Kaltura Video Navigator for ECM Installation and Deployment Guide

Version: 2.01

Kaltura
open source video

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Contents

Preface

This preface contains the following topics:

About this Guide

This guide describes how to deploy the Kaltura Video Navigator for ECM. The Kaltura Video Navigator is an IBM ECM add-on compatible with IBM ECM (On Premise). If you are an ECM professional you will find the deployment process for the Kaltura Video Navigator is very similar to other IBM Navigator solutions' deployment.

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 ECM administrators.

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

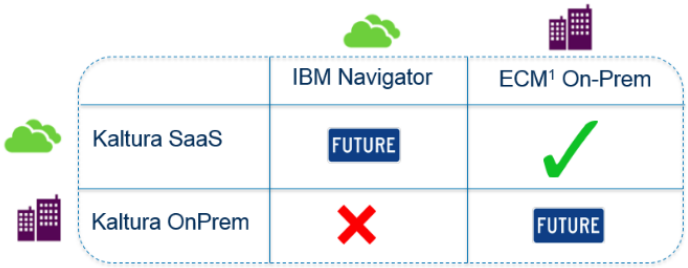
SECTION 1

Introduction to the Kaltura Video Navigator for ECM

This document contains all the information you need for quick and successful deployment of the Kaltura Video Navigator for ECM. All the steps provided are standard IBM ECM installation actions. If you are an IBM ECM administrator you will find this installation to be very similar to other IBM ECM solution deployments. If you are not very experienced with IBM ECM administration, the instructions provided are conclusive and contain print screens and detailed information. If you need help with the Kaltura Video Navigator for ECM solution deployment, our technical staff will be glad to assist you.

IBM Prerequisites

- IBM FileNet P8 5.2.1+
  Required components within FileNet P8:
  - IBM Content Navigator 2.0.2+ (running on top of the IBM FileNet repository)
  - IBM Content Search Services 5.2.1 (module running within IBM FileNet 5.2.1+)
  - IBM Case Manager v5.2+
- IBM ECM On Premise (FileNet 5.2.1+ and the related software)
- Kaltura SaaS services.



Kaltura Prerequisites

Before starting the deployment process, be certain to contact your Kaltura representative to create a Kaltura Application Framework instance for the Kaltura Video Navigator for ECM. You should receive the following:

- A Kaltura Partner ID

Please prepare the following information for you initial discussion with your Kaltura representative:

- The launch point base URL that will be used further in the process
- The Administration application login page URL Server
- The IBM ECN Server version (Standard or Enterprise)

SECTION 2

Getting Started

Perform the following tasks before you install the Content navigator Plug-in.

Custom Libraries and Configuration

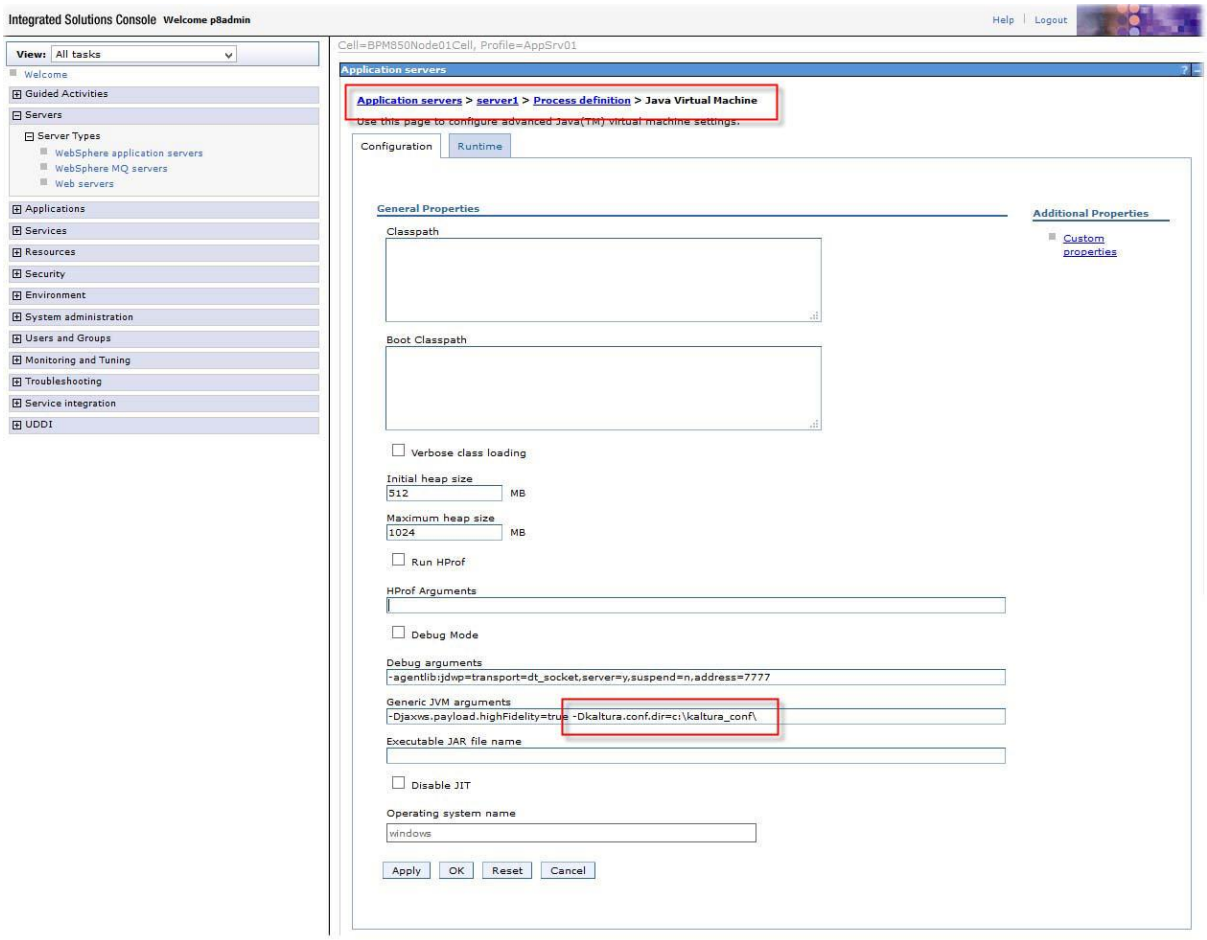
To configure custom libraries

- Create a folder on the FileNet server (*KALTURA_CONF_DIR*) and copy over the following libraries, archives, and configuration:
  - kaltura-api-1.0.jar
  - kaltura-cn-common-1.0.jar
  - kaltura-custom-service-1.0.jar
  - kaltura-event-handler-1.0.jar
  - kaltura-cn-plugin-1.0.4.jar
  - kaltura-code-module-1.0.jar
  - kaltura-web-handler-1.0.war
  - java-xmlbuilder-1.1.jar
  - json-simple-1.1.1.jar
  - jsoup-1.7.2.jar
  - commons-http-client-3.1.jar
  - web-handler.properties
  - kaltura-log4j.xml
- Additionally, create *KALTURA_CONF_DIR\logs* folder as the primary location of all log files for the solution.

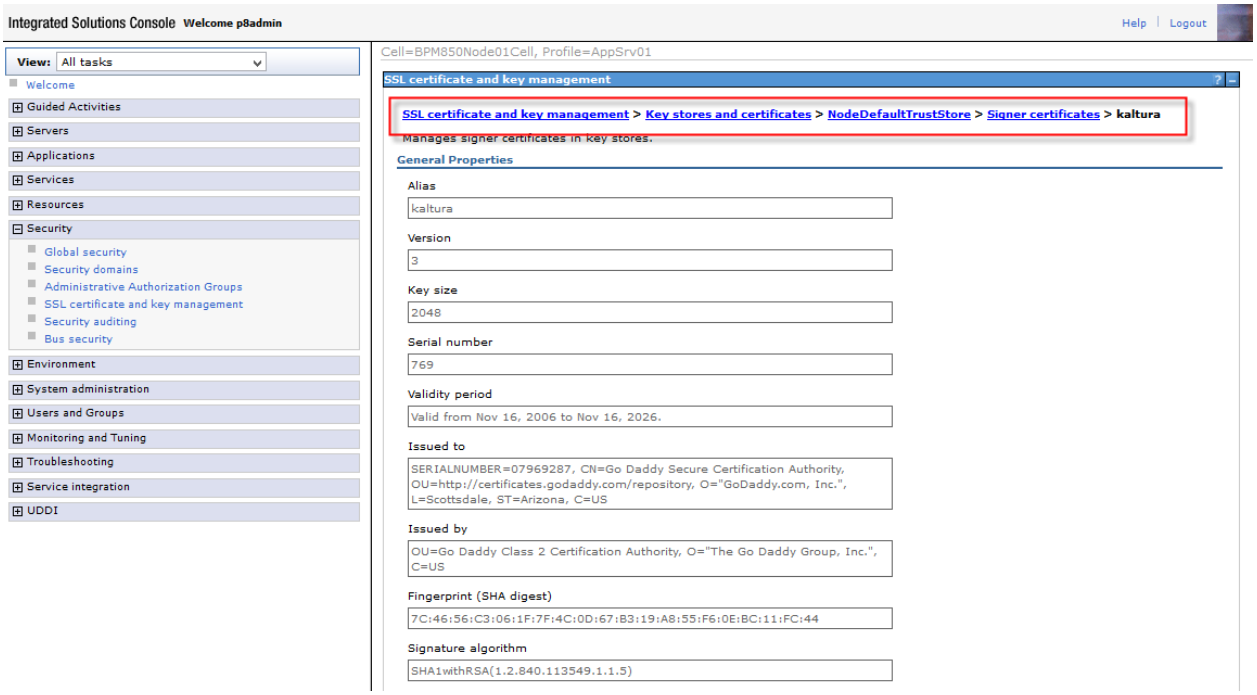
Application Server Configuration

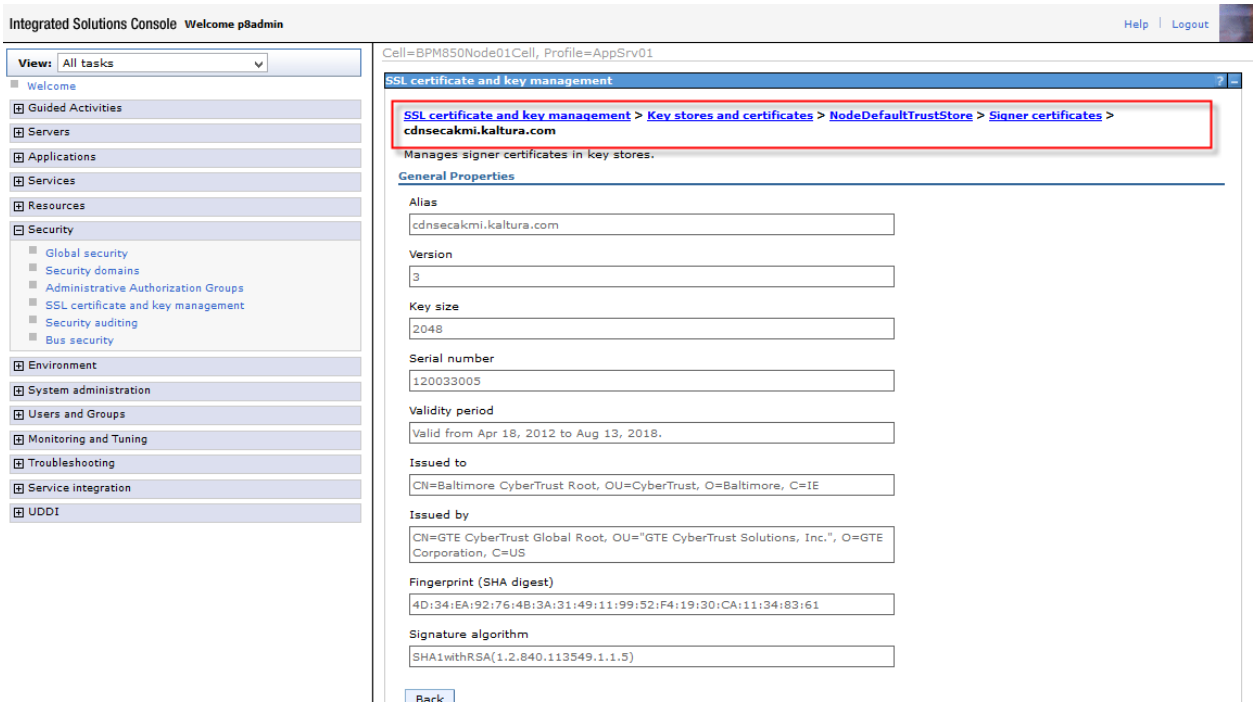
To configure the application server

1. Define an application server JVM variable -Dkaltura.conf.dir=KALTURA_CONF_DIR with the value matching the folder with Kaltura libraries and configuration. Note that the path should contain the trailing slash.



2. Import Kaltura certificates from *kaltura.com* and *cdnsecakmi.kaltura.com*.



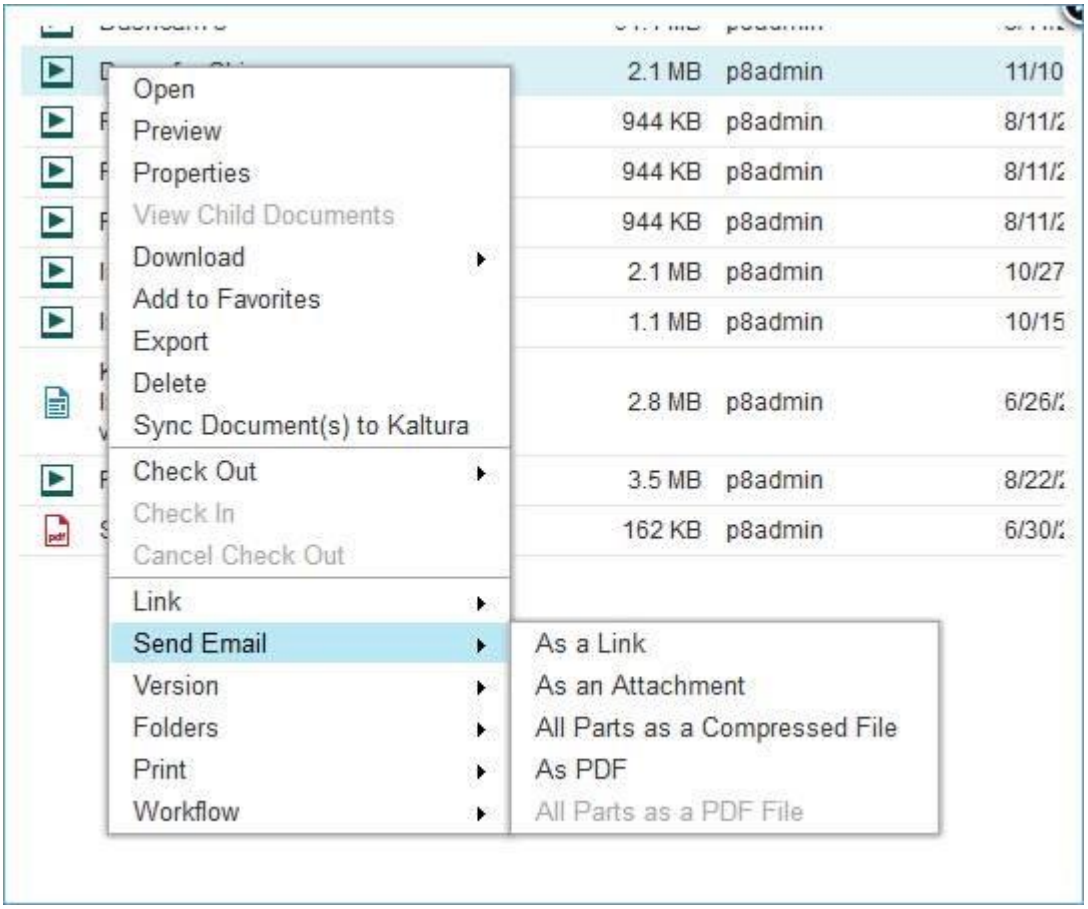


3. Copy the following libraries to the existing IBM Content Navigator deployment. Default path for IBM WebSphere Application Server is *<SERVER_HOME>\profiles\<PROFILE_NAME>\installedApps\<CELL_NAME>\navigator.ear\navigator.war\WEB-INF\lib*.
   - commons-httpclient-3.1.jar
   - jsoup-1.7.2.jar
   - kaltura-api-1.0.jar
   - kaltura-cn-common-1.0.jar
   - kaltura-code-module-1.0.jar
   - kaltura-custom-service-1.0.jar

4. Restart the Content Navigator application in the application server management console.

NOTE: The admin of ICN (IBM Content Navigator) should be certain that the instance is configured regardless of the Kaltura Video Navigator (KVN,) to reflect the video related workflows.

For example, not allowing to download a video document as a PDF or not allowing sending a video as a PDF over mail.



Initial Kaltura Configuration

The following configuration must be performed in Kaltura, by your Kaltura representative, before deploying the Kaltura Video Navigator into an ECM FileNet environment.

The following steps are performed by Kaltura Support

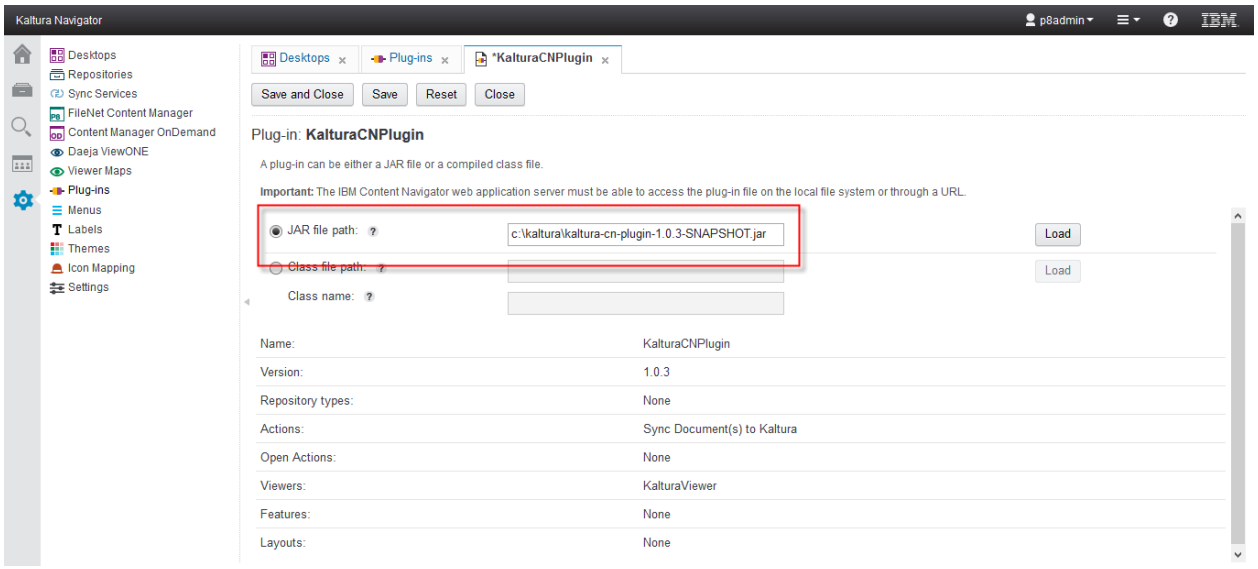
1. Create a Kaltura Partner ID.
2. Configure a KAF instance of type ECM.
3. Create a default channel for videos:
   a. Go to the KMC, "Content" tab, and select the "Categories" sub-tab.
   b. Click "Add Category".
   c. Select "ECM > site > channels" and click "Next".
   d. Give a name to the channel (e.g. "default") and click "Save > Close".
4. Add the ECM host to the trusted hosts on the KAF host.

SECTION 3

Content Navigator Plug-in Installation and Configuration

To Install the Kaltura Navigator Plugin

1. In the Content Navigator, navigate to Administrative View, expand the Plug-ins element, and select New Plug-in action.
2. Load the Kaltura Navigator plugin from *KALTURA_CONF_DIR*\kaltura-cn-plugin-1.0.x.jar.



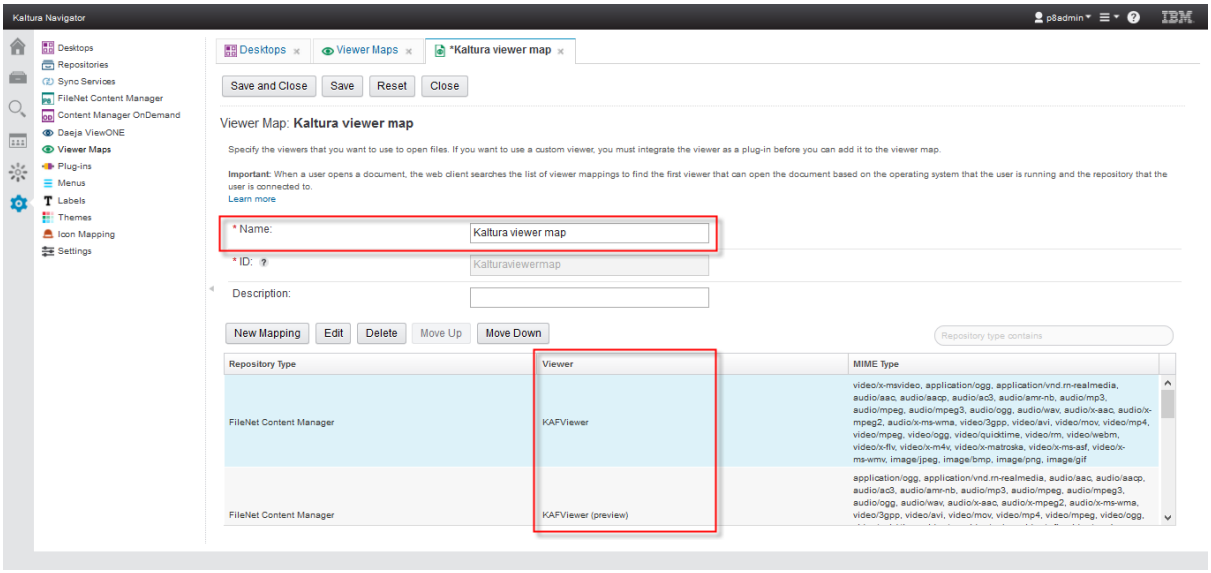
3. Save changes and reload Content Navigator.

Define the Kaltura Viewer and Viewer Map

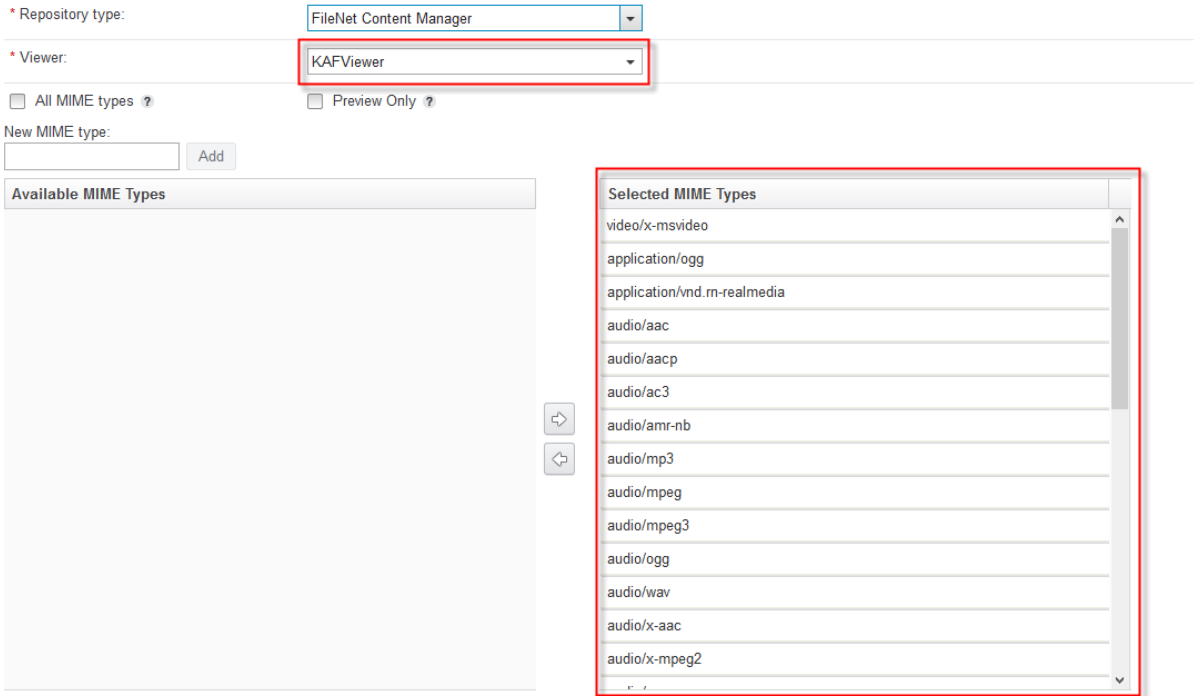
IBM Content Navigator uses viewers designed to support different MIME types. A new Kaltura Viewer should be defined in a FileNet repository configuration to allow playing and preview of videos through an embedded Kaltura player. A corresponding new viewer map or update to an existing viewer map is required for MIME types mapping.

To define the Kaltura Viewer and Viewer Map

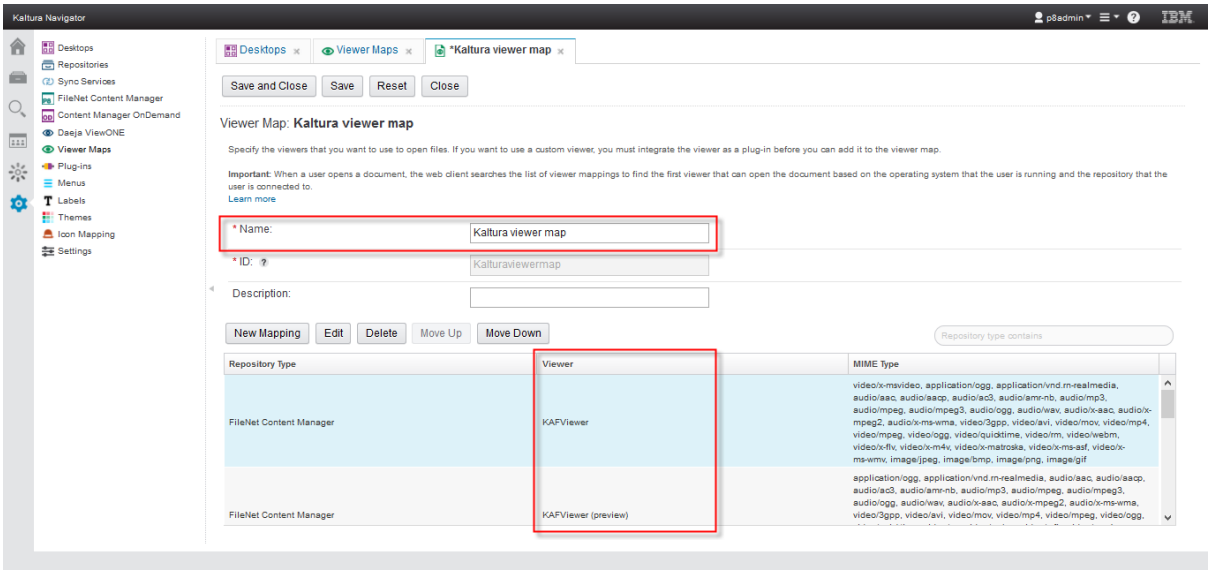
1. In Content Navigator, select Administrative View >> Viewer Maps >> New Viewer Map.
2. Create a Kaltura viewer map.



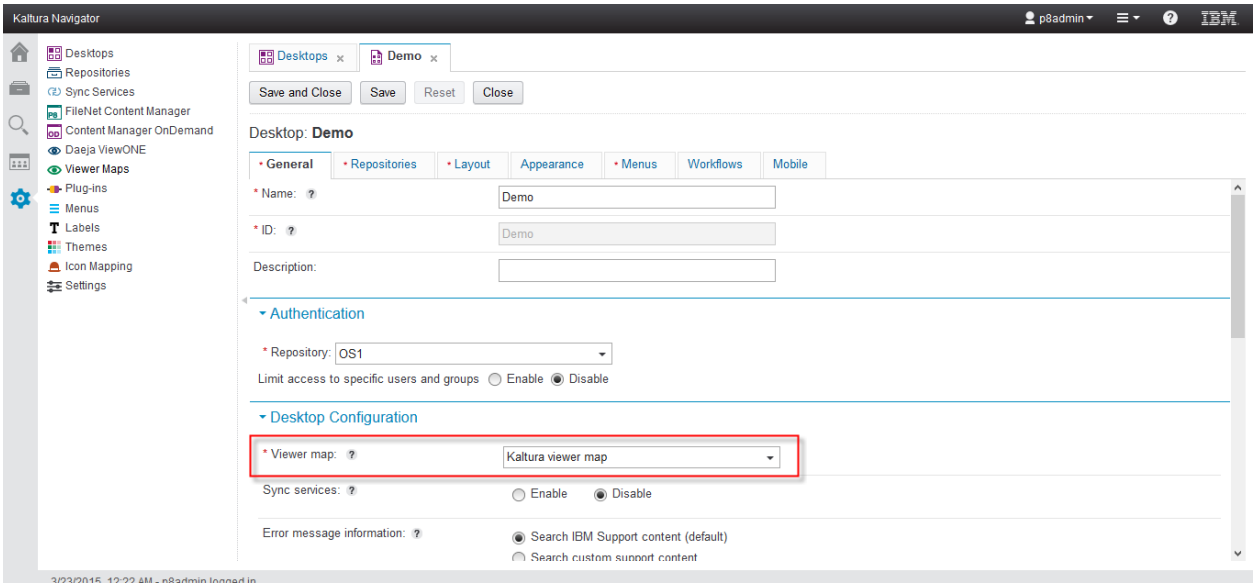
3. Select *New Mapping* and create two new mappings for *KAFViewer* and *KAFViewer (preview)* for the supported Mime Types. If required, add Mime Types in the *New MIME type* field.



4. Set Kaltura Viewer at the top of the list for FileNet Content Manager.



5. Set *Kaltura viewer map* as the viewer map for a desktop with Kaltura integration.

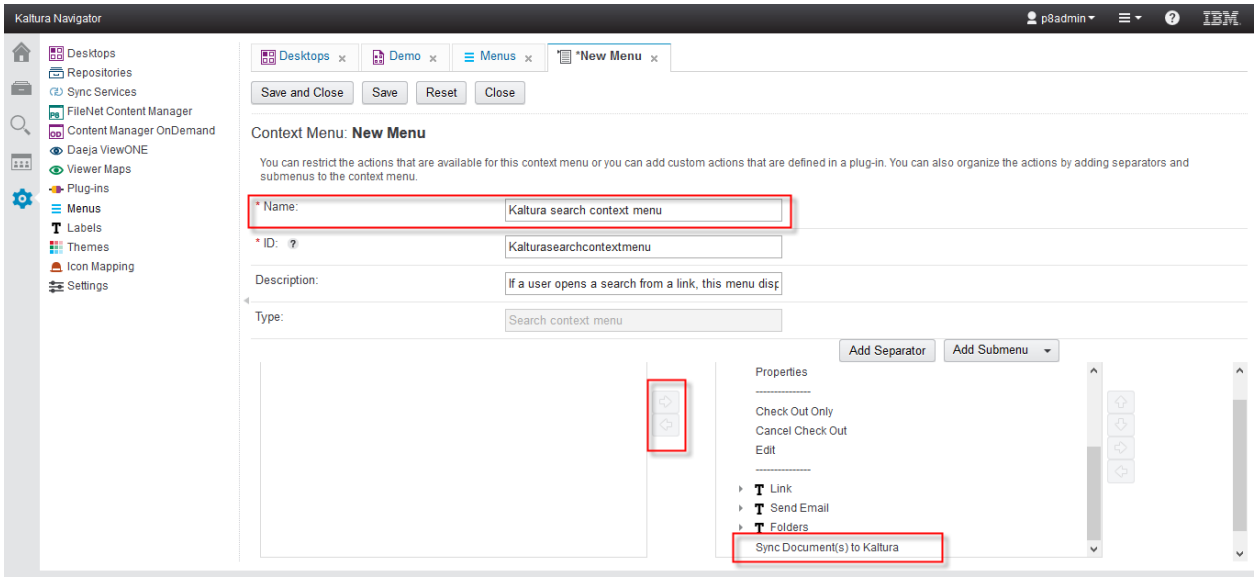


Assign the Kaltura Sync Action

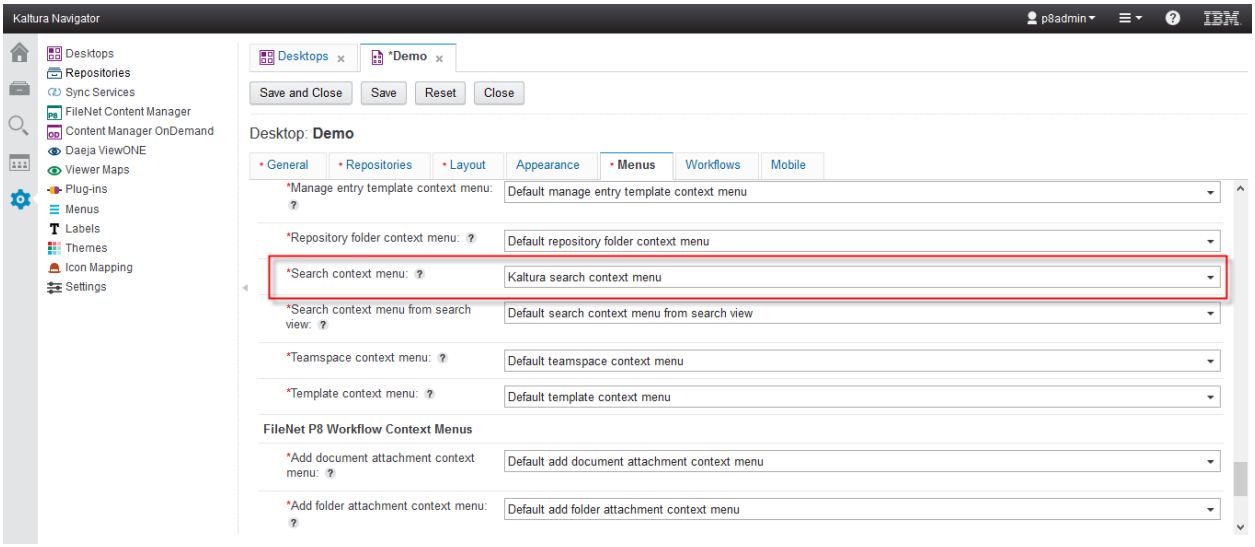
This step is optional. The Kaltura Navigator plugin includes a custom action that can be added to context menus of a Content Navigator desktop configuration to enable manual synchronizationof one or multiple videos to Kaltura directly from Content Navigator interface.

To assign the Kaltura Sync action

1. Add Sync Document(s) to Kaltura action to ICN toolbars and menus as required.



2. Assign new toolbars and menus to desktops with Kaltura integration.

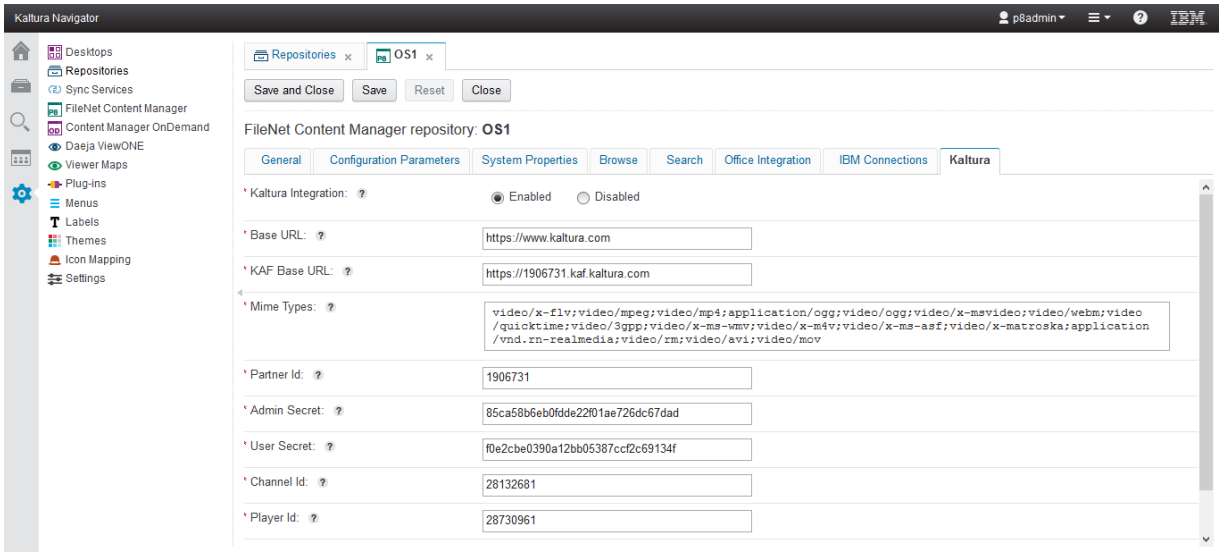


Define the Kaltura Configuration

To define the Kaltura configuration

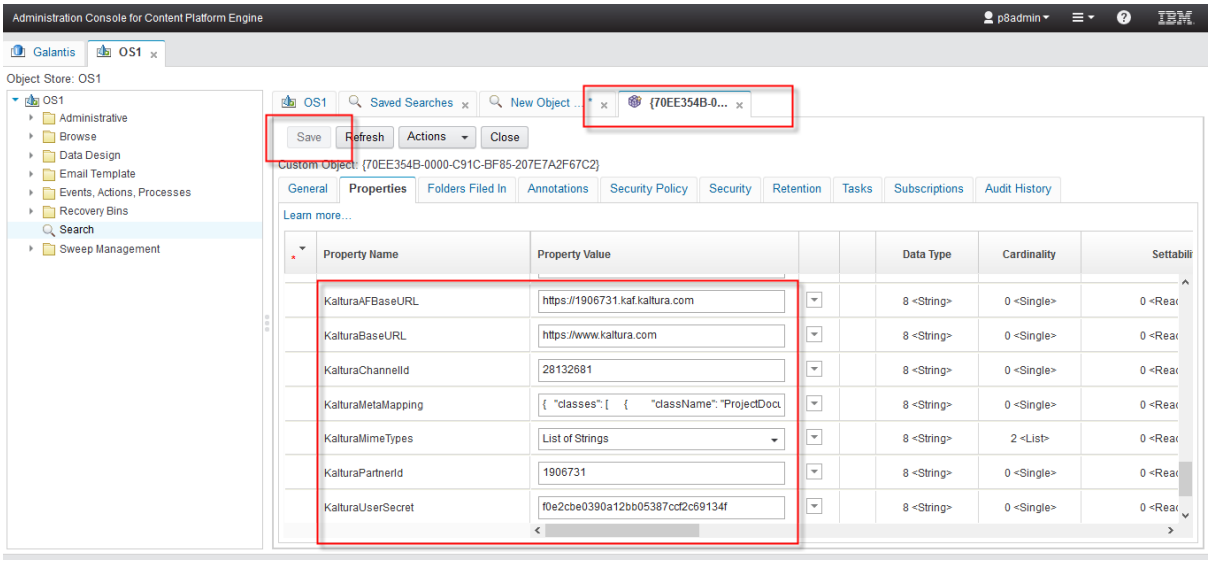
1. In the Content Navigator, select Administrative view and then select the repository to be integrated with Kaltura.
2. Define the following Kaltura integration configuration settings in the *Kaltura* tab:
   - Kaltura Enabled = true
   - Base URL
   - KAF Base URL
   - Mime Types
   - Partner Id
   - Admin Secret
   - User Secret
   - Channel Id

- Player Id
- Audio Player Id
- Image Player Id
- All Media Admins
- Kaltura Meta Mapping



When you save the initial Kaltura configuration, the required FileNet configuration is created and deployment of a code module is initiated. Kaltura configuration settings become read-only (except Mime Types, Player Ids, and Kaltura Meta Mapping parameters) starting from the next login to the ICN.

Read-only fields can always be updated by modifying properties of the Kaltura Settings object in FileNet.



When Kaltura settings are saved in the new configuration frame, the process also creates custom metadata profiles for the configured partner Id in Kaltura.

Steps for manual FileNet configuration are provided in Section 7 of this document.

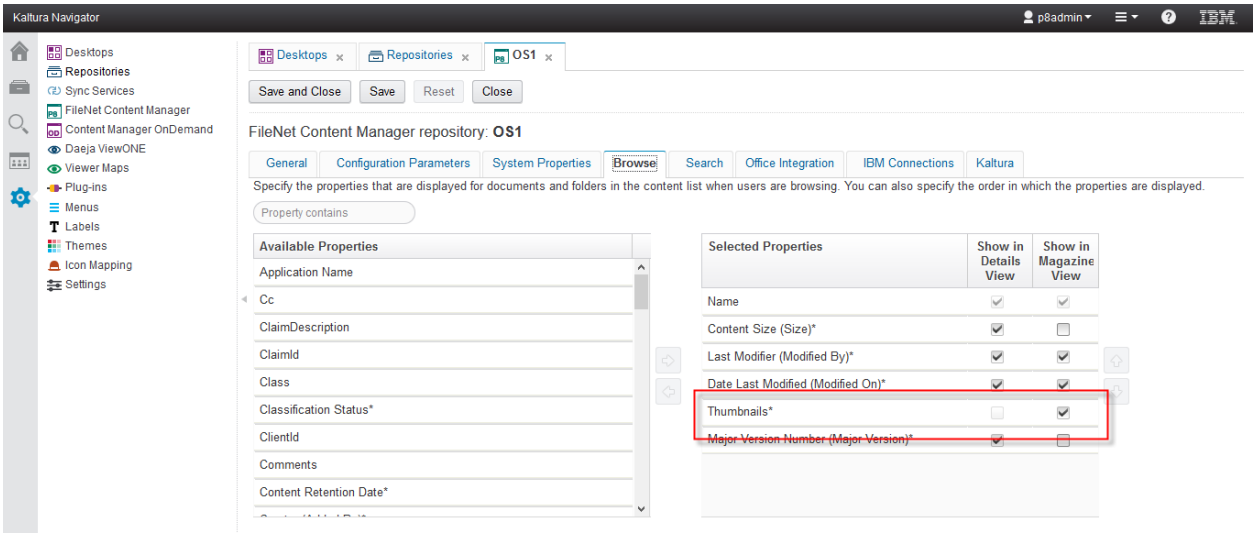
Enable Thumbnails Support

Thumbnails support should be enabled for the repository where videos are going to be synchronized

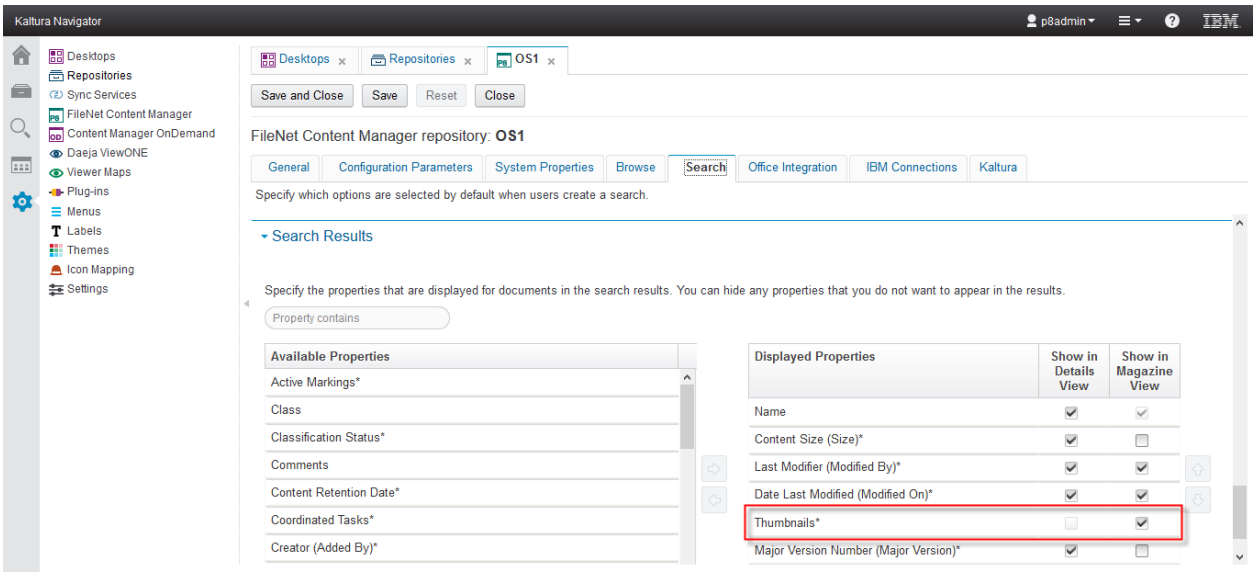
with Kaltura.

To enable thumbnail support

1. Open the repository configuration in ICN.
2. Add the Thumbnails property to the list of displayed properties in Browse view configuration.



3. Add the thumbnails property to the list of displayed properties in Search view configuration.

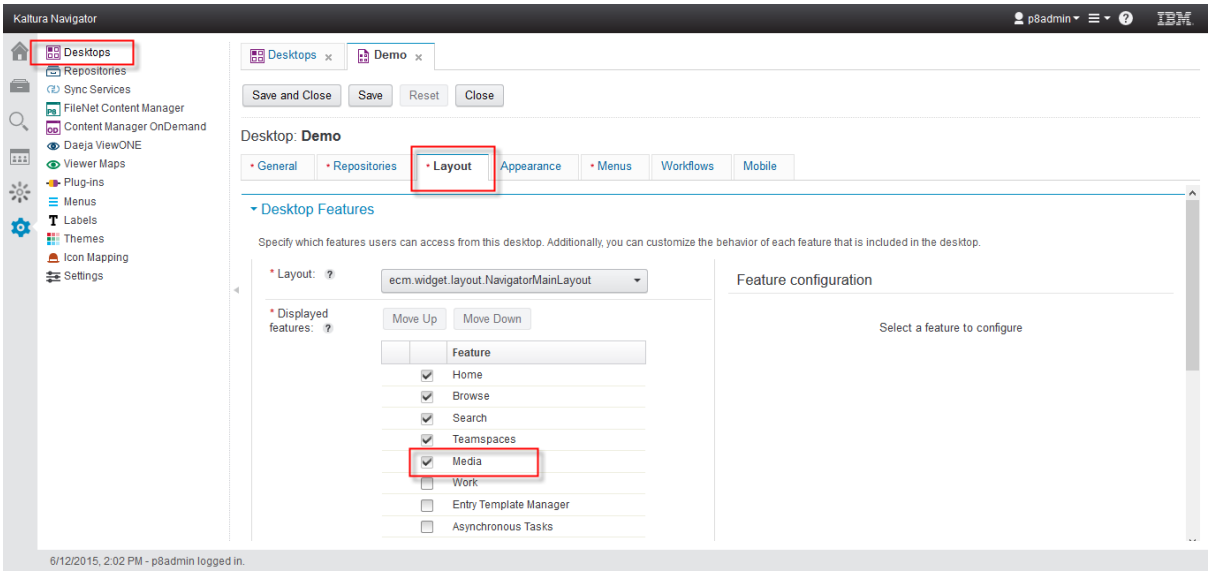


Enable Media Feature

The new Media feature will provide access to My Media and All Media tabs in Content Navigator embedding the corresponding KAF frame endpoints.

To enable Media feature

a. Open desktop configuration in ICN.
b. Select Media checkbox under Layouts tab. Save configuration and reload ICN.


Kaltura Navigator
p8admin
IBM
Desktops
Repositories
Sync Services
FileNet Content Manager
Content Manager OnDemand
Daeja ViewONE
Viewer Maps
Plug-ins
Menus
Labels
Themes
Icon Mapping
Settings
Desktops
Demo
Save and Close
Save
Reset
Close
Desktop: Demo
General
Repositories
Layout
Appearance
Menus
Workflows
Mobile
Desktop Features
Specify which features users can access from this desktop. Additionally, you can customize the behavior of each feature that is included in the desktop.
Layout:
ecm.widget.layout.NavigatorMainLayout
Displayed features:
Move Up
Move Down
Feature
Home
Browse
Search
Teamspaces
Media
Work
Entry Template Manager
Asynchronous Tasks
Feature configuration
Select a feature to configure
6/12/2015, 2:02 PM - p8admin logged in.

SECTION 4

Custom REST Service Installation

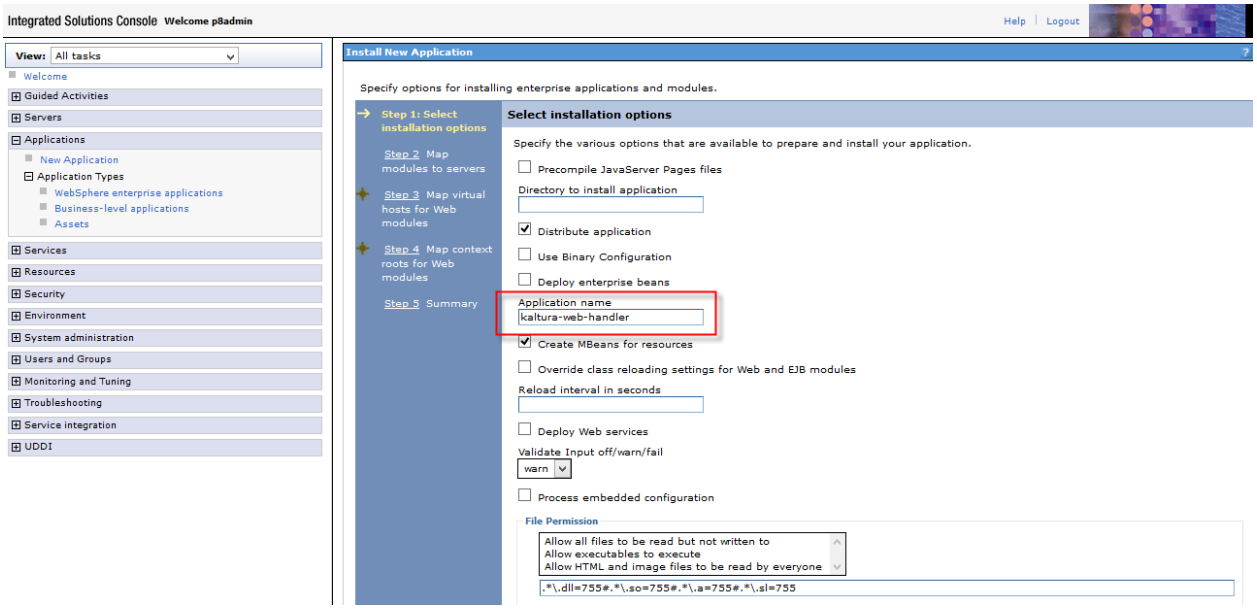
The new custom REST service is a standalone web application that listens to and processes Kaltura notification requests for synchronization of metadata, thumbnails, and captions updates from Kaltura to an ECM repository.

The application is lightweight and can be deployed to the same application server hosting FileNet and/or Content Navigator applications

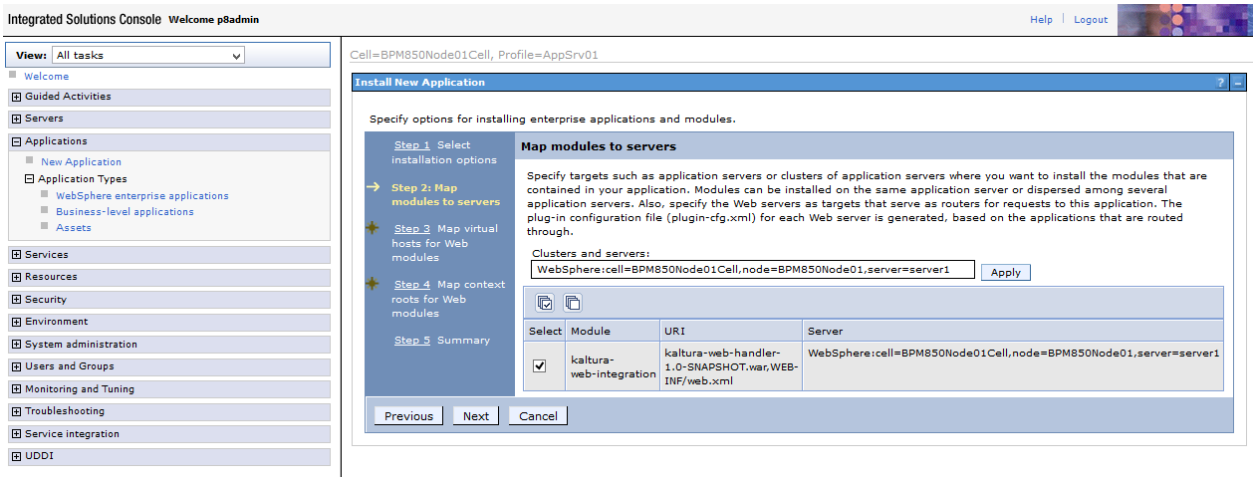
Application Deployment

To deploy the Kaltura-web-handler to the application server

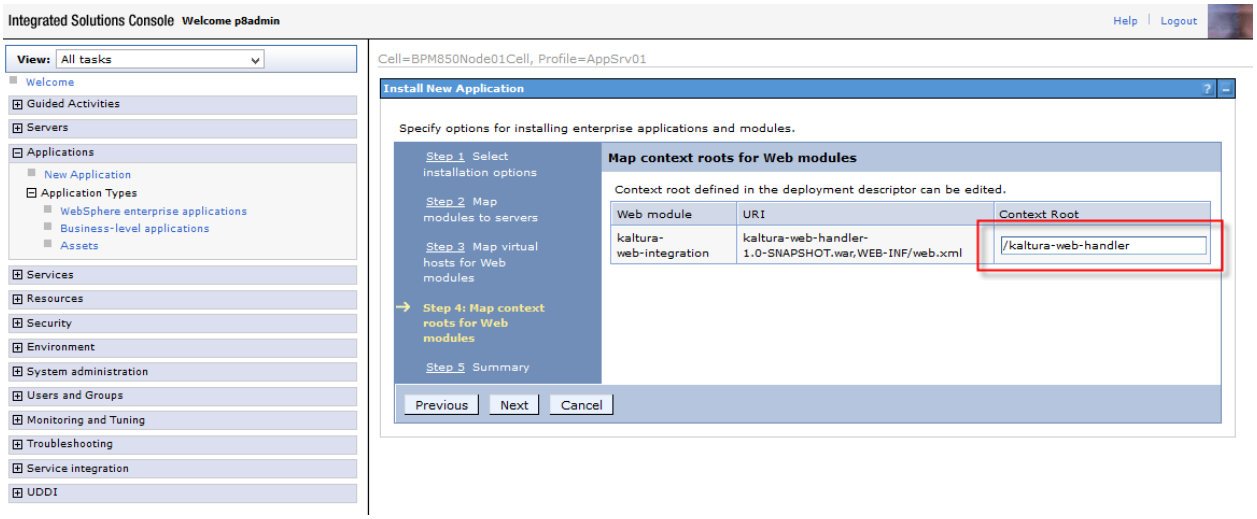
1. Load the kaltura-web-handler-1.0.war from *KALTURA_CONF_DIR*.
2. Define the application as *kaltura-web-handler* in the application server and leave the default deployment settings.



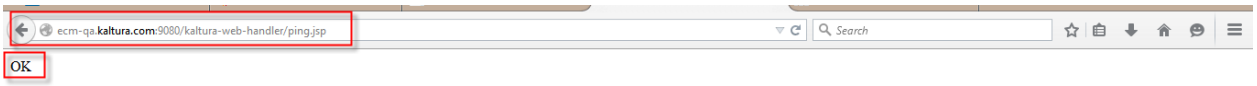
3. Select the servers/clusters/web servers to deploy the application to.



4. Set context root as */kaltura-web-handler* and Finish the deployment.



5. Validate application by accessing http://server:port/kaltura-web-handler/ping.jsp



FileNet Connection and Access Configuration

The custom REST service requires additional configuration to connect to a FileNet domain. The settings are specific for each environment where integration solution is deployed.

All settings are saved in *KALTURA_CONF_DIR\web-handler.properties* file.

To configure connection to FileNet

1. Update the following parameters in web-hander.properties configuration file:

   fnt.url = http://<HOST>:<PORT>/wsi/FNCEWS40MTOM/ - update <HOST> and <PORT> with values of the server hosting the FileNet application

   fnt.jaas = FileNetP8WSI - update JAAS stanza value (will not be required in most cases)

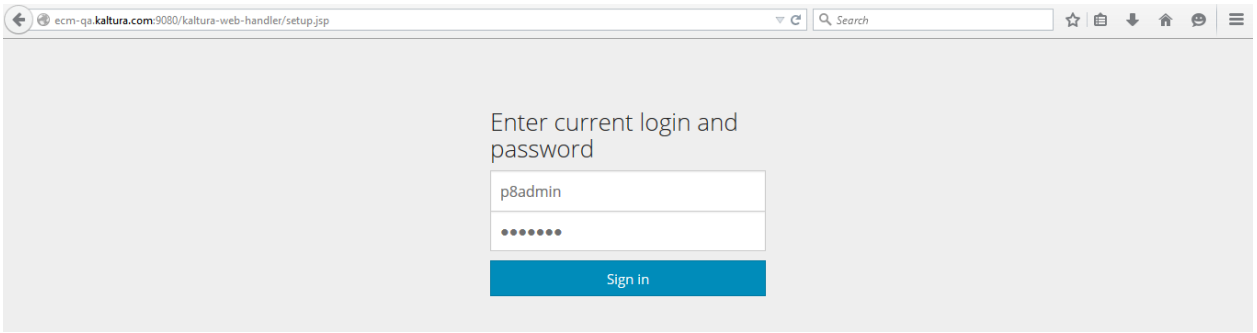
   fnt.domain = <DOMAIN> - update with the FileNet domain name

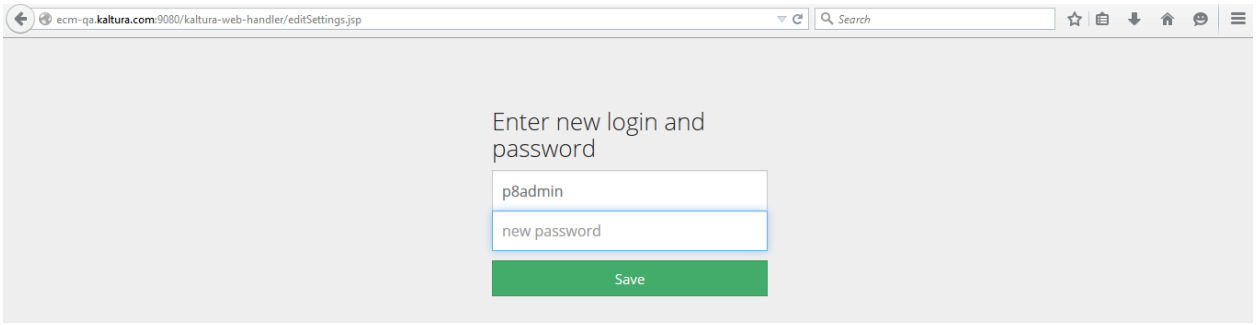
2. Save the configuration file.

To configure access to FileNet

1. Login as p8admin\test123 as initial credentials.
2. Set the credentials for accessing FileNet from the custom REST service in http://server:port/kaltura-web-handler/editSettings.jsp.

   The credentials will be encrypted and stored in *KALTURA_CONF_DIR*. They must be used if any further changes to FileNet connection security are required.





SECTION 5

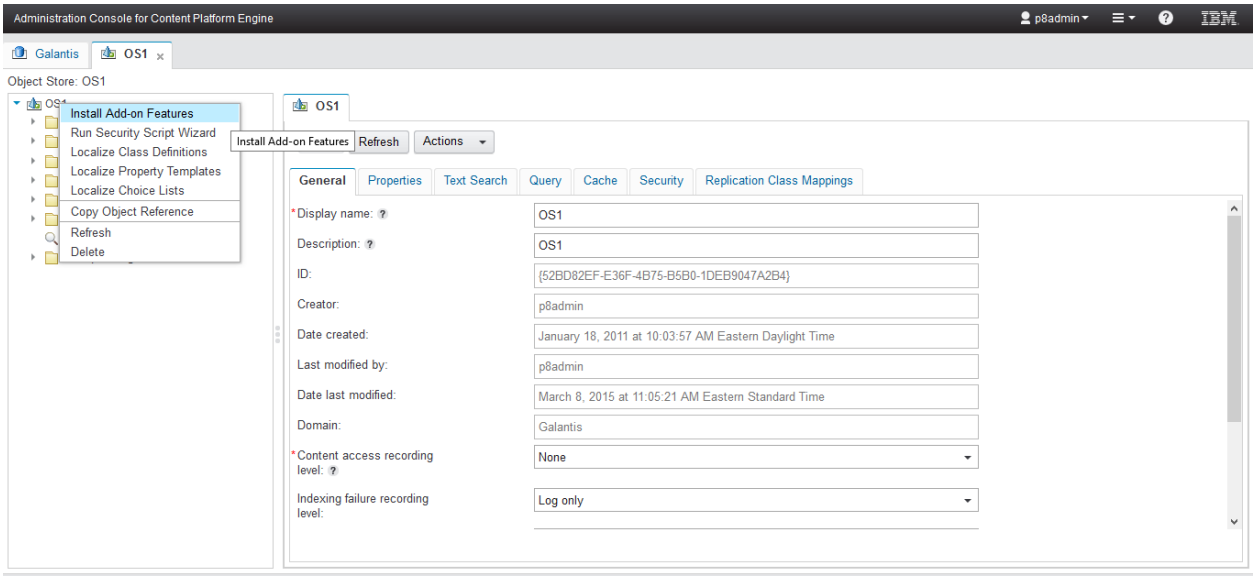
Transcription Indexing Configuration

FileNet v5.2.1 contains a technology preview feature for managing the transcription of video documents. This feature, in combination with Kaltura video captions capabilities, allows transcribing of rich media and indexing it for full-text search in ECM.

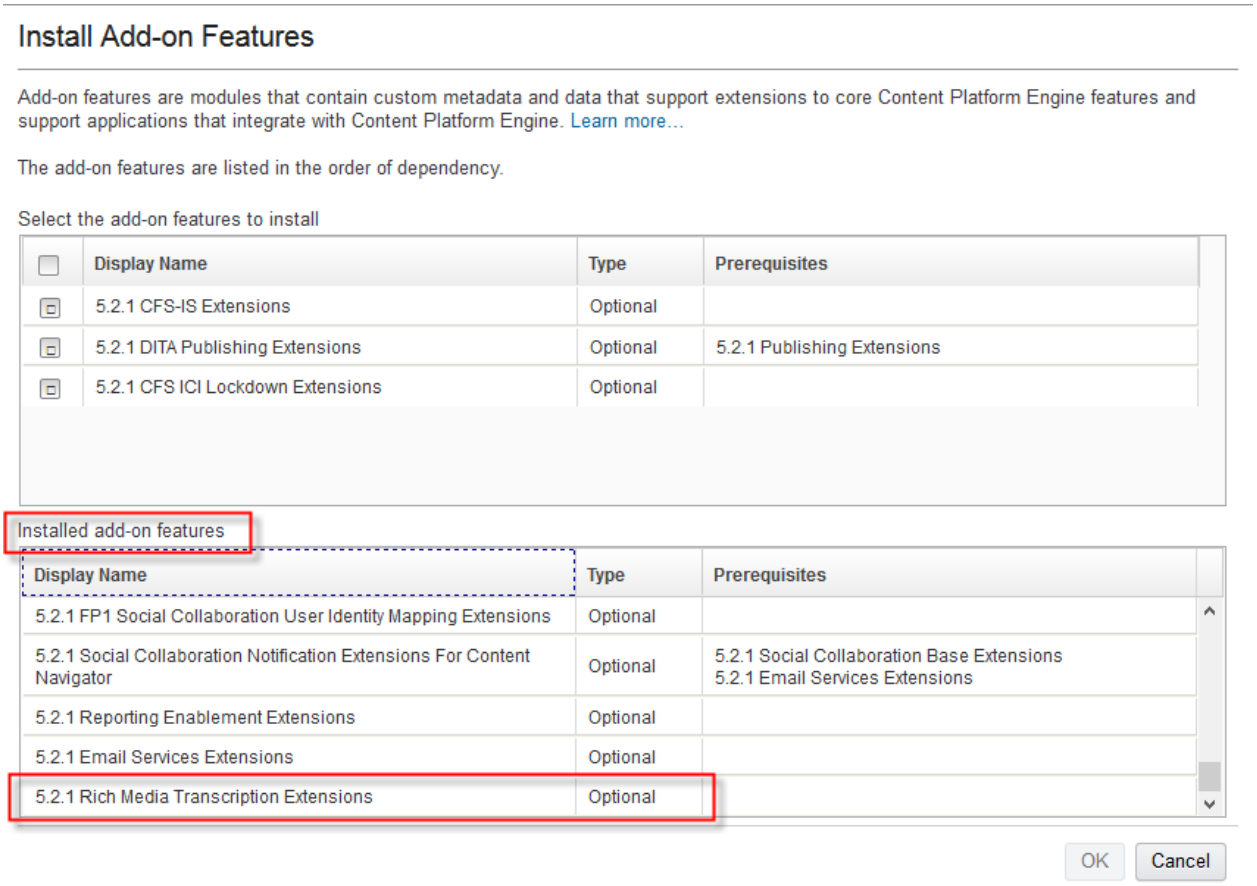
FileNet Add-On Installation

To install the FileNet add-on

1. Login to Administrative Console for CPE (*http://server:port/acce*) and select *Install Add-on Features* action for the object store with Kaltura integration.



2. Install the 5.2.1 Rich Media Transcription Extensions.



FileNet Configuration

The steps below described the required configuration in FileNet to enable indexing of captions in FileNet Content Search Services application and make video searchable by the text of the transcription of the video.

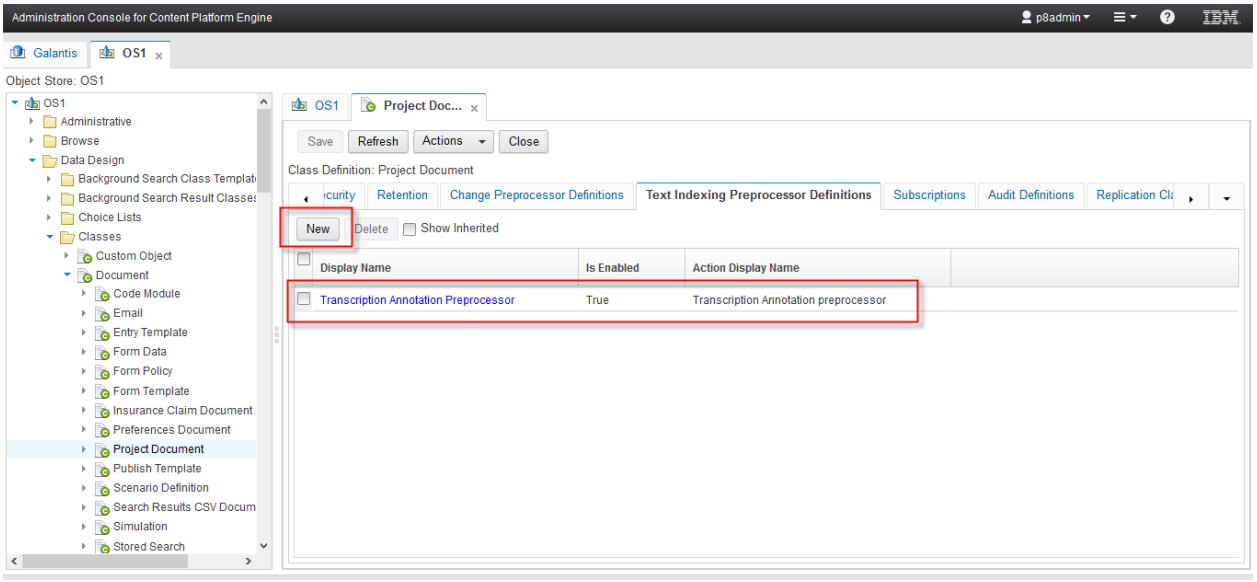
Text Indexing Preprocessor

FileNet includes the transcription annotation preprocessor that parses transcription TTML/DFXP files for their further indexing by FileNet Content Search Services application.

To setup the text indexing pre-processor

NOTE: Perform for each ECM document class that should be synced with Kaltura:

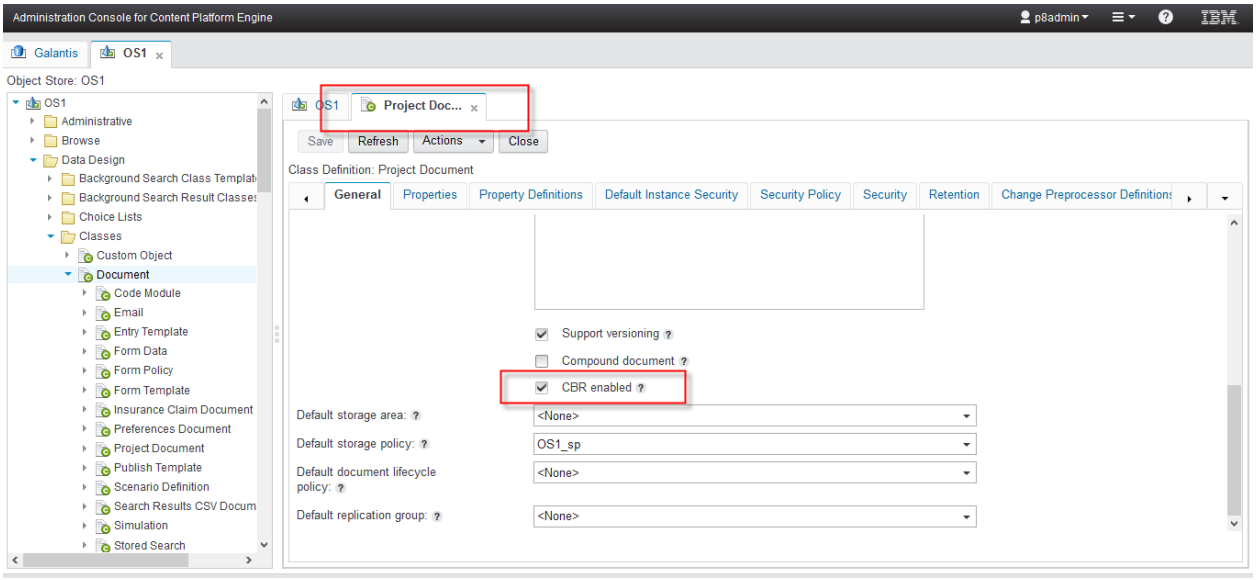
1. In the Administrative Console for CPE, open the object store, and select *Data Design >> Classes >> Document*.
2. Select the class that stores videos integrated for captions syncing and then *Text Indexing Preprocessor Definitions* tab.
3. Create a new *Transcription Annotation Preprocessor* pointing to the corresponding action.



Enabling Content-Based Retrieval (Captions Search)

To enable content-based retrieval

1. For each ECM document class that should be synced with Kaltura, select *CBR enabled* flag in General tab of the class configuration.



2. When all previous changes are completed, restart the Application server hosting FileNet, Content Navigator, and the custom integration components.

SECTION 6

Kaltura Notifications' Configuration

Notifications

When ECM configuration is complete and custom metadata profiles are created in Kaltura, enable notifications to *http://server:port/kaltura-web-handler/HttpNotificationHandler.jsp* for the following:

- Base entry update/delete
- Metadata update (for all custom profiles)
- Captions asset add/update/delete
- Thumbnail add/update/delete

SECTION 7

Manual FileNet Configuration

FileNet configuration and code modules are deployed automatically when the initial Kaltura integration configuration is saved in the Content Navigator. Use the following instructions if manual (re-)configuration is required, and for validations.

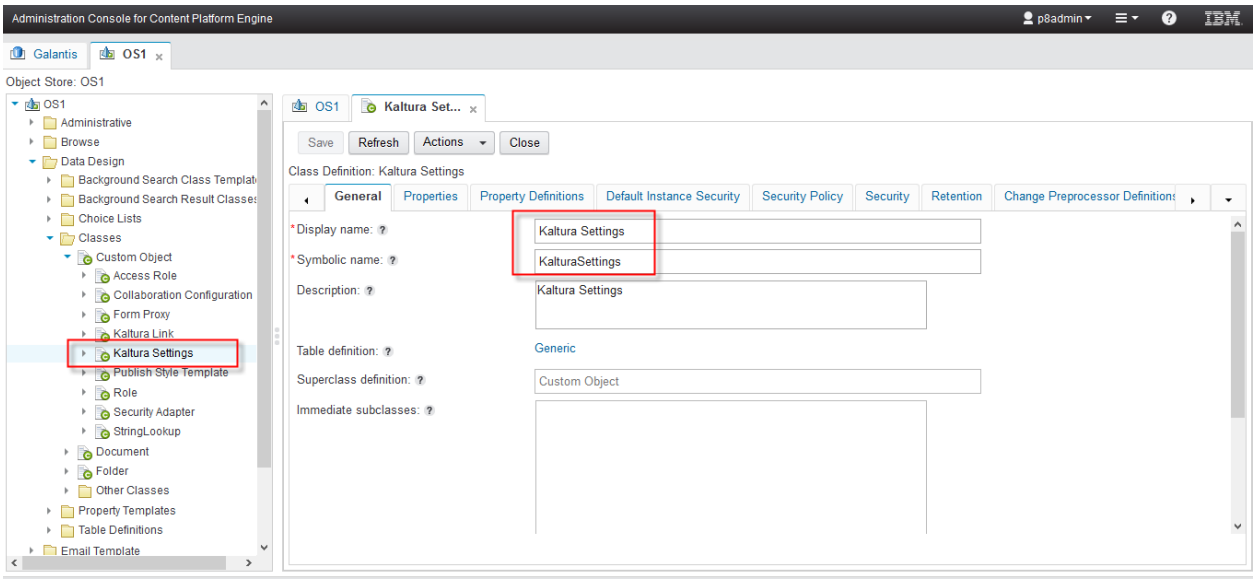
Data Model

This section provides information about the data model used for configuring FileNet manually.

Kaltura Settings Class

To configure the Kaltura Settings class

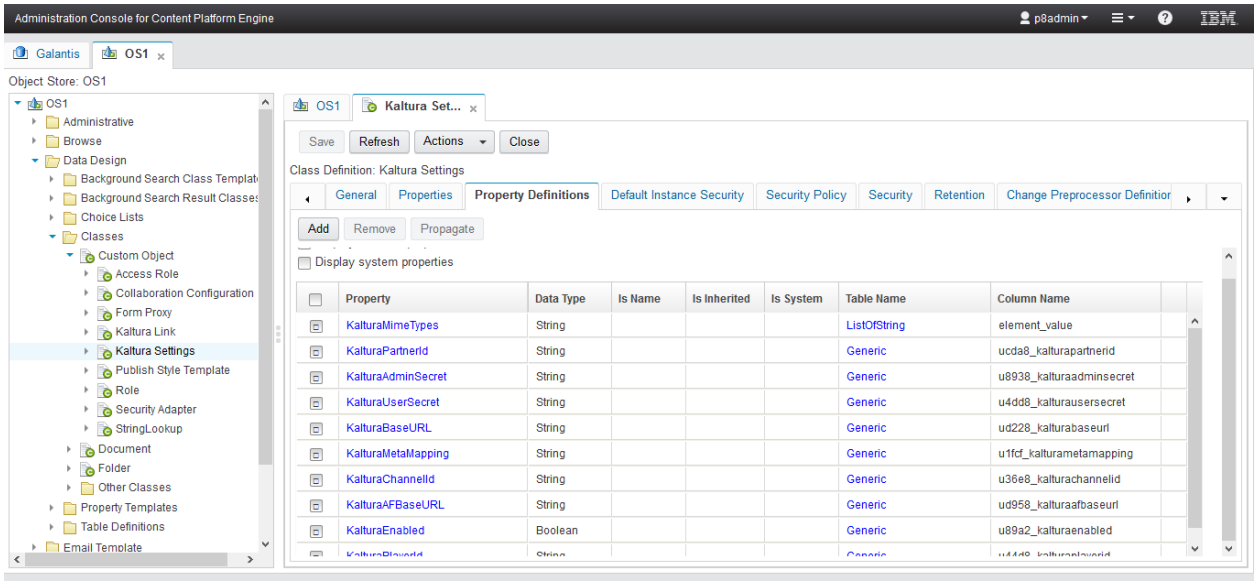
1. Create Kaltura Settings class as subclass of Custom Object in the configuration for the FileNet object store.



2. Create and add the following properties to Kaltura Settings class.

Name	Symbolic Name	Type	Length	Description/Comments
KalturaMimeTypes	KalturaMimeTypes	String[]	64	Array will contain all video MIME types to be supported
KalturaPartnerId	Kaltura Partner Id	String	64	Partner ID of Kaltura repository
KalturaAdminSecret	KalturaAdminSecret	String	64	Admin secret of configured Kaltura media repository
KalturaUserSecret	KalturaUserSecret	String	64	User secret of configured Kaltura media repository
KalturaBaseURL	KalturaBaseURL	String	64	Base URL to the configured

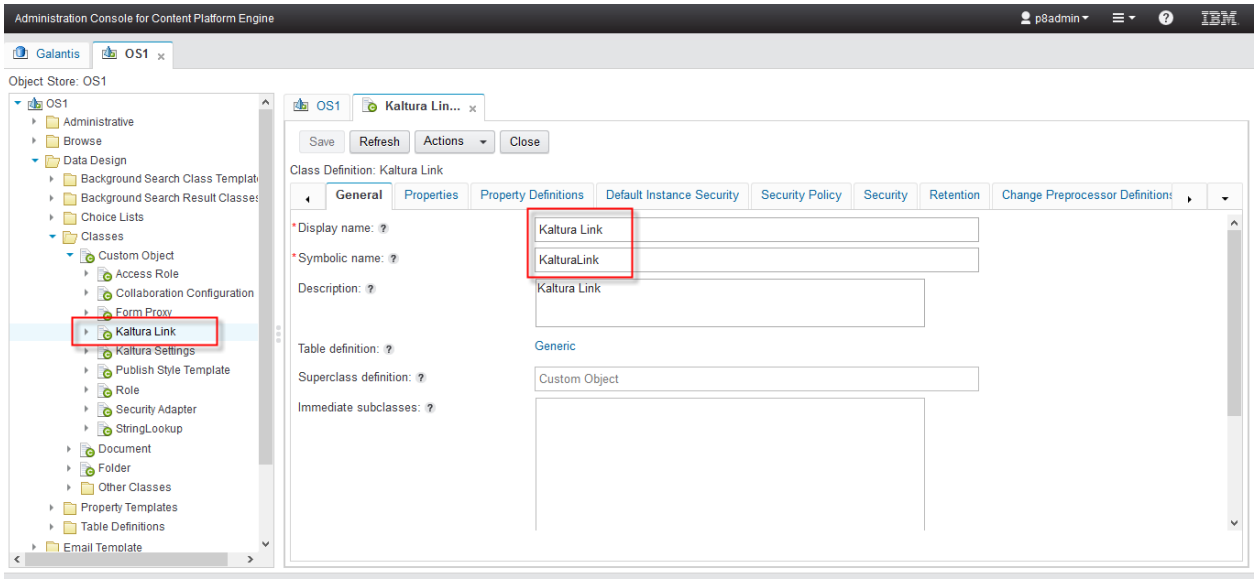
Name	Symbolic Name	Type	Length	Description/Comments
				Kaltura instance
KalturaMetaMapping	KalturaMetaMapping	Long String	6000	Metadata mapping schema between FileNet and Kaltura
KalturaChannelId	KalturaChannelId	String	64	Stub channel ID for publishing to Kaltura repository
KalturaAFBaseURL	KalturaAFBaseURL	String	64	Base URL of the KAF instance
KalturaEnabled	KalturaEnabled	Boolean		Indicates whether integration with Kaltura is enabled for the object store
KalturaPlayerId	KalturaPlayerId	String	64	ID of a Kaltura player to be used in integration for videos
KalturaAllMediaAdmins	KalturaAllMediaAdmins	String	64	Comma separated list of All Media frame administrators
KalturaAudioPlayerId	KalturaAudioPlayerId	String	64	ID of a Kaltura player to be used in integration for audios
KalturaImagePlayerId	KalturaImagePlayerId	String	64	ID of a Kaltura player to be used in integration for images



Kaltura Link Class

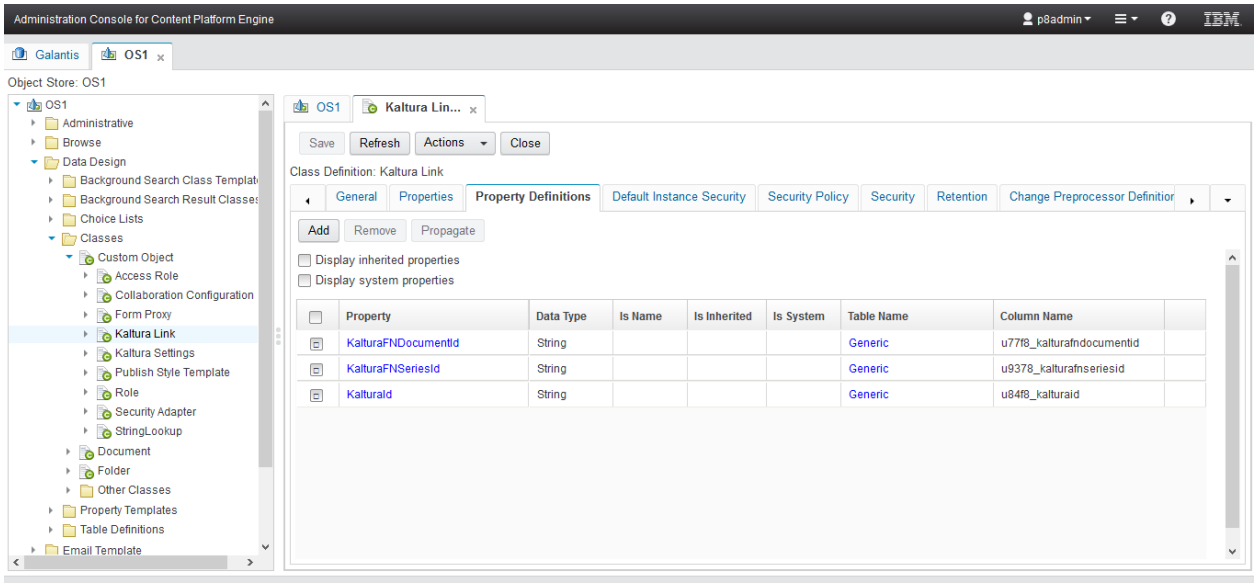
To create the Kaltura Link Class as a subclass

1. Create Kaltura Link class as subclass of Custom Object in the configuration for the FileNet object store.



2. Create and add the following properties to Kaltura Link class.

Name	Symbolic Name	Type	Length	Description/Comments
KalturaFNDocumentId	KalturaFNDocumentId	String	64	The unique ID of a document (released version) in FileNet.
KalturaFNSeriesId	KalturaFNSeriesId	String	64	The unique ID of FileNet document version series corresponding to the integrated and synced object.
KalturaId	KalturaId	String	10	Unique ID of a video object in

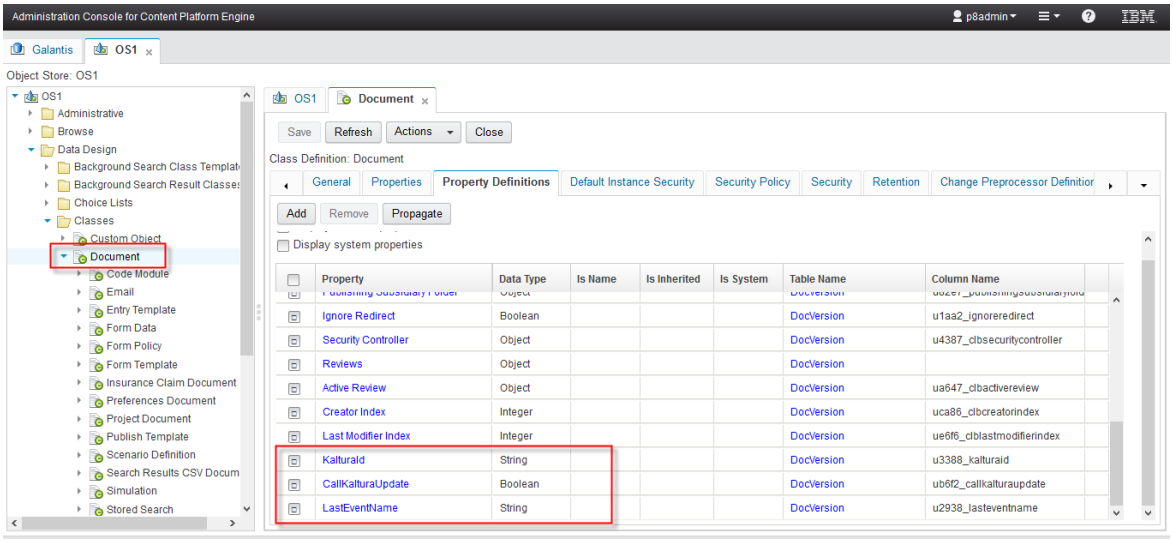


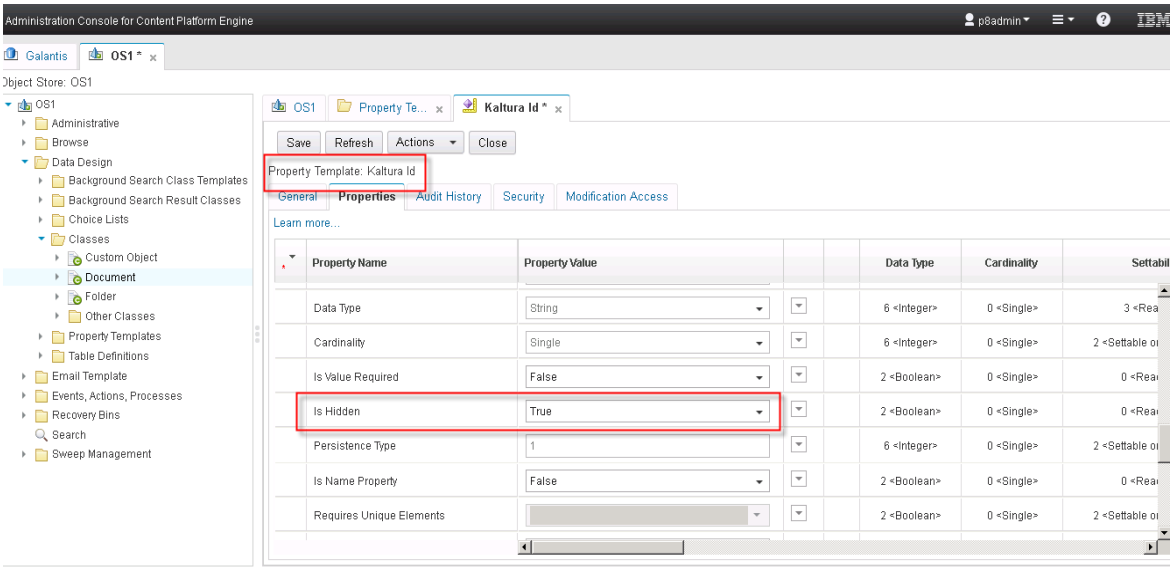
Document Class Updates

To update the base document class with new properties

- Create the properties based on the following table. Make sure to configure the new properties as Hidden.

Name	Symbolic Name	Type	Length	Description/Comments
KalturaId	KalturaId	String	10	Unique ID of a video object in Kaltura. Hidden.
CallKalturaUpdate	CallKalturaUpdate	Boolean		Flag indicating whether object update in FileNet should be synced to Kaltura. Hidden.
LastEventName	LastEventName	String	64	Name of last event raised for the object. Hidden.





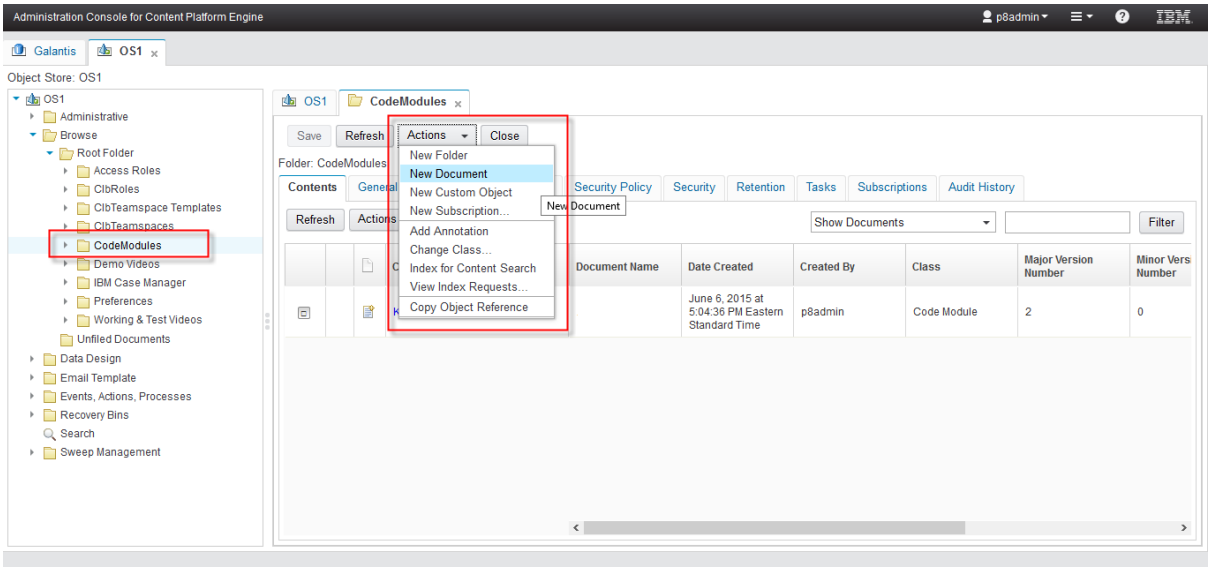
Code Module

A code module is a special Document subclass in FileNet that contains Java components. The code module contains action handlers and required Java libraries for the following actions:

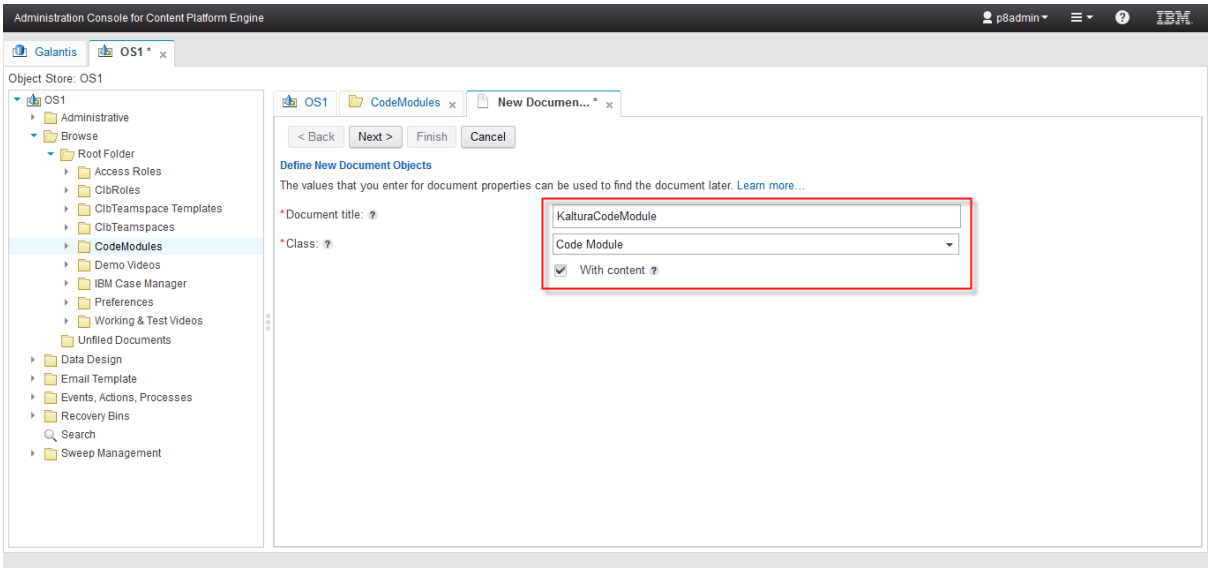
- Kaltura Event Action
- Kaltura Change Preprocessor Action
- Kaltura Sweep Action

To create the Kaltura Code Module

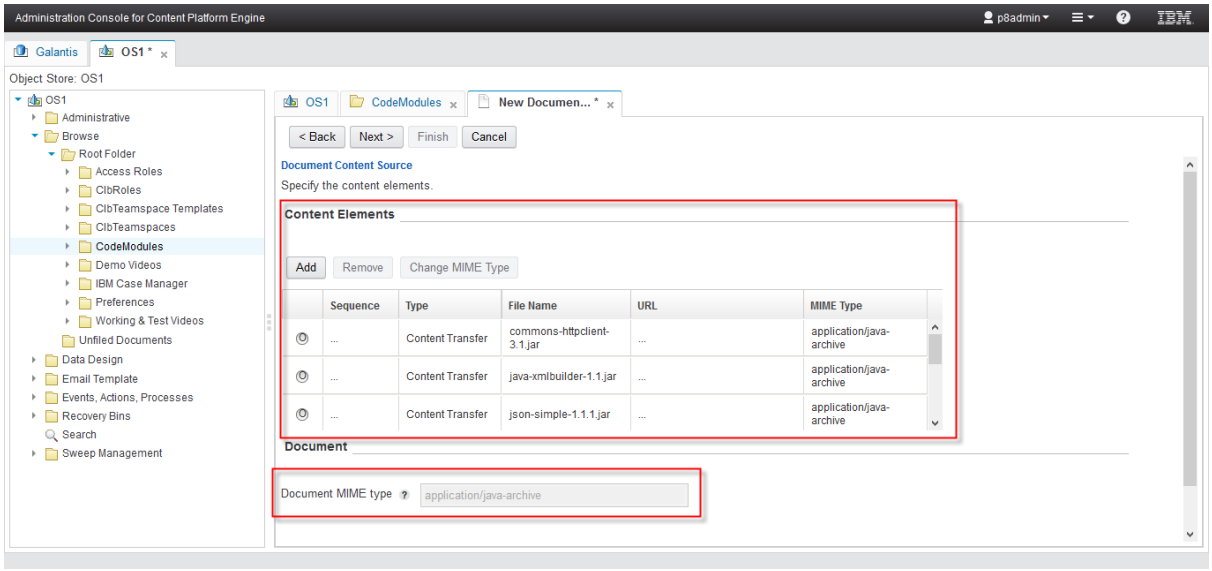
1. In ACCE, select Object Store >> Browse >> Root Folder >> CodeModules >> Actions (in the folder menu) >> New Document.



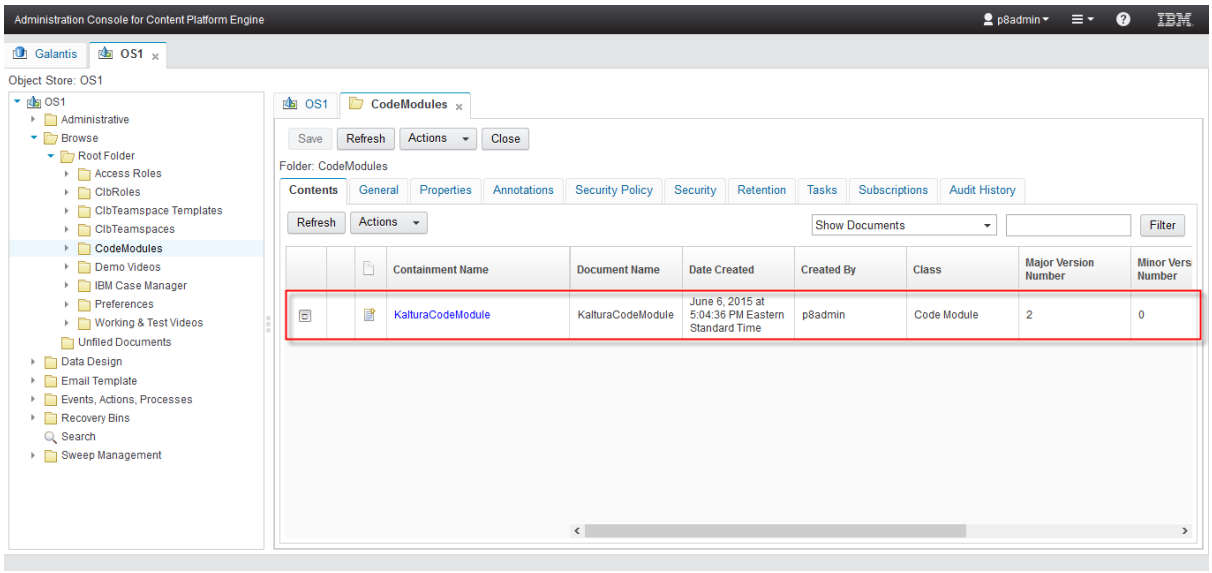
2. Set name to *KalturaCodeModule* and class=*Code Module*. Make sure that *With content* checkbox is selected.



3. Add the following libraries from *KALTURA_CONF_DIR* as Content Elements in the next step:



4. Leave default values for all next steps in the wizard and click Finish to create the code module.



5. Add the following 7 libraries as content elements when a code module is created:

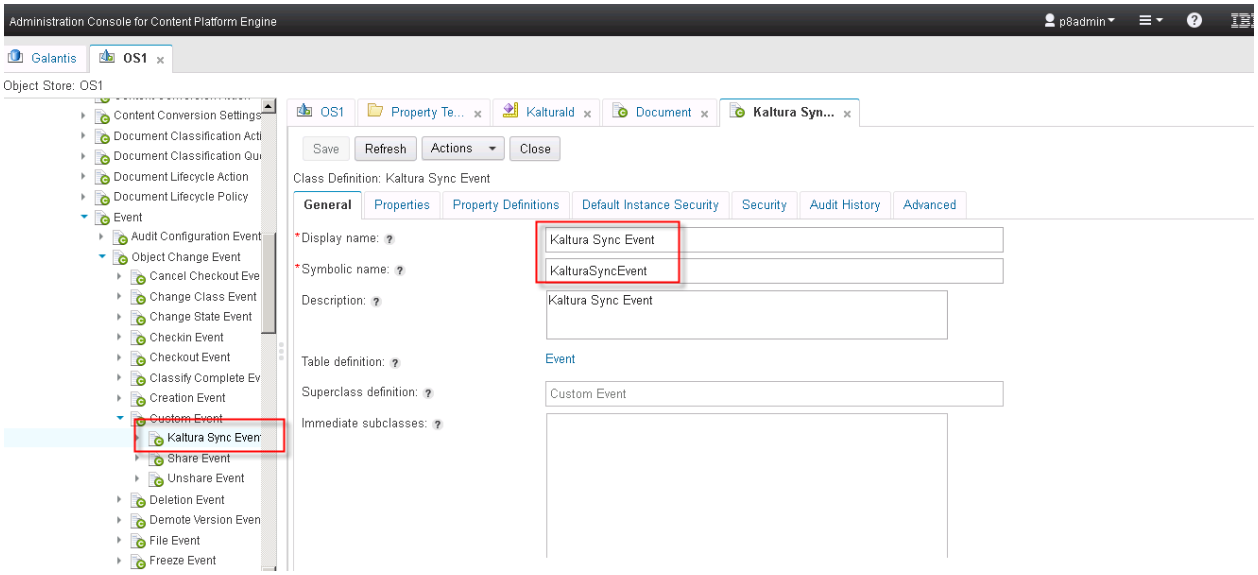
- kaltura-api-1.0.jar
- kaltura-cn-common-1.0.jar
- kaltura-custom-service-1.0.jar
- kaltura-event-handler-1.0.jar
- java-xmlbuilder-1.1.jar
- json-simple-1.1.1.jar
- commons-http-client-3.1.jar

Events and Subscriptions

Kaltura Sync Event

To create the Kaltura Sync Event

- Create Kaltura Sync Event as a subclass of *Classes >> Other Classes >> Event >> Object Change Event >> Custom Event* in Administrative Console for CPE.

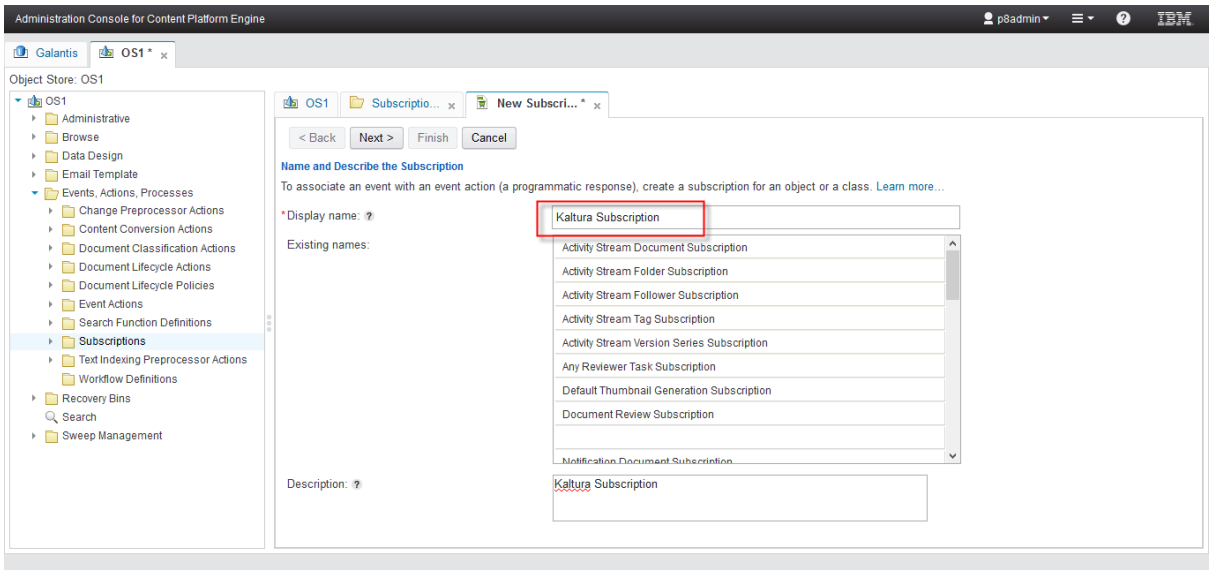


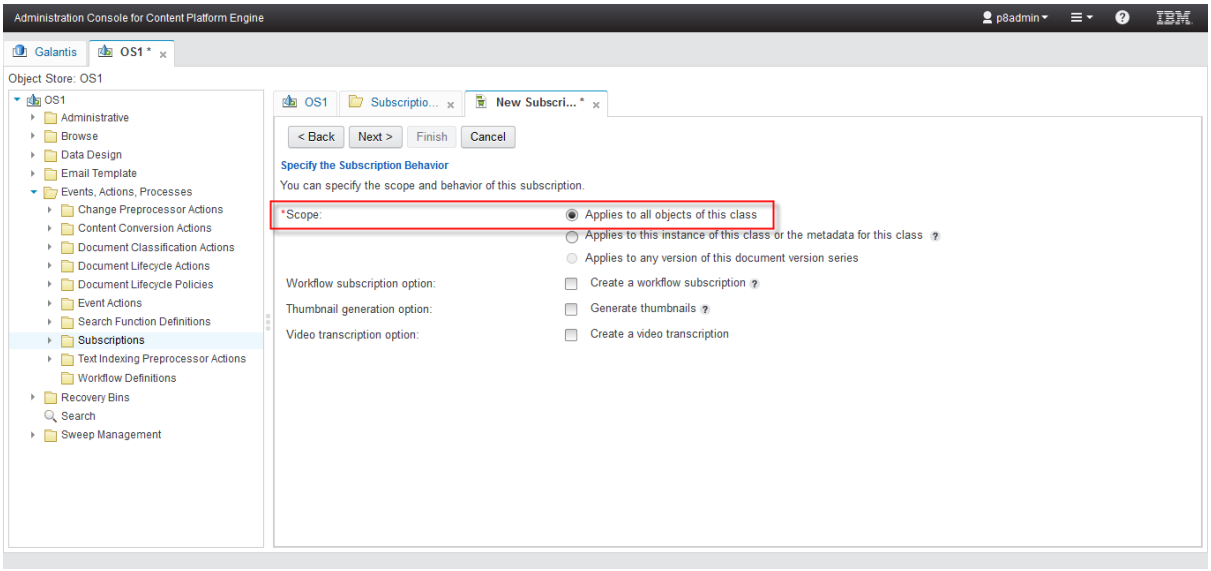
Kaltura Subscription and Event Action

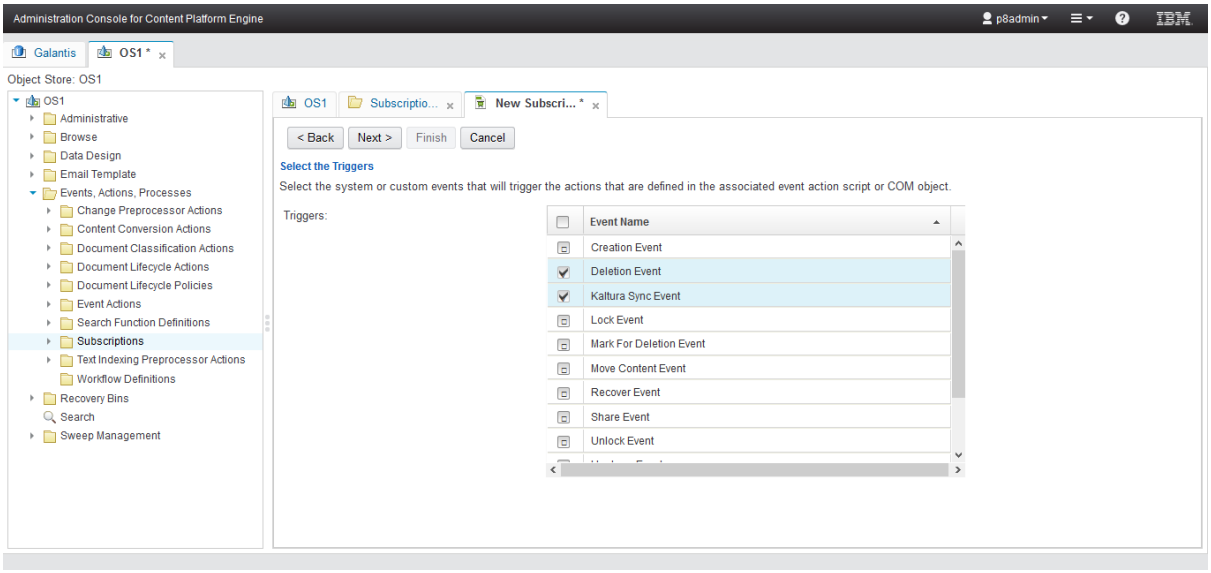
Perform the following configuration on the base Document class. The settings will propagate to all subclasses. If required, perform on each child Document class separately.

To configure the base document class for Kaltura Subscription and event action

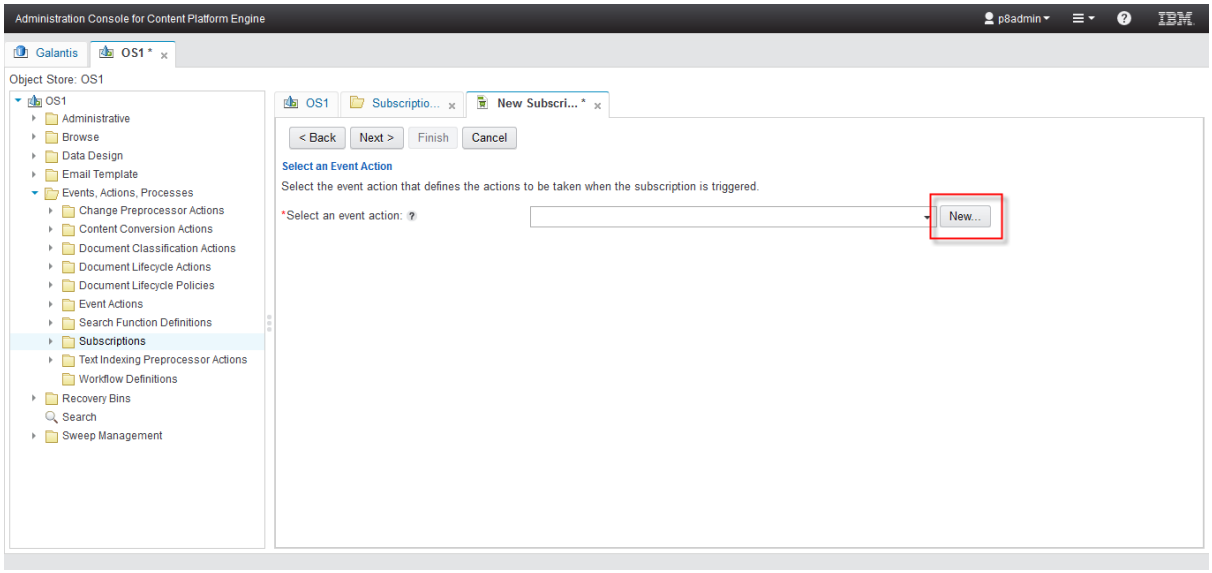
1. Create Kaltura Subscription on the base *Document* class using the following settings:
   - Name = Kaltura Subscription
   - Scope = Applies to all objects of this class
   - Triggers: Checkin Event, Delete Event, Kaltura Sync Event, Update Event
   - Event Action = Kaltura Event Action



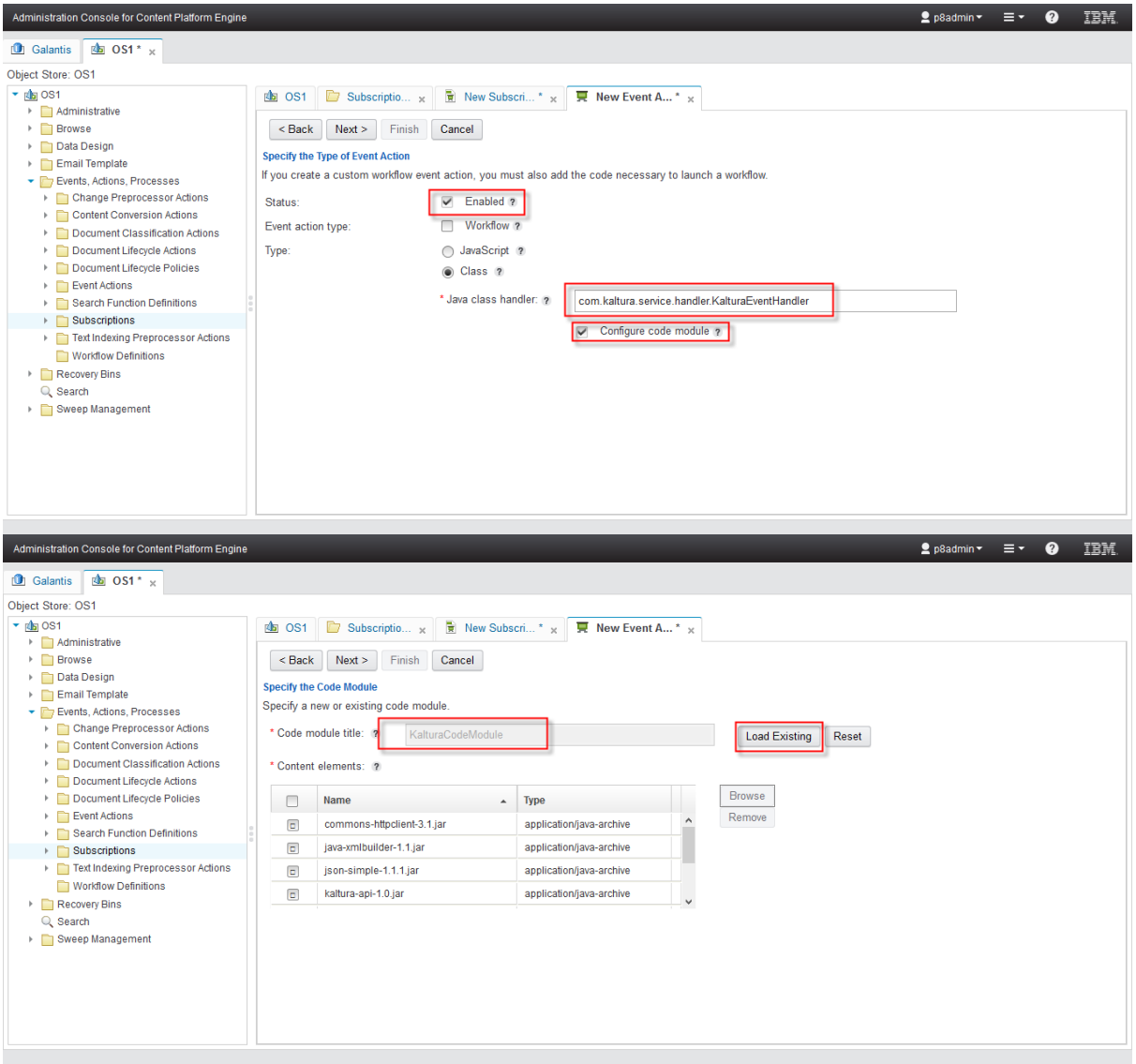




2. When prompted, create the new custom event action for the subscription. Use the following values:
   - Name = Kaltura Event Action
   - Enabled = true
   - Type = Class
   - Java Class Handler = com.kaltura.service.handler.KalturaEventHandler



3. Make sure that *Configure code module* checkbox is selected. Click on *Load Existing* button and select *KalturaCodeModule*.



4. Click *Finish* to create the new event action and then *Finish* again to create the subscription.

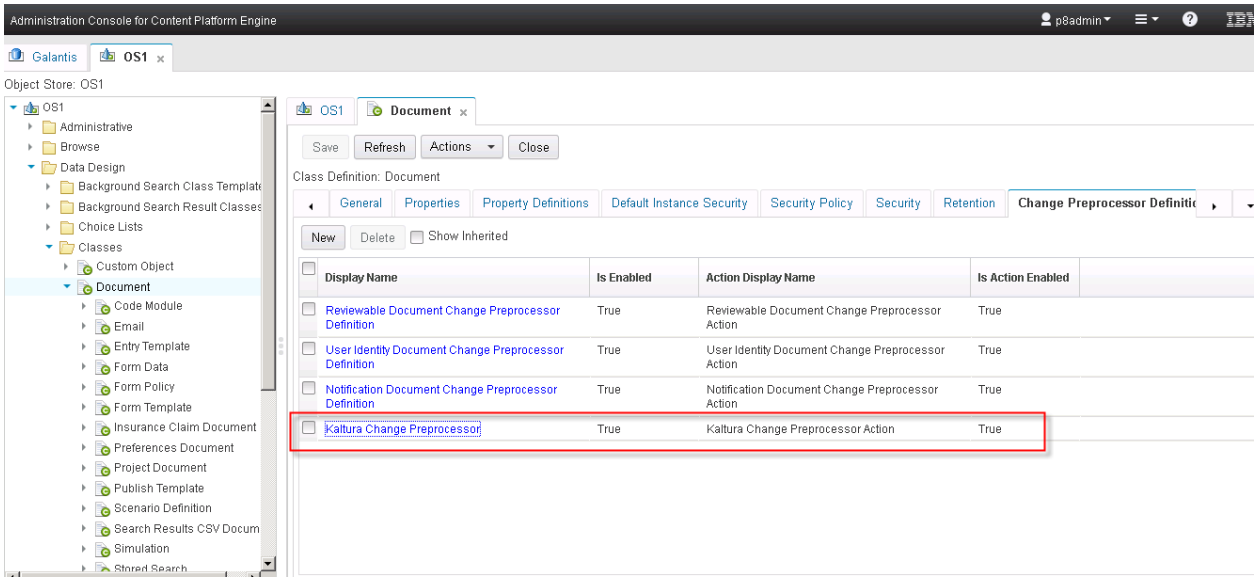
Change Pre-processor

Kaltura Change Pre-processor and Action

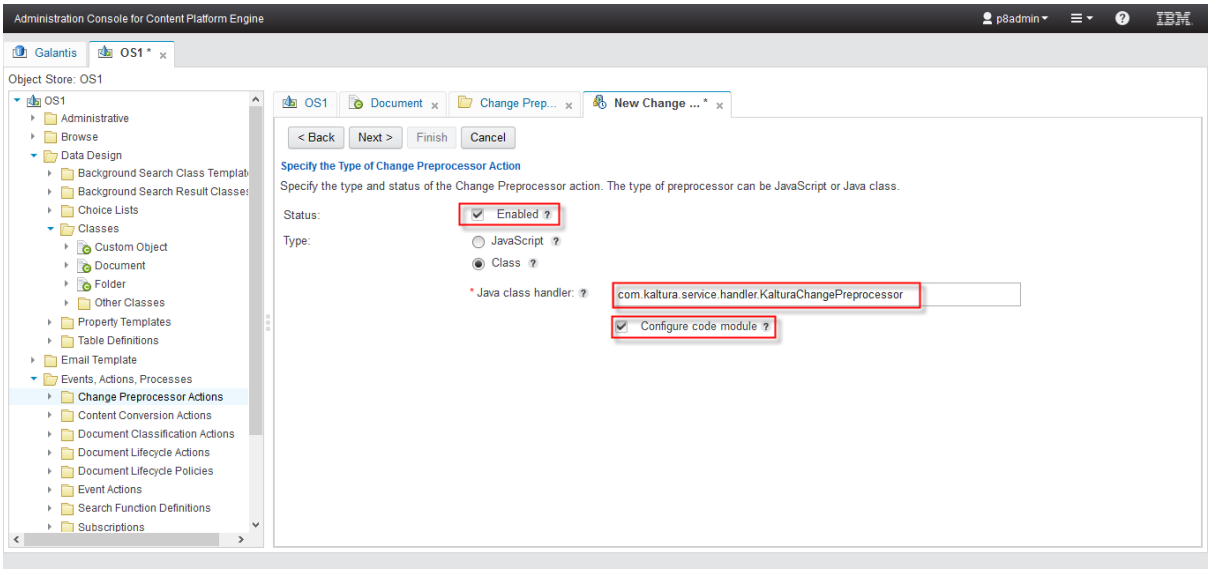
To configure the base document class for the Change Pre-processor and action

Perform the following configuration on the base Document class. The settings propagate to all subclasses. If required, perform the congfiguration on each child Document class separately.

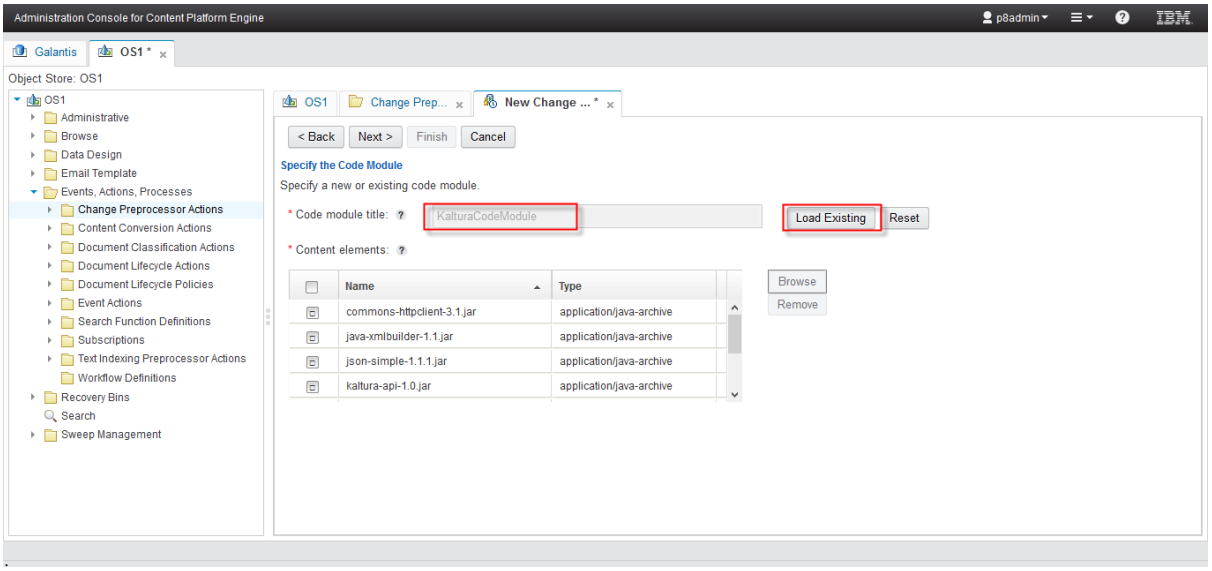
1. Under Change Pre-processor Definitions tab of a document class, create a new change pre-processor using the following settings:
   - Name = Kaltura Change Pre-processor
   - Status = Enabled
   - Change Pre-processor Action = Kaltura Change Pre-processor Action



2. When prompted, create the new change pre-processor action using the following values:
   - Name = Kaltura Change Preprocessor Action
   - Type = Class
   - Java class handler = com.kaltura.service.handler.KalturaChangePreprocessor



3. Make sure that *Configure code module* checkbox is selected. Click on *Load Existing* button and select *KalturaCodeModule*.



4. Click *Finish* to create the new change preprocessor action and then *Finish* again to create the change preprocessor definition.

Custom Kaltura Sweep

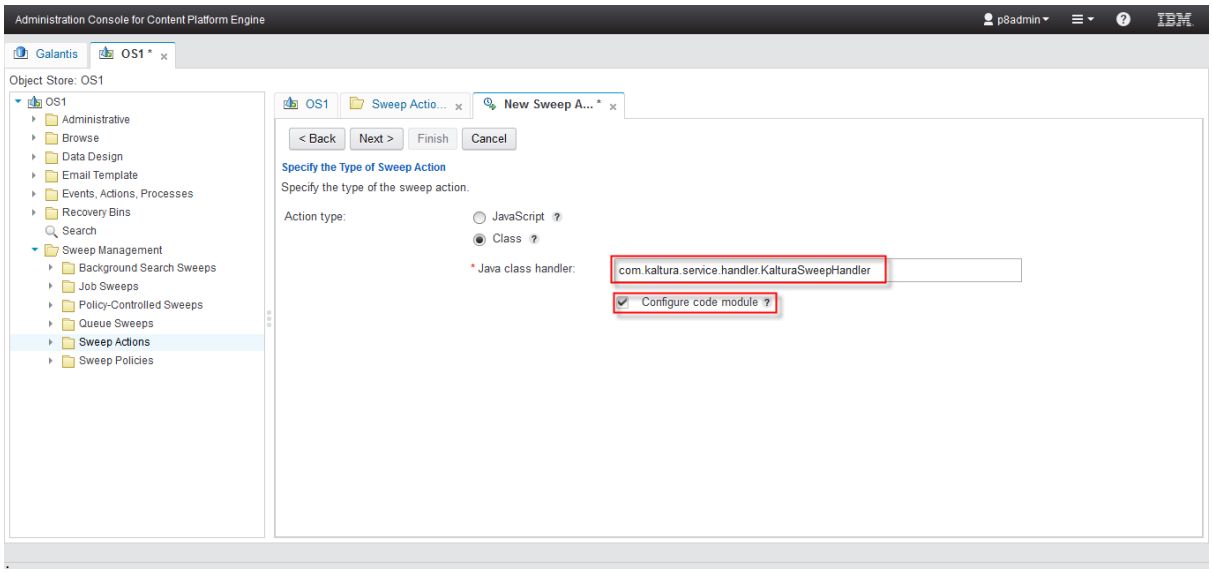
You can configure performance tuning parameters and the repository-wide common behaviour configuration parameters for a basic sweep by using IBM® Enterprise Records Task Manager.

Kaltura Sweep Action

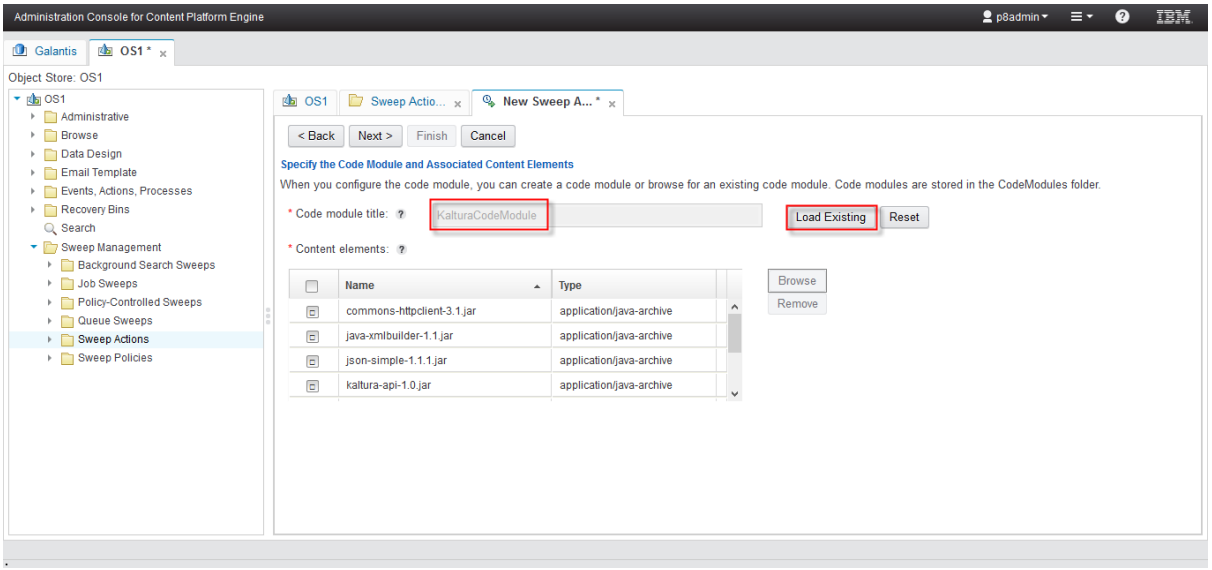
To configure the Kaltura Sweep action

1. In Administrative Console for CPE, navigate to Object Store >> Sweep Management >> Sweep Actions.
2. Create a new Sweep Action using the following values:
   - Name = Kaltura Sweep Action

- Java class handler = com.kaltura.service.handler.KalturaSweepHandler



3. Make sure that *Configure code module* checkbox is selected. Click on *Load Existing* button and select *KalturaCodeModule*.



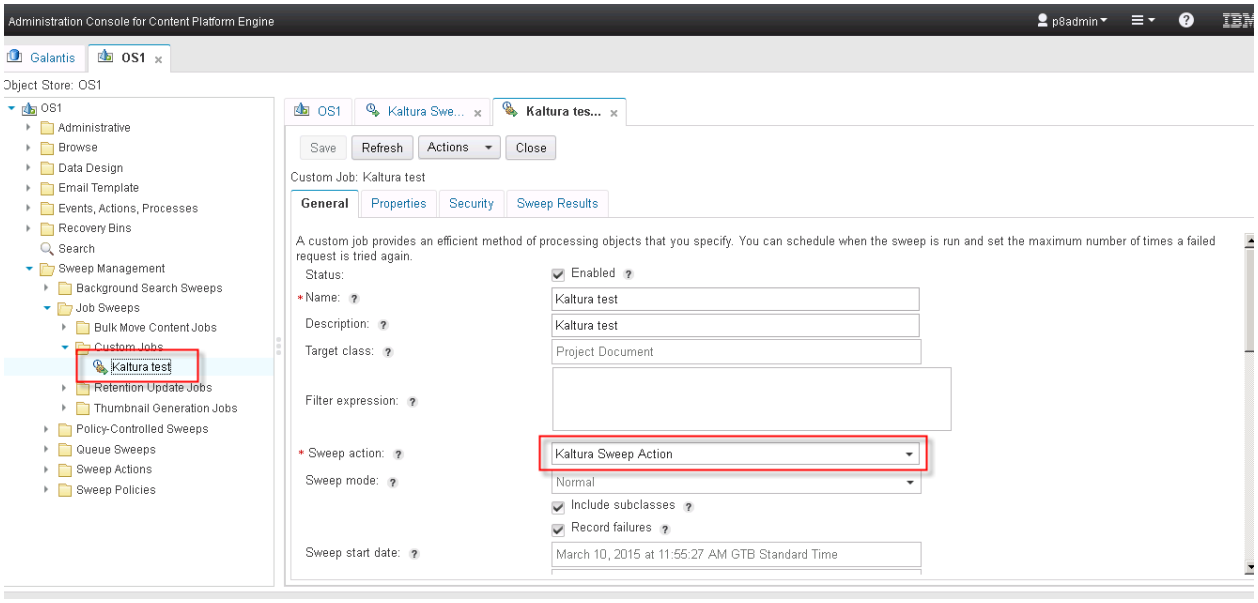
4. Click *Finish* to create the new custom sweep action.

Running a Sweep

Sweep processes can be triggered from the ECM Task Manager in the IBM® Enterprise Records task pane to allow for remote execution and scheduling.

To run a sweep

1. In the Administrative Console for CPE, navigate to Object Store >> Sweep Management >> Job Sweeps >> Custom Jobs.
2. Create a custom sweep job using Kaltura Sweep Action to initiate syncing of existing videos to Kaltura.



A custom schedule can be defined for the sweep job in the same configuration frame if required.