MPEG Testing and Evaluation

IETF standard
protocols (rtp/rtsp/etc)

MPEG-1/2/4/7 media types

W3C content technologies

Research prototypes/
Measurement tools
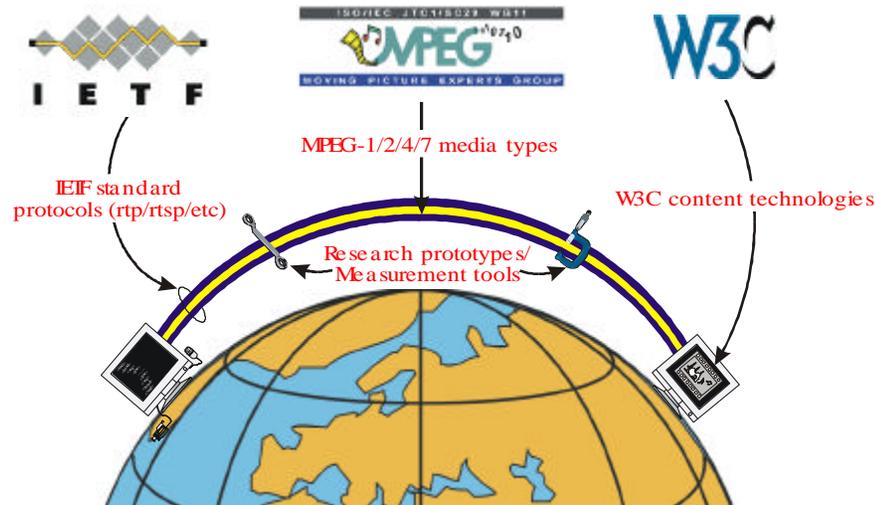
Objectives

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To develop new techniques and tools to test and evaluate the next generation of object-based multimedia presentation technology

To expedite standardization, commercialization and development of new object-based content presentation technology

To deliver practical test and measurement technology to the multimedia research and product development industry

Collaborators / Customers

Standards Groups: MPEG, SMPTE

NIST Collaborators: ATP

Other Collaborators: Academic and industry researchers (UMd, GWU, University of Oulou, Finland, and NOKIA), developers of reference implementations in France, Israel, and Italy.

Customers: Tektronix, French Telecom USA, NIH, UMd.

Planned Accomplishments

MPEG Standards:
• Establishing 2D/3D BIFS testing profiles
• Contributions to MPEG-4 conformance
• Software tool to study the effects of splicing
Metrics to evaluate image quality
•Extend the present modeling techniques; test existing and new techniques against a larger corpus of images.
Image and video Indexing:
•Investigate new indexing techniques, develop software to implement them, test such techniques against the state of the art.