New services deriving added value for video by combining it with complementary content from the Web

Linking of video objects to the concepts they represent, and hence related content about those concepts

Provisioned as an enhanced in-video experience

Delivered via an end-to-end service platform hosting the added value services over different networks
What could be a connected media experience?

Where is Obertauern?

Which peak is that? Can I ski there? How?

What is the building? If it is a hotel, how is the accommodation?
The technical case for connected media

- Consumption
- Delivery
- Linking to content
- Concept annotation
- Object identification

ConnectME Framework
- Hypervideo Browser
- Content Packaging
- Content Adaptation
- Web content selection

Linked Media layer
- Multimedia metadata query
- Classifiers/concept guessing
- Video Segmentation/ROI detection

Hypervideo Annotation Suite
Annotation Suite 1/2

- HTML 5, CSS 3, responsive layout, based on Twitter Bootstrap
- jQuery, JS based UI
- Timeline based interface
- Allows adding/editing/deleting annotations in/to the CMF
- Allows registering videos to and loading video annotations from the CMF
- Multilanguage support (currently EN, DE)
- Access via OpenID
Annotation Suite 2/2

- Annotations are RDF and concepts are using LOD identifiers
  - Annotation export in N3, RDF/XML and Turtle
- Manual annotation with LOD concepts (URIs) and HTML content (URLs)
- Currently Plugins for dbpedia and geonames search APIs
  - Plugin based architecture allows adding further LOD sources easily
- Future plans: Mobile annotation tool for smartphone and tablet
ConnectME Annotation Model
ConnectMe Framework

- Triple store based on the Linked Media Framework
- Analysis of annotations (Apache Stanbol Enhancer) and automatical enrichment with images and videos (Linked Services Infrastructure)
- Linked Service Infrastructure (LSI) searches through several APIs
  - Currently supports: Flickr, YouTube, Instagram, Ookaboo and Foursquare venues
Interactive video player 1/2

- Based on the open source Lime player (http://tkurz.github.io/lime/)
- Makes use of: HTML5 video, CSS3
- Versions:
  - web based – designed for desktops and laptops, responds to mouse events,
  - tablet – designed to touch enabled devices with minimum 7” screens
  - Google TV – designed to fit a tv remote control interaction (ongoing development)
Interactive video player 2/2

- Flexible Plugin and Widget implementation
- Available plugins:
  - DBPediaInfoPlugin – handles annotations with DBPedia resources URI
  - GeoPlugin – handles annotations with Geonales resource URI
  - VideoPlugin – handles video results from LSI for any Linked Data URI it is configured for
Links

- Annotation tool: http://annotator.connectme.at
- Player: http://player.connectme.at
- CMF: http://connectme.salzburgresearch.at
- LSI: http://production.sti2.org/lsi
- LMF: https://code.google.com/p/lmf/