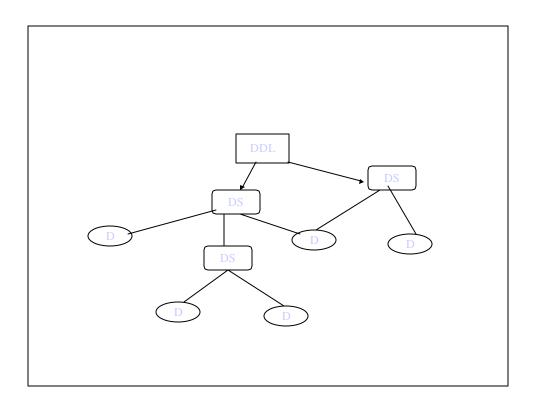
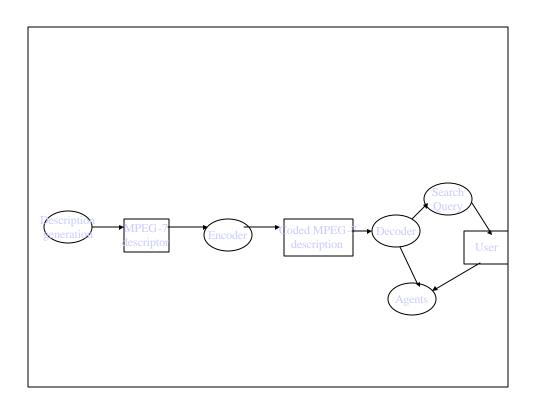
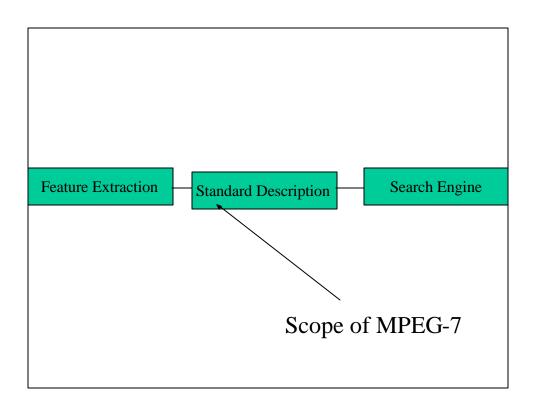
MPEG-7

- MPEG-7 will specify a standard set of descriptors that can be used to describe various types of multimedia information.
 - Descriptors
 - Description Scheme
 - Description Definition Language (DDL)

• MPEG-7 represents information about the content, not the content itself ("the bits about the bits")







Different Types of Features

- Lower abstraction level
 - shape
 - size
 - texture
 - color
 - movement
 - position (where in the scene can the object be found)

Different Types of Features

- Audio
 - key
 - mood
 - tempo
 - tempo changes
 - position in sound space

Different Types of Features

- Highest Level Abstraction (semantic)
 - "This is a scene with a barking brown dog on the left and a blue ball that falls down on the right, with the sound of passing cars in the background."

Other Type of Information

- The form
 - coding scheme (JPEG, MPEG-2)
 - size
- Conditions for accessing the material
- Links to other relevant material
- The context (e.g. Olympic 1996)

Search

- MPEG-7 data will be used to answer user queries.
- Music
 - Play a few notes on a keyboard and get in return a list of musical pieces containing required tune or images somehow matching the notes, e.g., in terms of emotions.



Search

- Graphics
 - Draw a few lines on a screen and get in return a set of images containing similar graphics, logos, ideograms,...
- Image
 - Define objects, including color patches or textures and get in return examples among which you select the interesting objects to compose your image.

Search

- Movement
 - On a given set of objects, describe movements and relations between objects and get in return a list of animations fulfilling the described temporal and spatial relations.
- Scenario
 - On a given content, describe actions and get a list of scenarios where similar actions happen.

Search

- Voice
 - Using an excerpt of Pavarotti's voice, and getting a list of Pavarotti's records, video clips, where Pavarotti is singing or video clips where Pavarotti is present

MPEG

• Go to http://www.cselt.it/mpeg