



## Condat® Smart Media Engine

### Benefits

#### Recommendation & Search

- High quality results
- Cross Media Analysis
- Permanent knowledge base update

#### Customization

- Tuning & extension of Recommender algorithm
- Easy resource integration
- Interfaces for flexible connectivity

The progressing fusion of today's mass media internet, TV, print and radio has increased the content providers need to retrieve specific materials in their distributed, heterogeneous repositories with texts, AV materials and interactive websites.

The **Condat® Smart Media Engine** faces this challenge by offering a convenient and easy-to-use solution covering:

- Generation of **Cross Media Recommendations** returning media items related to the current working focus ordered by relevance.
- **Semantic Search** delivering more and better results than a conventional full-text search and
- Provision of **keyword lists**, which were implicitly derived during content ingestion.

### Generation of Recommendations based on the Semantic Fingerprinting Method

As AV materials are usually provided with a rich set of meta data, the Smart Media Engine mainly employs content- and knowledge representation based recommendation methods. The algorithms employ, enhance and improve several proved techniques, such as semantic fingerprinting, enrichment by LoD and disambiguation.

## Active Knowledge Base

The Active Knowledge Base is automatically derived, updated and expanded from sources of the Linked Open Data Cloud (LoD) such as DBpedia and builds the foundation for the semantic analysis and generation of recommendations.

## Semantic Analysis & Semantic Fingerprinting

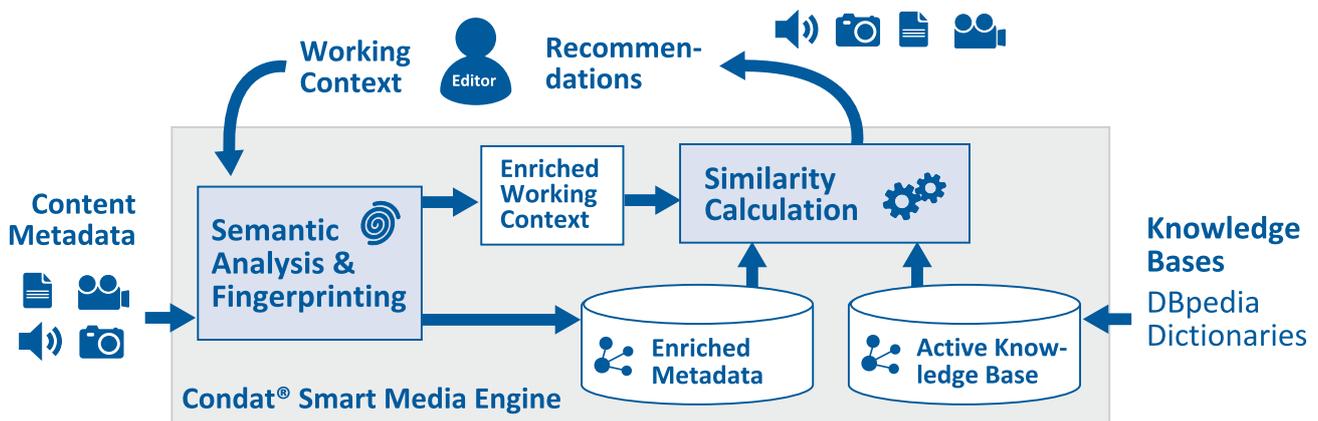
The SME periodically crawls through the content providers materials across media boundaries and semantically analyzes their meta data on the basis of the Active Knowledge Base. The content metadata are expanded by synonyms, abbreviations and thematically similar expressions to broaden the search space, which enables the SME to deliver more complete and relevant results.

## Enriched Metadata Repository

Finally the algorithm stores a semantic fingerprint for each media item consisting of weighted keywords from the Knowledge Base in the Enriched Metadata Repository.

## Similarity Calculation

The Similarity Calculation derives a semantic fingerprint for the media items currently focussed by the editor and returns a list with the most similar media items from the enriched metadata repository as recommendations.



## Optional Enhancements

For the deployment of the Engine in further application scenarios where less meta data available, additional recommender methods such as „collaborative filtering“ can be included to improve the quality of the results.

## Import Interfaces

The Engine offers interfaces for importing AV media data, which can be easily configured for variable data structures. The imported meta data are textually analyzed and the semantic content is extracted.

## About Condats

Berlin-based Condats AG is one of the leading vendors of innovative software solutions in the fields of media, mobility and monitoring. Our consultants, project managers and software developers have longterm experience gained through numerous successful customer projects.

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