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October 2014

Product Implementation Training (PIT)

Content Platform Engine 5.2.1
Introduction to Pluggable Video Transcriptions a Technology Initiative to
Enable Partners

Introduction

- ## Course Overview
  - Introduction to the Pluggable Video Transcriptions feature
  - Preview-only technology initiative that allows partners to start working on their integrations with P8

- ## Target Audience
  - Any IBM employee working with partners to integrate a Video Transcription service with P8

- ## Suggested Prerequisites
  - Basic knowledge of the P8 Content Platform Engine
  - Basic knowledge of P8 Content Based Retrieval

- ## Version Release Date October 2014

Course Objectives

After this course you will be able to:

- Describe what Video Transcription is
- Describe the basic capabilities provided with the Pluggable video transcription technology initiative

Course Roadmap

➔ Introduction to Video Transcription

• Terms & Definitions

• Introduction to the new Content Platform Engine capabilities

Introduction to Video Transcription

- Refers to the extraction of spoken language from video and audio files
  - This is not the same as video analytics which recognizes objects in video
- Represented in common formats such as Timed Text Markup Language (TTML)
  - Time intervals of spoken text
  - http://www.w3.org/TR/ttaf1-dfxp/
  - TTML is the Video Transcription format the Content Platform Engine uses
- Interesting facts about technologies that perform transcription
  - Operate on audio files
  - Don't produce 100% accuracy and can require manual edits
  - Can take 2x or more of the play time for transcription

Introduction to Video Transcription

What is Video Transcription used for?

- Applying closed captioning to video

- Video navigation

  Positioning to a place in the video where something is spoken

  Word clouds – e.g. word based frequency display and navigation

- Translation to different languages

- Technologies, such as full text search, which can process textual data can make use of the data

Course Roadmap

- Introduction to Video Transcription
- ➔ Terms & Definitions
- Introduction to new Content Platform Engine Capabilities

Terms & Definitions

| Term	Definition
TTML	Timed Text Markup Language – time intervals of spoken text extracted from video and audio files
Sweep Job	A background service that visits specified class instances meeting a filter criteria.
Transcription Annotation Preprocessor	A module built into the Content Platform Engine that knows how to extract the text from Transcription Annotation instances (TTML) for the purposes of full text indexing
Transcription Request	A subclass of CmQueueEntry called RmsTranscriptionRequest that is defined by the Rich Media Addon. Used to submit a pending request to convert from video to TTML
Transcription Request Handler	A module built into the Content Platform Engine that is integrated with the transcription request sweep. The module calls into the content conversion subsystem to generate TTML and persist the results as a Transcription Annotation
Content Conversion Subsystem	The pluggable framework built into the Content Platform Engine that calls out to a partner provided transcription handler to generate TTML.
Transcription Annotation	Subclass of Annotation defined by the Rich Media Addon used to store TTML data

Course Roadmap

- Introduction to Video Transcription
- Terms & Definitions
- ➔ Introduction to new Content Platform Engine Capabilities

Introduction to new Content Platform Engine Capabilities

- Framework to convert from Video and/or Audio files to Timed Text Markup Language (TTML)
  - Rich Media Transcription Extensions add on
    - Defines required classes and sweep definitions for background processing
  - Provide partners with the ability to plug in custom code for conversion from Video and/or Audio to TTML (Transcription Handler/Code module)
  - Automatic submission of new content for transcription using a subscription
  - Direct submission of content for transcription using the API
  - Sweep job for Transcription of existing content

- TTML produced from Transcription is stored as an Annotation
- The ability to full text index the TTML annotation data with the Document

Introduction to new Content Platform Engine Capabilities

- Blue – CPE
- Yellow – Partner supplied code
- Green – Content Search Services
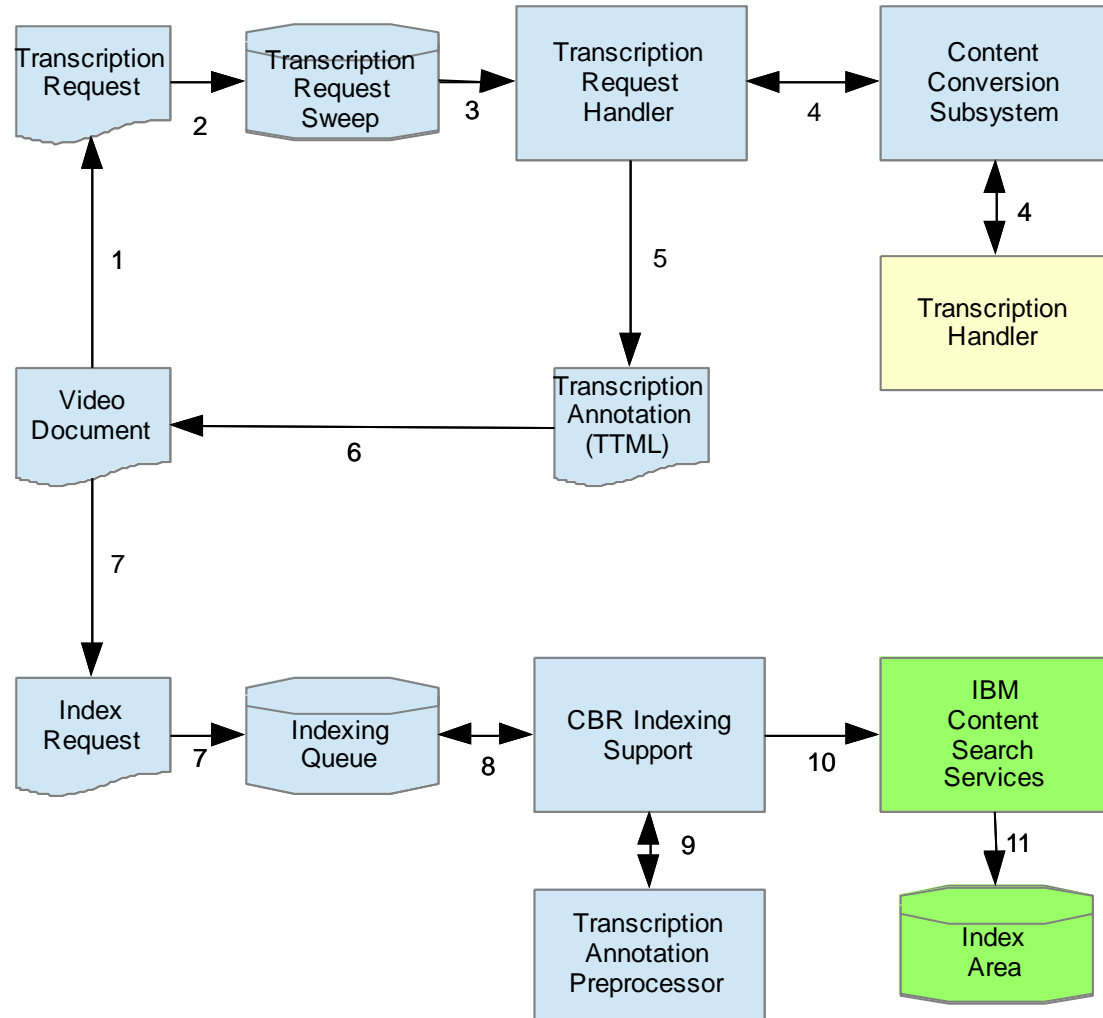
Introduction to new Content Platform Engine Capabilities

- **Production of the TTML from Video - Transcription**
  - Check in of the document triggers the submission of the transcription request using a subscription
  - The Transcription Request is processed by calling out to a Partner provided content conversion handler
  - TTML is returned from the conversion handler and saved as a Annotation to the document

- **CBR Indexing of Video Transcription**
  - Triggered by the creation of the Video Transcription Annotation

    AnnotatedObject property in the metadata data is set to CBR Propagation Type of PUSH
  - An Annotation preprocessor attached to the document class is used to extract text from the TTML for full text indexing

Introduction to new Content Platform Engine Capabilities

- The user can submit a full text search and locate the document objects based on the spoken words in the video

- User interfaces can utilize the TTML associated to the Video for navigation and/or displaying the spoken text

- Applications can submit Transcription Requests directly to generate the TTML

- Applications can bring their own TTML annotations without requiring a partner provided conversion handler

- Full text indexing of bring your own TTML is supported

- TTML Annotations can be edited and replace the automatically generated versions

Course Summary

You have completed this course and can:

- Describe what Video Transcription is
- Describe the basic capabilities provided with the Pluggable video transcription technology initiative

Contacts

- Product Marketing Manager: Stephen Hussey

- Development Manager: Grace Smith

- Subject Matter Experts (SME)/Area of Expertise: Shawn Waters, Brian Owing, Antonio Montanana, Himanshu Shah, Darren Kennedy

Product Help/Documentation/Resources

This information will be available after eGA of the 5.2.1 release

A techdoc explaining this feature:

- http://www.ibm.com/support/docview.wss?uid=swg27043790

For topics not related to this feature use the P8 5.2.1 Knowledge Center
- http://www.ibm.com/support/knowledgecenter/SSNW2F_5.2.1/