IBM FileNet Content Manager

IBM Video Streaming Integration
Getting Started

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Contents

Abstract

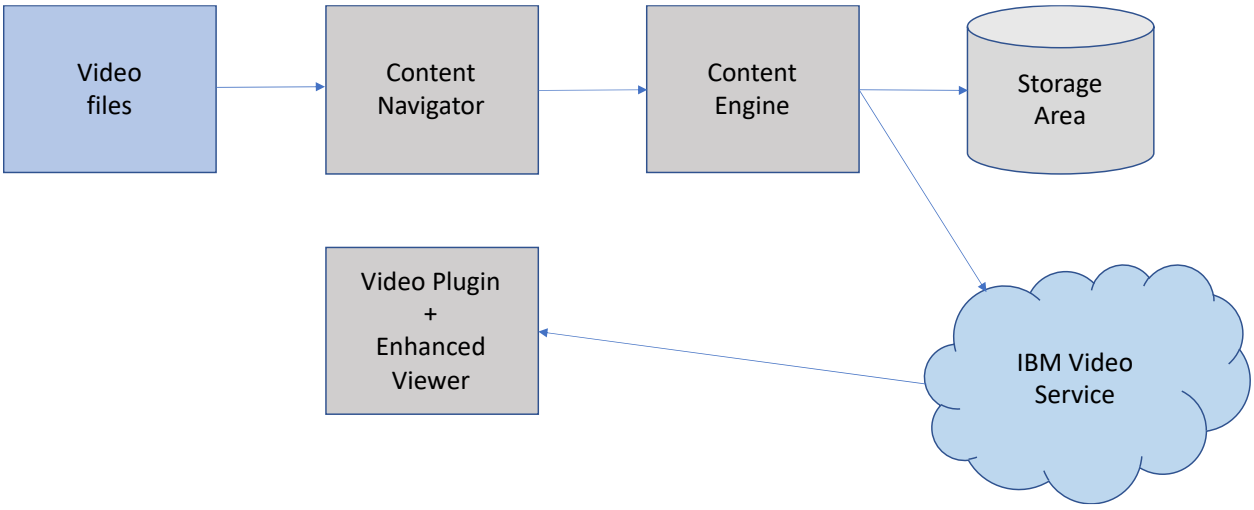
This document describes installing and getting started using the IBM Video Streaming integration with FileNet Content Manager and IBM Content Navigator.

Background Information

What is the IBM Video Streaming integration?

FileNet Content Manager integration with IBM Watson Media Video Streaming enables customers to store and manage videos in FileNet Content Manager. Customers can quickly access and playback videos alongside other content. Within the Video Viewer, customers can search for keywords and phrases and jump to those sections of the video.

An overview of the key components is shown below. Video files are ingested through Content Navigator and uploaded to the Content Platform Engine, where they are stored in their native format. The video files are then copied to the IBM Video Streaming Cloud service where they are transcoded for optimal playback. Video files can then be retrieved and played back through the IBM Video Viewer within Content Navigator.



- Video formats supported:
  - video/quicktime: mov
  - video/x-flv: flv
  - video/mp4: mp4
- Videos that are stored in a FileNet Storage Repository are sent to the IBM Video Service where they are processed and cached for enhanced viewing.
- IBM Content Navigator supports the Video Service enhanced viewer:
  - Fast playback and fast skip to any location.
  - Search video captions in the viewer.
- Support for processing existing or newly ingested video files.
- Support for removing cached videos for superseded document versions.
- Optional support for persisting video captions as annotations.
  - Perform full text search on video captions in the Administration Console for Content Platform Engine or the Content Platform Engine API.

Platforms

The IBM Video Streaming integration is supported in a traditional on-premises release and in a FileNet Content Manager container environment.

On-premises support includes WebSphere V8.5.5 and V9.0.x, on all supported operating system platforms.

Prerequisites

To configure the IBM Video Streaming integration, the following requirements must be met:

- Access to one of the following services:
  - IBM Video Streaming Service or
  - IBM Enterprise Video Streaming Service

  If you do not already have access to one of these services, contact your Sales Account Manager to obtain an account. The account must be set up in integration mode, where *intercom_ve benefit* is removed. Appendix C provides more details on this.

- IBM Video Streaming is a Cloud based service so you will need to update your firewall to allow access to the video streaming IP addresses and ports, for example, 443, 21, and 1935. For more information, see the "Firewall settings needed for viewing streams" and "IP address ranges" sections in https://support.video.ibm.com/hc/en-us/articles/207852107-Opening-Firewall-or-Proxy-Ports-for-IBM-Watson-Media-Broadcasting-and-Viewing

  Contact IBM Video Streaming at https://support.video.ibm.com/hc/en-us/requests/new for additional assistance.

- Content Platform Engine Prerequisites
  - Content Platform Engine V5.5.3 or later
  - A new or existing object store which contains video content (does not need to be just video content).
  - A FileNet Content Manager administrative account with full control access to the object store where you want to configure the integration. All Video Streaming and Content Platform Engine integration metadata event actions and sweeps are created under the context of this user, and this user is the owner of the metadata.
  - Linux or Windows system with Java 1.8 installed (for running the standalone IVS deployer tool)
  - Content Platform Engine CEWS client files (V5.5.3 or later).
    - Download the Java CEWS client files by using the Administration Console for Content Platform Engine client download (`JavaCEWSclient.zip`.)
  - Apache commons JAR file: `commons-net-3.6.jar`
    - Download from: https://mvnrepository.com/artifact/commons-net/commons-net/3.6
  - For secure communication of commands between the Content Platform Engine and the IBM Video Streaming service, obtain a SSL certificate from the IBM Video Streaming service. The installation procedure is described under the Content Platform Engine section of this document.

- Content Navigator prerequisites
  - Content Navigator 3.0.7 IF1 or later

- Access to the IBM ECM Github (https://github.com/ibm-ecm)

- Download the Video Streaming integration configuration Json file and JAR files (for both IBM Content Navigator and Content Platform Engine) from the **ibm-ecm-video-streaming** repository
- This repository includes this Getting Started guide as well as the following files:
- Content Navigator: `ivsPlugin.jar`
- Content Platform Engine: `ivs.jar`, `JSON4J.jar` and `ivs_config.json`

Getting Started

Before you begin, obtain the files that are needed for the IBM Video Streaming integration from the following location:

https://github.com/ibm-ecm/ibm-ecm-video-streaming

Review the **Prerequisites** to make sure that your environment is ready for the integration.

Setting up the IBM Video Streaming integration includes three high-level steps:

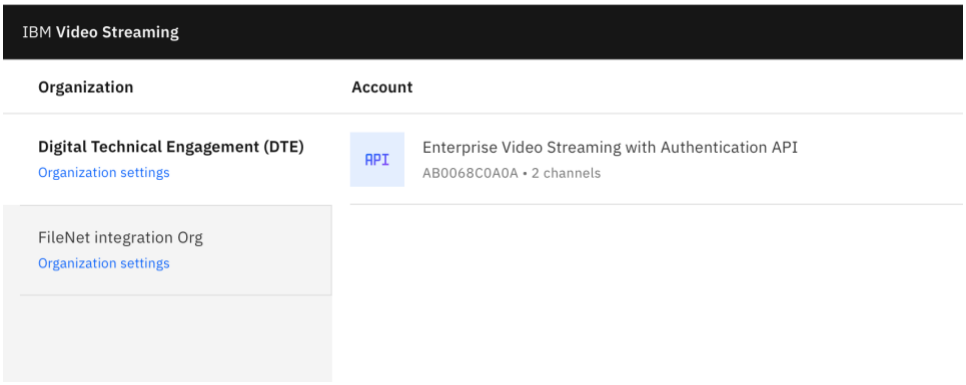
- Configuring the IBM Video Streaming Service
- Configuring the integration on Content Platform Engine
- Configuring the integration on IBM Content Navigator

Configuring the IBM Video Streaming Service

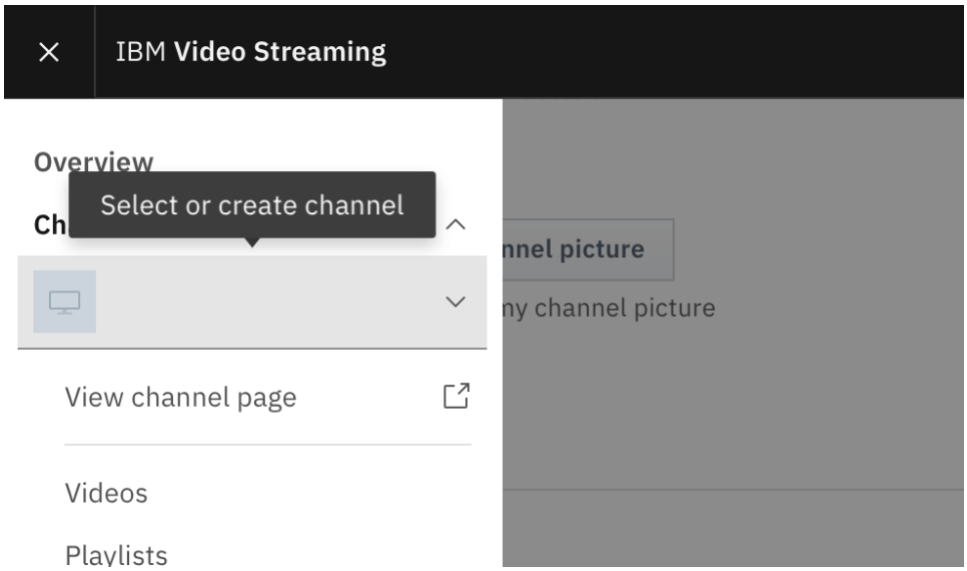
Before you begin, make sure you have access to IBM Video Streaming Service or IBM Enterprise Video Streaming Service. Use the following steps to set up a channel and configure authentication for the channel.

To configure the IBM Video Streaming Service:

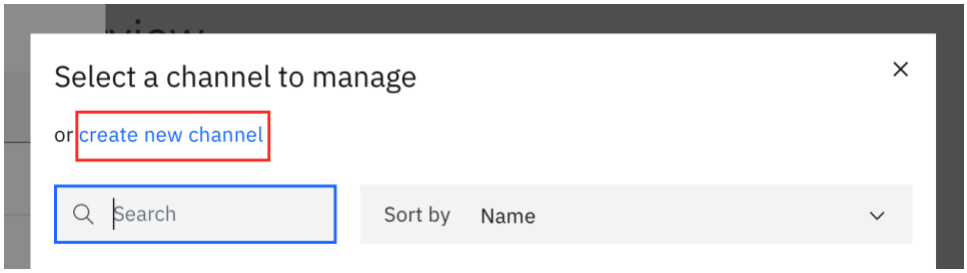
1. Log in to the IBM Video Streaming Dashboard (https://video.ibm.com):



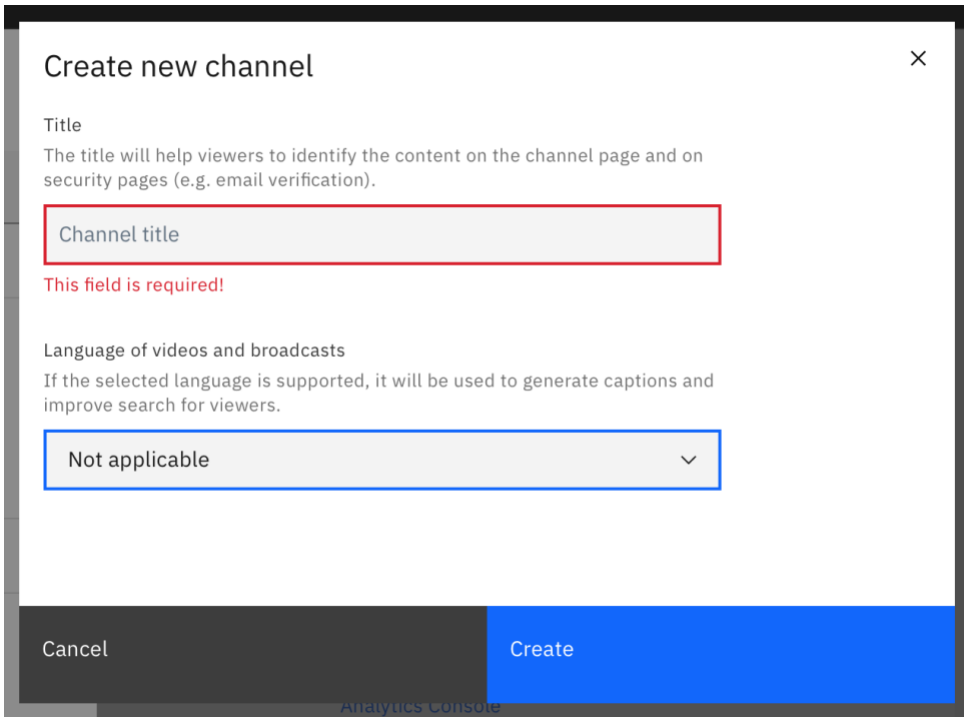
2. From your Account, go to the sidebar menu and select **Channels**, and from there, select the drop down menu.



You will see a pop up menu that allows you to create a new channel.

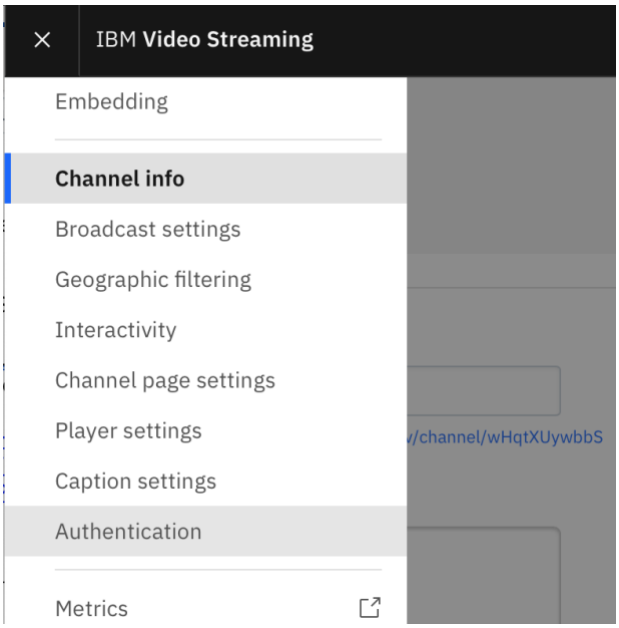


Then enter a new channel title, select your preferred language for caption generation, and click **Create**.

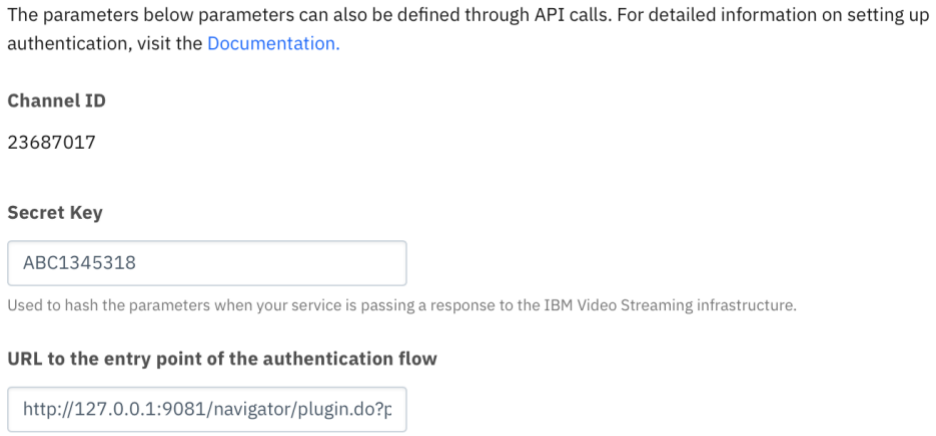


3. Configure authentication for your channel:

   Under **Channel info**, click **Authentication**.



   The **Authentication** settings display. Make a note of the settings that you enter in this dialog area. The **Channel ID** and **Channel Secret Key** are used in the IBM Content Navigator configuration steps.



Generate a **Secret Key** by typing in a value. Including strong password elements like upper and lower case letters, special characters, and numbers is recommended.

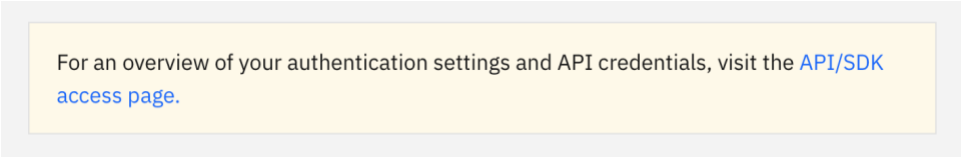
For the **URL to the entry point of the authentication flow** parameter, enter the URL of your IBM Content Navigator server, for example: https://<HOST_NAME>/navigator/plugin.do?plugin=IVSPlugin&action=CreateIVSHashlockService&repositoryId=<IVS_REPOSITORY>

Where:

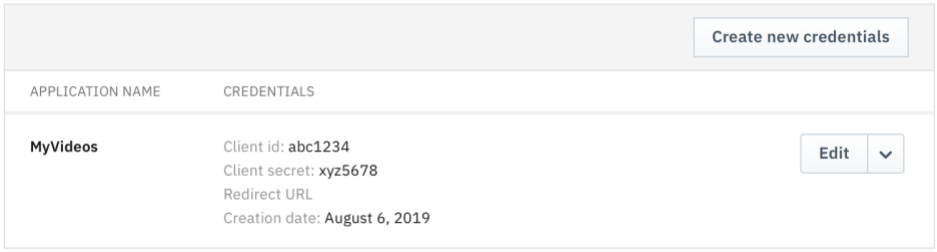
- HOST_NAME must be reachable to authenticate within your IBM Content Navigator system. Use the same protocol (HTTPS), that your IBM Content Navigator server uses.
- IVS_REPOSITORY is the name of the repository that you plan to configure with the IBM Video Streaming service subscription.

For more information, click on the **Documentation** link in the header of the Authentication page.

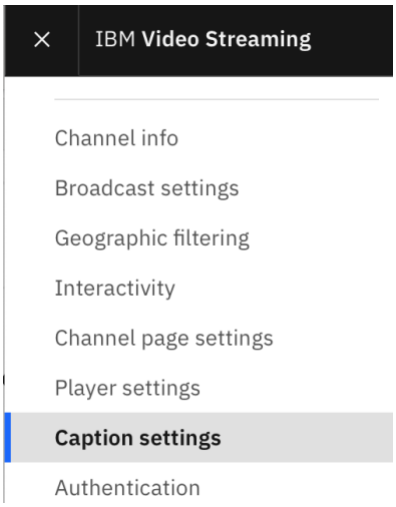
4. From the Authentication page for your channel, click the **API/SDK access page** link. You can also find this page by navigating to **Integration and Apps > API/SDK access page**.



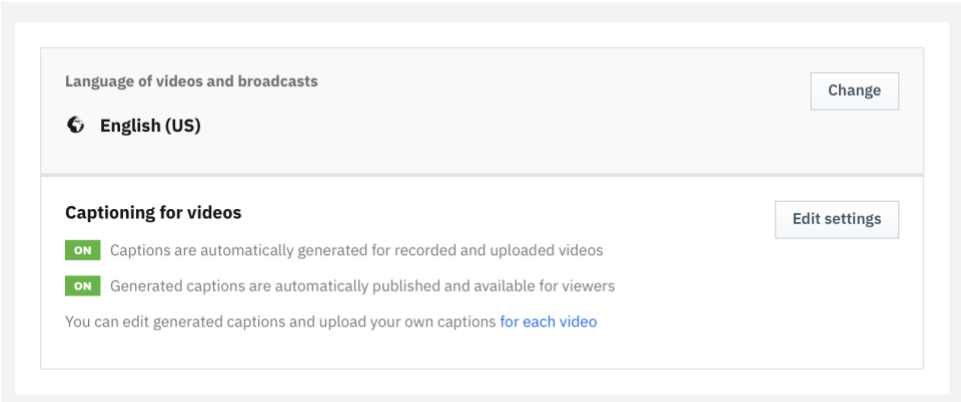
5. Make a note of the values for the **Client ID** and **Client Secret** for this Account. These values are used when you configure Content Platform Engine configuration. You can optionally click **Edit > Regenerate** to produce new secret hashes.



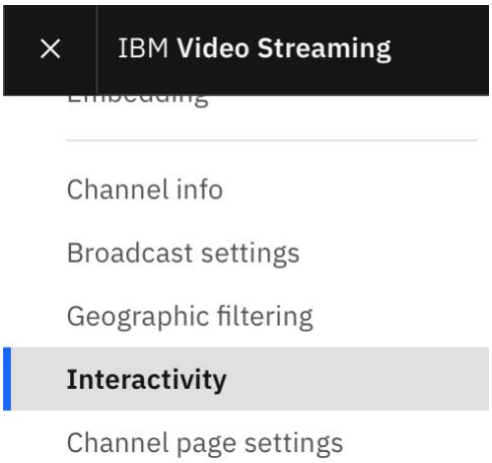
6. Configure the caption settings. Under your channel, click **Caption settings**.



Ensure that captioning is enabled for the language that you prefer, and that the setting **Captions are automatically generated for recorded and uploaded for videos** is turned on.

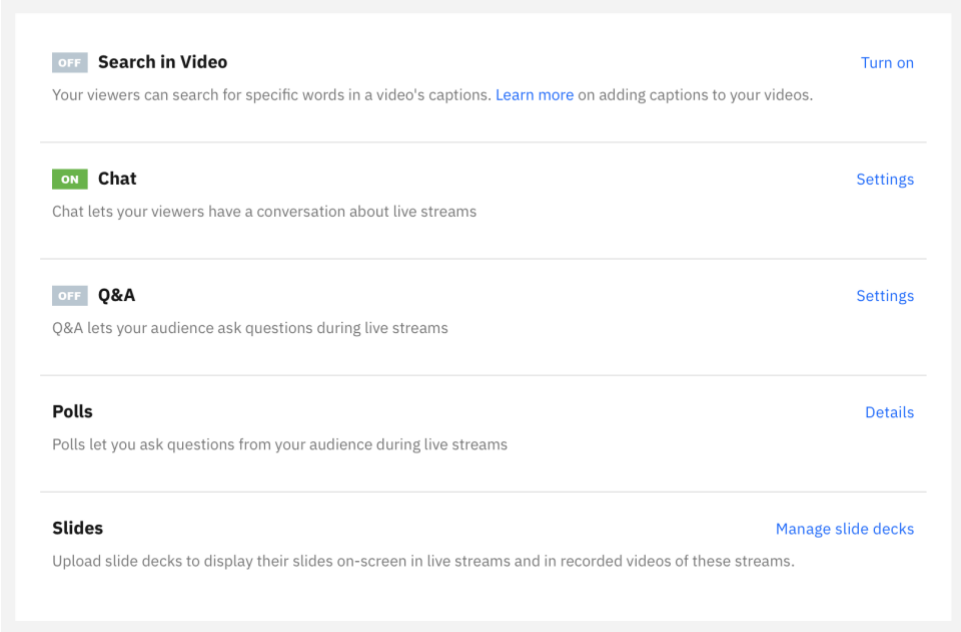


7. Configure your interactivity settings. Under your channel, click **Interactivity**.



Update your interactive video settings, such as Search in Video, Chat, and so on.

Ensure that **Search in Video** is enabled to be able to find words within a video's captions.



After you complete the configuration of the IBM Video Streaming Service, continue with configuring the integration on Content Platform Engine.

Configuring the integration on Content Platform Engine

Configuring the IBM Video Streaming integration on Content Platform Engine requires the following actions:

- Preparing the environment for the integration
- (Optional) Configuring SSL communication
- Preparing the `ivs_config.json` configuration file
- Deploying the integration to your object store by using the command line tool

- Creating subscriptions in Content Platform Engine

To prepare the environment for the IBM Video Streaming integration:

1. Create a temporary staging directory, for example `ivs_tmp`.
2. Copy the video streaming integration JAR file, `ivs.jar`, into this directory.
3. Copy `JSON4J.jar` file into this directory.
4. Unzip and copy into the directory the `JavaCEWSclient.zip` file that you downloaded from the Administration Console for Content Platform Engine. (Refer to the Prerequisites section of this document for details.)
5. Create a sub-directory named `lib` under the directory that you created in Step 1.
6. Copy the IBM Video Streaming integration JAR file `ivs.jar` and the `commons-net-3.6.jar` files to the `lib` directory.
    - The `lib` directory must have exactly these two files and no other files:
        - `ivs.jar`
        - `commons-net-3.6.jar`

(Optional) To configure SSL communication between Content Platform Engine and IBM Video Streaming:

To optionally enable secure communication of commands between the Content Platform Engine and the IBM Streaming Video service, obtain an SSL certificate from the IBM Video Streaming service and import the certificate into the application server for Content Platform Engine.

1. Obtain the SSL certificate from the IBM Video Streaming service (`https://api.video.ibm.com`) . For example, in the browser, click the security icon in the address, and use the provided information to download the certificate file.
2. Import the dowloaded certificate into the application server that you are using with Content Platform Engine:

   For WebSphere Application Server (on-premises deployments):
   https://www.ibm.com/support/knowledgecenter/SSNW2F_5.5.0/com.ibm.p8.install.doc/p8pup710.htm

   For Liberty (container deployments):
   https://www.ibm.com/support/knowledgecenter/SSEQTP_liberty/com.ibm.websphere.wlp.doc/ae/twlp_add_trust_cert.html

3. After the certificate is installed on the application server, change the "certificateValidationEnabled" configuration parameter in the ivs_config.json file (described in the next section) from false to true.

To prepare the IBM Video Streaming `ivs_config.json` configuration file:

1. Create a file called `ivs_config.json` in your `ivs_tmp` directory.
   A sample configuration file is provided on the IBM Github location.
2. Customize the configuration file for your environment as described below.

Use the sample file and the parameter details in the following sections to prepare your configuration JSON file.

Sample Configuration File

```
{
    "certificateValidationEnabled": false,
    "maximumContentSize": 1024000000,
    "enableFtpClientTrace": true,
    "enableAnnotationCreation": true,
    "annotationClassName": "Annotation",
    "annotationDescriptiveText": "IBM Video Captions",
    "supportedVideoFormat": {
        "video/quicktime": "mov",
        "video/x-flv": "flv",
        "video/mp4": "mp4"
    },
    "global": {
        "clientId": "bbbbd5767624601177d2b59895487a1257666dec1",
        "evsUrl": "https://video.ibm.com",
        "apiUrl": "https://api.video.ibm.com",
        "channelId": "24623779"
    }
}
```

Note: As an alternative, you can use the following evsURL and apiURL values:

```
        "evsUrl": "https://www.ustream.tv",
        "apiUrl": "https://api.ustream.tv",
```

The following parameters are specific to your configuration and will require updating:

- clientId
- channelId
- annotationClassName
- annotationDescriptiveText (optional)

These required parameters and additional parameters are described in the following table.

Configuration File Details

Parameter	Default	Description
maximumContentSize	1024000000	The maximum size of a video to be uploaded to the video service (videos larger than this size are ignored). **Increase this value if uploading video files larger than 1GB.**
maximumDeferrals	20	The maximum number of times to defer an upload queue entry. **Increase this value if uploading large video files.**

Parameter	Default	Description
annotationClassName	Annotation	The class name to be used when creating an Annotation to store the video captions. To ensure that caption Annotations are persisted, create a dedicated Annotation subclass for the captions.
annotationDescriptiveText	IBM Video Captions + language	The descriptive text to be set on the Annotation. The language of the captions is added to this text.
supportedVideoFormat	mp4, mov, and flv	The video formats that IBM Video Streaming supports. Do not add other formats.
global		
clientId	null	The video service client id. Obtained during IBM Video Streaming service configuration.
channelId	null	The video service channel id. Obtained during IBM Video Streaming service configuration.
evsUrl	https://video.ibm.com	The video service authentication URL.
apiUrl	null	The video service API URL. If not supplied it is derived from the evsURL, for example: https://api.video.ibm.com

To change or customize other parameters, consult IBM Support. Additional parameters are described in Appendix A.

To deploy the IBM Video Streaming integration to Content Platform Engine:

1. From your command line, changen to the `ivs_tmp` directory that you created earlier.
2. Run a command like the following to deploy the integration to your object store:

```
java -cp ivs.jar:* com.ibm.internal.cpe.ivs.CmdLine -cmd deploy -user
P8Admin -url http://localhost:9080/wsi/FNCEWS40MTOM -objectstore
P8ObjectStore -adminsgroup P8Admins -usersgroup GeneralUsers -
configfile ivs_config.json -libraries lib
```

The example command shown deploys the IBM Video Streaming integration to an object store named 'P8ObjectStore'. Substitute the name of your object store.

The example is a Linux example; for Windows, change `-cp ivs.jar:*` to `-cp ivs.jar;*`

The parameters that need to be customized for your configuration are:

- -user
- -url
- -objectstore
- -adminsgroup
- -usersgroup

These and additional parameters are described in the following table.

IBM Video Streaming deployment tool parameters

Parameter	Description
-adminsgroup	Directory service group name that is applied as a security principal with administrative access rights to the video streaming metadata.
-configfile	File path to the configuration source file (the file contents will be persisted as the only instance of the IVSConfiguration class). See description of the configuration file in this document.
-libraries	File path to the directory that contain the JAR files to be included in the integration code module. This directory must contain two files: `ivs.jar` and `commons-net-3.6.jar`.
-objectstore	Symbolic name of the Object Store where the integration will be deployed.
-url	Content Manager URL for WSI client access.
-user	The user name of the FileNet Content Manager administrative user, used to logon to Content Platform Engine and perform operations on the object store.
-usersgroup	Directory service group name that is applied as a security principal with user (restricted) access rights to the video streaming metadata.
-verbose	Enable verbose logging for the command line installer.

The IVS deployment tool provides other capabilities besides deploying the IVS configuration to the Content Platform Engine. A list of all commands are described in Appendix B. However, before attempting to use these other commands, please consult IBM Support for assistance.

To create subscriptions for the integration:

Use the Administration Console for Content Platform Engine to create the required checkin, delete, and info subscriptions:

- IVS Document Checkin Event Action
- IVS Document Delete Event Action
- IBM Video Info Delete Event Action

Perform these actions as the administrative user that deployed the integration.

To configure the IVS Document Checkin Event Action:

1. In the Administration Console for Content Platform Engine, from the test object store, navigate to **Data Design > Classes > Document**.
2. Under **Actions**, click **New subscription**.
3. Enter **Display Name** and **Description** values for the subscription, for example, *Video Checkin Action*, and click **Next**.
4. Set the **Scope** of the subscription, and click **Next**.
5. Select **Checkin Event**, and click **Next**.
6. For **Event action**, select **IVS Event Action**, and click **Next**.
7. Click **Enable this subscription**.
8. Optionally enable **Include sub-classes**.
9. Click **Next**, then click **Finish** to create the subscription.

To configure the IVS Document Delete Event Action:

1. In the Administration Console for Content Platform Engine, from the test object store, navigate to **Data Design > Classes > Document**.
2. Under **Actions**, click **New subscription**.
3. Enter **Display Name** and **Description** values for the subscription, for example, *Video Delete Action*, and click **Next**.
4. Set the **Scope** of the subscription, and click **Next**.
5. Select **Deletion Event**, and click **Next**.
6. For **Event action**, select **IVS Event Action**, and click **Next**.
7. Click **Enable this subscription**.
8. Select **Run synchronously**.
9. Optionally enable **Include sub-classes**.
10. Click **Next**, then click **Finish** to create the subscription.

To configure a subscription to delete the video from the video service when the IBMVideoInfo object is deleted**:**

1. In the Administration Console for Content Platform Engine, from the test object store, navigate to **Data Design > Classes > Other Classes**.
2. Expand **Abstract Persistable**, and select **IBMVideoInfo**.
3. Under **Actions**, click **New subscription**.
4. Enter **Display Name** and **Description** values for the subscription, for example, *Video Info Deletion Action*, and click **Next**.
5. Set the **Scope** of the subscription, and click **Next**.
6. Select **Deletion Event**, and click **Next**.
7. For **Event action**, select **IVS Event Action**, and click **Next**.
8. Click **Enable this subscription**.
9. Select **Run synchronously**.
10. Optionally enable **Include sub-classes**.
11. Click **Next**, then click **Finish** to create the subscription.

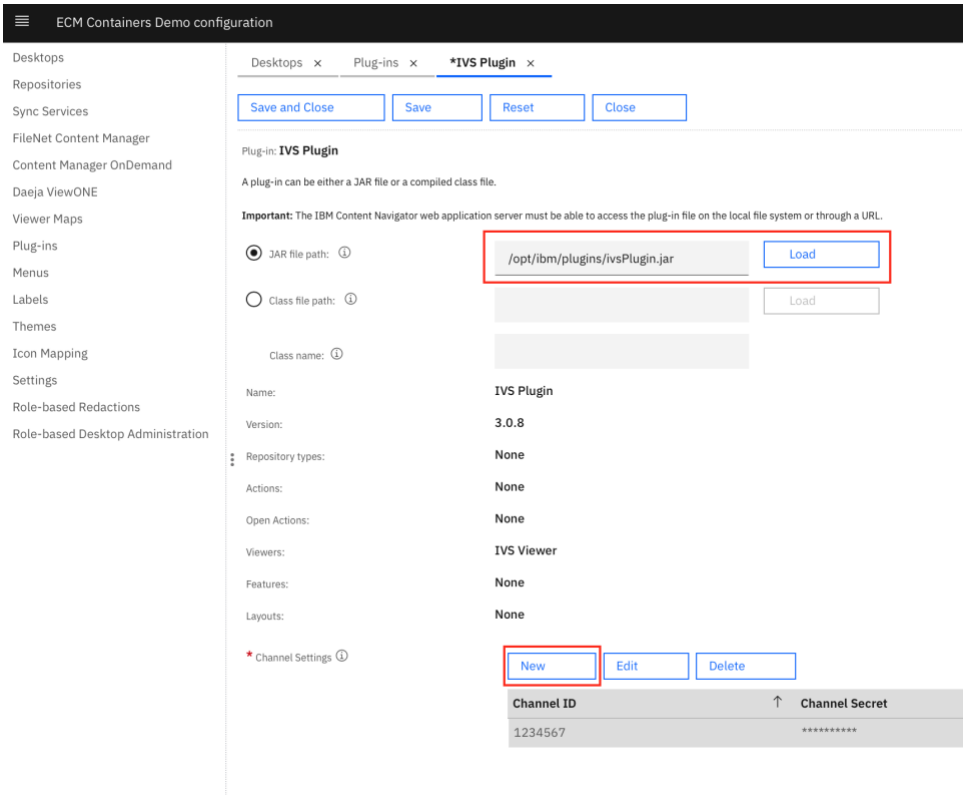
After you complete configuring the integration on Content Platform Engine, continue with configuring the integration on Content Navigator.

Configuring the integration on IBM Content Navigator

Use the Administration Desktop to add the Video Streaming integration plugin to IBM Content Navigator. For more information about plugins, see the IBM Content Navigator Knowledge Center.

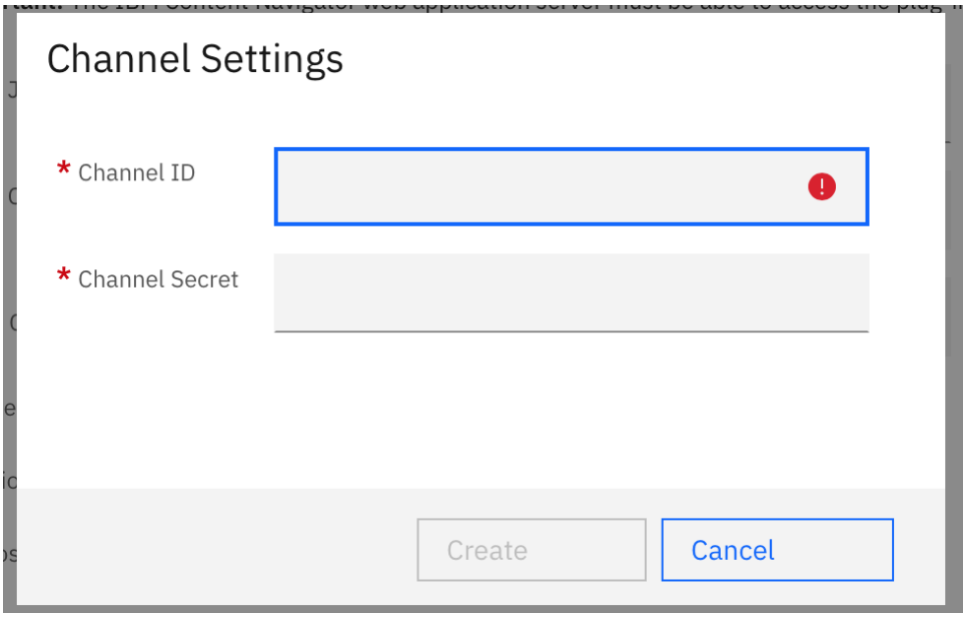
To configure the integration on IBM Content Navigator:

1. Copy the ivsPlugin.jar file to the IBM Content Navigator plug-in directory, for example: C:\Program Files\IBM\ECMClient\plugins or /opt/ibm/plugins
2. Log in to the Administration Desktop in IBM Content Navigator, open the **Plug-ins** page, and click **New** to create a new plug-in.
3. For JAR file path, enter the path to the ivsPlugin.jar file and click Load.

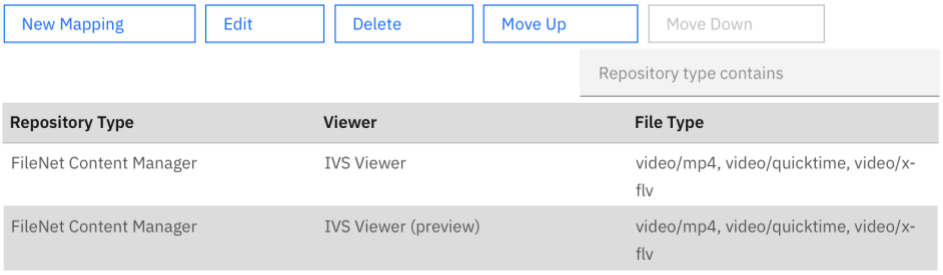


After you load the plugin, the **Channel Settings** display. When you configure an object store for video streaming, a channel ID is required. IBM Content Navigator can support multiple channel IDs when various object stores are configured on a Navigator desktop.

4. In the Channel Settings, click **New** to open the Channel Settings dialog. Specify the **Channel ID** and **Channel Secret** that you configured in the IBM Video Streaming Dashboard, and click **Create**.



5. In the Desktop menu, click **Viewer Maps** to create a new viewer map for FileNet Content Manager with the IBM Video Streaming Viewer. Select all of the available formats from the Available file types.

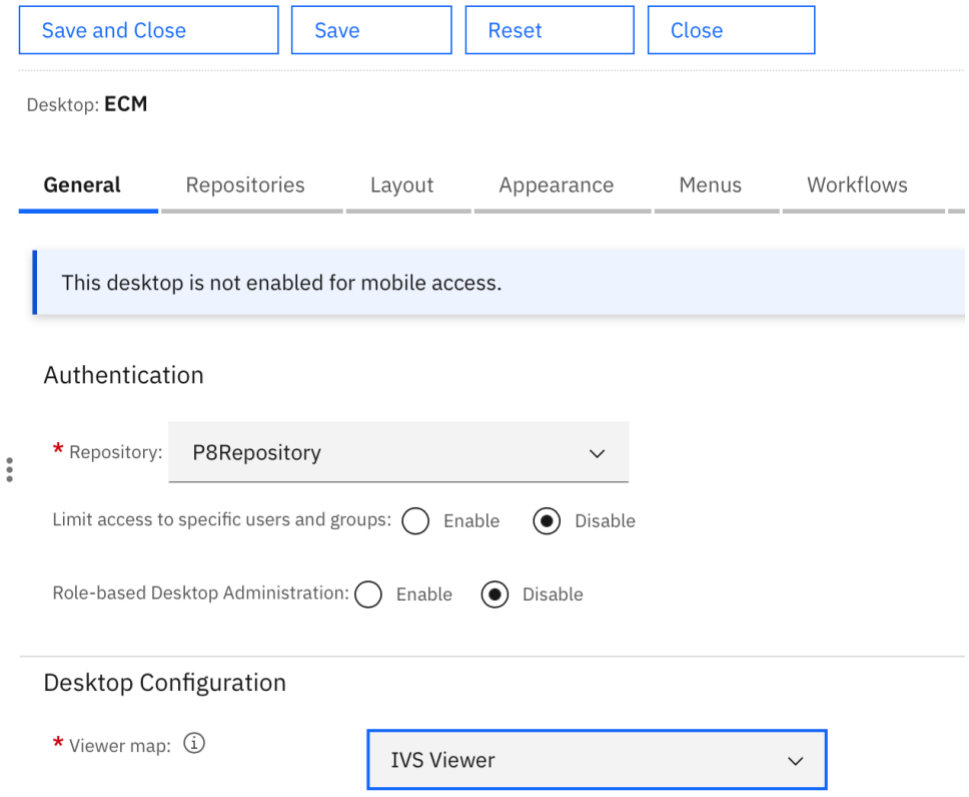


Optional:

- Repeat the steps and check **Preview** if you would like to use the IBM Video Servcies Viewer in Filmstrip View.
- Add other viewers to handle other types of documents as needed.

For more details, see:
Configuring viewers used to display documents in the web client

6. Update your Desktop to use the new viewer map.



7. Refresh your desktop.

You are now done with IBM Video Streaming configuration and can begin uploading video files through Content Navigator to FileNet Content Manager and the IBM Video Streaming service for viewing through Content Navigator.

Using the IBM Video Streaming Service integration

After you set up the integration in your environment, you can upload video content to the IBM Video Streaming Service.

To upload and view videos using IBM Content Navigator:

1. When you upload a video, make sure that you use the correct Document Class that has the IVS Checkin and IVS Delete subscriptions. This ensures that your new video is processed and sent to the IBM Video Streaming Service.
2. To play back a video, wait for your Content Platform Engine server to upload the video to the IBM Video Streaming Service and for the video service to transcode the video into different quality levels for playback.
3. When the video is ready, you can play it back in IBM Content Navigator. If you have thumbnails enabled, your video can display in the thumbnail view.

Note:

The service requires a valid Channel ID and Channel Secret to display thumbnails and videos on the IBM Video Streaming Viewer. Various error messages might display, alerting the user or administrator of the values that might be missing in their configuration.

Uploading existing videos in an object store to the IBM Video Streaming service

In addition to ingesting new videos into your FileNet P8 repository and having them upload to the IBM Video Streaming service, you can also upload existing videos already in your FileNet P8 repository, provided that they are in an object store and document class where IBM Video Streaming is configured. You can create a Content Platform Engine sweep job to accomplish this.

Create the sweep as an administrative user, preferably the same user that deployed the integration.

To create a job sweep to submit existing documents with video content to the video service:

1. In the Administration Console for Content Platform Engine, from the object store, expand **Sweep Management**.
2. Expand **Job Sweeps**, and select **Custom Jobs**.
3. Enter a name, for example, **Submit Documents to IVS**.
4. For **Sweep Mode,** select **Normal**.
5. Check **Enabled**, and click **Next**.
6. Select Document, or a sub-class of Document, as the class to process.
7. Enter a **Filter Expression** that selects the Documents to send to the video service.
8. Check **Include sub-classes** if needed.
9. Check **Record failures**.
10. For the **Sweep Action**, select **IVS Upload Job Sweep Action**, and click **Next**.
11. Accept default values for start and end dates, and click **Finish** to create the sweep.

Appendix A – IBM Video Streaming configuration file details

The IBM Video Streaming configuration file `ivs_config.json` provides access and tuning information for the IBM Video Streaming components running in Content Platform Engine. Only a few of the parameters are required during the Content Platform Engine installation procedure, and most other parameters can be left at their default values. If a parameter is not explicitly listed in the `ivs_config.json` file, the default value for that parameter is used.

Configuration File Details

Parameter	Default	Description
certificateValidationEnabled	false	If false, the SSL certificate is not validated.
connectionTimeout	30000	Timeout value in milliseconds for a connection to the video service.
readTimeout	30000	Timeout value in milliseconds for a video service read operation.
writeTimeout	30000	Timeout value in milliseconds for a video service write operation.
ftpUploadTimeout	30000	Timeout value in milliseconds for a ftp upload (to the video service) operation.
ftpBufferSize	0	The buffer size for FTP store file operation (0 indicates use default buffer size).
controlKeepAliveTimeoutSeconds	60	Control keep alive seconds for a ftp upload (to the video service) operation.
enableFtpClientTrace	true	Enable trace logging output from FtpClient (will be written to the p8 server trace log if Handler detailed tracing is enabled).
maximumContentSize	1024000000 (1GB)	The maximum size of a video to be uploaded to the video service (videos larger than this size are ignored). Max value is 4GB (40960000000)
deferralSeconds	60	The number of seconds to defer a upload queue entry before checking to see if the video upload operation has completed.
captionDeferralSeconds	300	The number of seconds to defer a upload queue entry before checking to see if the captions have been extracted from the video.

Parameter	Default	Description
maximumDeferrals	20	The maximum number of times to defer an upload queue entry. **Increase this value if uploading large video files.**
enableAnnotationCreation	false	If true, the video captions will be persisted as an Annotation of the Document.
useDefaultAnnotationPermissions	true	If true, the sweep does not explicitly set the permissions on the Annotation, the instance defaults are applied. If false, the sweep copies the permissions from the Document to the Annotation.
annotationClassName	Annotation	The class name to be used when creating an Annotation to store the video captions. To ensure that caption Annotations are persisted, create a dedicated Annotation subclass for the captions.
annotationDescriptiveText	IBM Video Captions + language	The descriptive text to be set on the Annotation. The language of the captions is added to this text.
global		
clientId	Required, based on IVS configuration. No default.	The video service client id.
channelId	Required, based on IVS configuration. No default.	The video service channel id.
evsUrl	https://video.ibm.com	The video service authentication URL.
apiUrl	null	The video service API URL. If not supplied it is derived from the evsURL, for example: https://api.video.ibm.com

Note: As an alternative, you can use the following evsURL and apiURL values:

```
"evsUrl": "https://www.ustream.tv",
"apiUrl": "https://api.ustream.tv",
```

Sample Configuration File

```
{
    "certificateValidationEnabled": false,
    "maximumContentSize": 1024000000,
    "enableFtpClientTrace": true,
    "enableAnnotationCreation": true,
    "annotationClassName": "Annotation",
    "annotationDescriptiveText": "IBM Video Captions",
    "supportedVideoFormat": {
        "video/quicktime": "mov",
        "video/x-flv": "flv",
        "video/mp4": "mp4"
    },
    "global": {
        "clientId": "bbbbd5767624601177d2b59895487a1257666dec1",
        "evsUrl": "https://video.ibm.com",
        "channelId": "24623779"
    }
}
```

Appendix B – IBM Video Streaming deployer tool for Content Platform Engine

The IBM Video Streaming deployer tool for Content Platform Engine deploys, updates, and removes IBM Video Streaming assets in Content Platform Engine.

Typical usage for the tool is limited to the deploy command for initally deploying IBM Video Streaming assets into Content Platform Engine. Contact IBM Support before using any of the other commands.

Supported Commands

Command	Description	Required Parameters
deploy	Deploy the Video Streaming/CPE integration to the specified object store. Metadata, actions, and sweeps will be created.	-user -url -objectstore -adminsgroup -usersgroup -configfile -libraries
update.configuration	Update the configuration data from a JSON file (the IVSConfiguration instance is updated).	-user -url -objectstore -configfile
update.clientsecret	Update the client secret value of the IVSConfiguration instance).	-user -url -objectstore
upgrade	Upgrade the code module JAR.	-user -url

Command	Description	Required Parameters
	NOTE: all video streaming subscriptions must be removed from all classes, and all instances of IVSUploadQueueEntry and IVSDeleteQueueEntry must be removed before upgrading the code module.	-objectstore -adminsgroup -usersgroup -configfile -libraries
delete.metadata	Delete all video streaming integration metadata. **NOTE:** All video streaming subscriptions must be removed from all classes, and all instances of IBMVideoInfo, IVSUploadQueueEntry, and IVSDeleteQueueEntry must be removed before deleting the metadata.	-user -url -objectstore
test.connection	Test the connection to the video service (outside of Content Platform Engine).	-configfile
test.upload	Test uploading a video file to the video service (outside of Content Platform Engine).	-configfile -testvideo

NOTE: When you run the deployer from the command line, you are prompted for the password of the Content Platform Engine user and the video service client secret as needed.

Parameters

Parameter	Description
-adminsgroup	Directory service group name that is applied as a security principal with administrative access rights to the video streaming metadata.
-configfile	File path to the configuration source file (the file contents will be persisted as the only instance of the IVSConfiguration class). See description of the configuration file in this document.
-libraries	File path to the directory that contain the JAR files to be included in the integration code module. This directory must contain two files: `ivs.jar` and `commons-net-3.6.jar`.
-objectstore	Symbolic name of the Object Store where the integration will be deployed.
-testvideo	File path to a video file (used to test uploading a video to the video service).
-url	Content Manager URL for WSI client access.
-user	The user name of the Content Manager administrative user, used to logon to Content Platform Engine and perform operations on the object store.
-usersgroup	Directory service group name that is applied as a security principal with user (restricted) access rights to the video streaming metadata.

Parameter	Description
-verbose	Enable verbose logging for the command line installer.

Command Line Examples

The examples below are Linux examples, for Windows change -cp ivs.jar:* to -cp ivs.jar;*

deploy

java -cp ivs.jar:* com.ibm.internal.cpe.ivs.CmdLine -cmd deploy -user P8Admin -url http://localhost:9080/wsi/FNCEWS40MTOM -objectstore P8ObjectStore -adminsgroup P8Admins -usersgroup GeneralUsers -configfile ivs_config.json -libraries lib

update.configuration

java -cp ivs.jar:* com.ibm.internal.cpe.ivs.CmdLine -cmd update.configuration -user P8Admin -url http://hostname:9080/wsi/FNCEWS40MTOM -objectstore P8ObjectStore -configfile ivs_config.json

update.clientsecret

java -cp ivs.jar:* com.ibm.internal.cpe.ivs.CmdLine -cmd update.clientsecret -user P8Admin -url http://localhost:9080/wsi/FNCEWS40MTOM -objectstore P8ObjectStore

upgrade

java -cp ivs.jar:* com.ibm.internal.cpe.ivs.CmdLine -cmd upgrade -user P8Admin -url http://localhost:9080/wsi/FNCEWS40MTOM -objectstore P8ObjectStore -adminsgroup P8Admins -usersgroup GeneralUsers -configfile ivs_config.json -libraries lib

delete.metadata

java -cp ivs.jar:* com.ibm.internal.cpe.ivs.CmdLine -cmd delete.metadata -user P8Admin -url http://localhost:9080/wsi/FNCEWS40MTOM -objectstore P8ObjectStore

test.connection

java -cp ivs.jar:* com.ibm.internal.cpe.ivs.CmdLine -cmd test.connection -configfile ivs_config.json

test.upload

java -cp ivs.jar:* com.ibm.internal.cpe.ivs.CmdLine -cmd test.upload -configfile ivs_config.json -testvideo cats.mp4

Appendix C – Known Issues and Restrictions

- The IBM Video Streaming account must not include the "intercom_ve" benefit. This setting is used on the IBM Video Streaming site to create a channel portal where clients can view all their videos. For now, clients cannot use the IBM Video Streaming portal page or “View Channel Page.” Since the purpose of this integration is between Filenet Content Manager and IBM Video Streaming, the portal is not needed. All the videos stream using IBM Content Navigator.
- Secure upload of videos from the Content Platform Engine to the IBM Video Streaming service is not currently supported.
- Videos without sound might take longer to upload. The IBM Video Streaming service does not indicate whether captions can be generated or not, so Content Platform Engine waits until the configurable maximum deferrals is reached.

Appendix D – Troubleshooting

If there is a problem uploading videos from Content Platform Engine to the IBM Video Streaming service, check the p8_server_error log for an "Authentication failed" message. To resolve this situation, copy the two jar files `local_policy.jar` and `US_export_policy.jar` in the WebSphere Application Server `<jre>/lib/security/policy/unlimited folder` to the `<jre>/lib/security folder` and restart WebSphere Application Server.

Sometimes large videos will hang after upload to the IBM Video Streaming service, during the transcoding phase. Try increasing the maximumDeferrals configuration value to resolve this issue.

If you are having trouble viweing videos in IBM Content Navigator, please check that you have the correct channel ID and channel secret configured.

Collecting logs and other data
Before submitting an issue to IBM support, please collect the following information:

Content Platform Engine
Enable Content Platform Engine Handler detailed trace, reproduce the issue and send the p8 server trace log file to IBM support.

Content Navigator
Collect the ICN server log and Web Browser console (with Debug mode enabled)

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