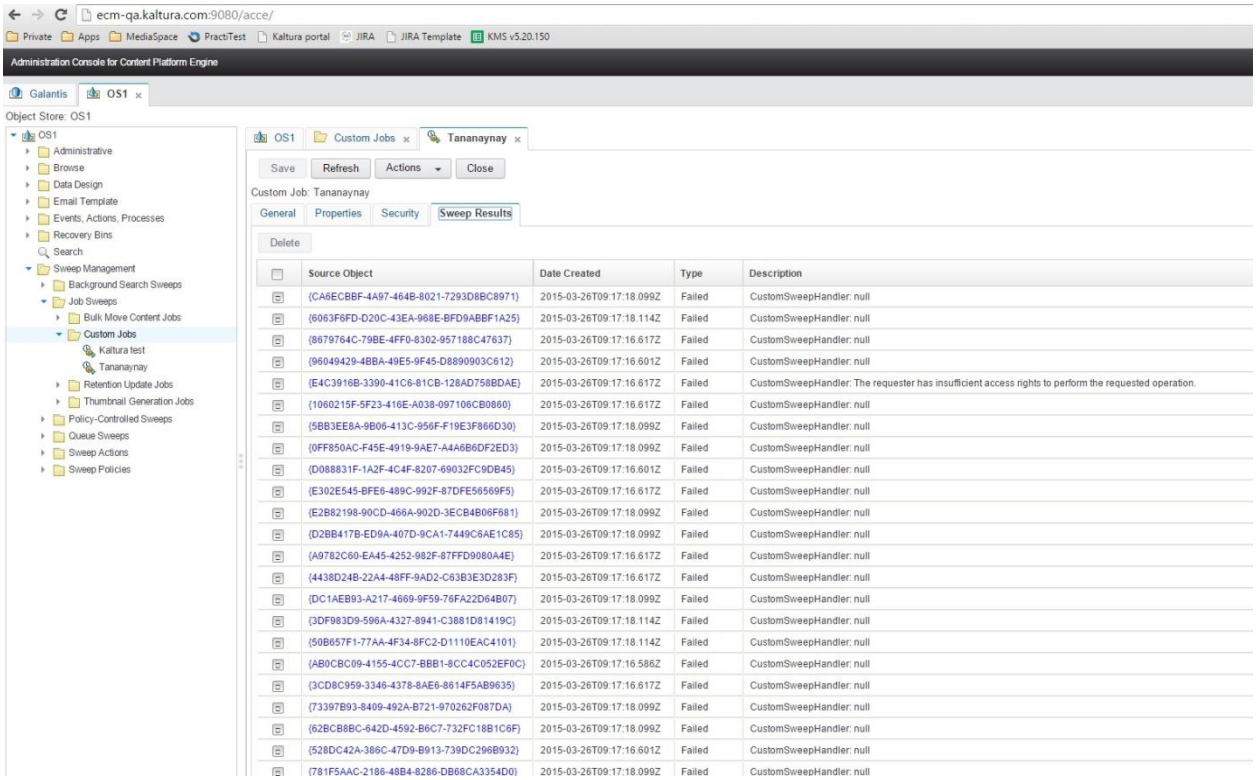
1. Validate the following logs for errors and warnings.
   - kaltura-errors.log
   - kaltura-event-handler.log
   - kaltura-web-handler.log
2. Check the notifications' configuration in Kaltura.
   - Notifications sync should be enabled for a Kaltura profile.
3. Re-synchronize thumbnails if required
   - At certain times, thumbnail sync might time out during initial object creation in Kaltura. In this case, manually re-generate a thumbnail in KAF to sync it back to ECM.

Issue: Custom Video Sweep Fails

Actions

1. Check the sweep results for any FAILED or IGNORED objects.
   - All objects FAILED during sweep require investigation by consulting the logs.

- If the object status is IGNORED, it is either of an unsupported MIME type, or mapping is not defined for its class.



2. Validate event handler log files for errors.
   - kaltura-errors.log
   - kaltura-event-handler.log