



## Automating Production of Cross Media Content for Multi-channel Distribution

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### Automated Content Tools to Manage Your Processes as You Like

**AXMEDIS** the perfect solution for new content models, protection solutions and processing for multi-channel management.

**Stop working to converging technologies and let technology working for you.**

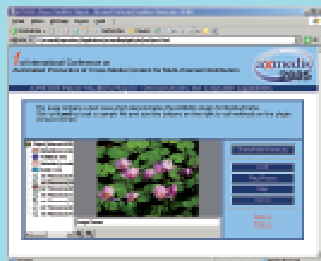
**AXMEDIS** provides manual and automated tools to make easy the migration towards multi-channel of your production and distribution processes.

#### AXMEDIS EDITOR, a tool for the

- authoring of multiple Object Identification codes: ISRC, ISAN, your personal codes, etc.
- authoring of multiple Metadata
- creation of simple and/or complex AXMEDIS objects, MPEG-21 content
- creation of nested AXMEDIS objects
- creation of objects with links/URI to other objects and/or resources
- definition of SMIL based presentation layers
- acceptance of any kind of resources and/or collections including HTML, SMIL, etc.
- application of content processing (any AXMEDIS Content Processing plug in)
- application of content protection (any AXMEDIS Protection Tool plug in)
- registration and certification of content for DRM
- protection of content for DRM
- search and query on database
- save, post on database, etc.

#### AXMEDIS EDITOR Tools:

- Hierarchy editor
- Metadata editor and Mapper
- Visual and behavioral editor
- Workflow editor
- Protection editor
- Java Script editor
- License editor (MPEG-21 REL)



#### AXMEDIS object model

- structure and packing models and formats
- metadata capabilities
- presentation and interaction model
- DRM support
- protection and security supports
- dynamic behavior support

#### Supported by several tools for

- manual production and protection
- automated production, protection and distribution
- workflow management
- DRM for B2B, B2C, and B2B2C
- Multi-channel distribution and convergence

#### Structural and Packaging Capabilities:

- Any file in any format/type can be packaged
- images, video, audio, documents, animations, etc.
- from executables to games and DLL
- any presentation model and file, single and multiple
- nested AXMEDIS objects
- MPEG-21 format and ISO MEDIA Binary File format
- default AXMEDIS model: MPEG MAF CMIP (prop)
- nested Objects: nested levels of metadata are reported on the top in an AXMEDIS index
- simple and nested protection models are supported
- support for MXF, SCORM, OMA, etc.

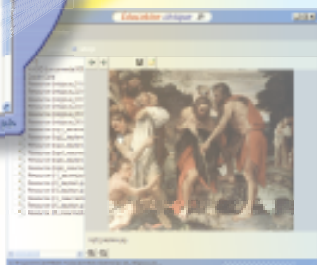
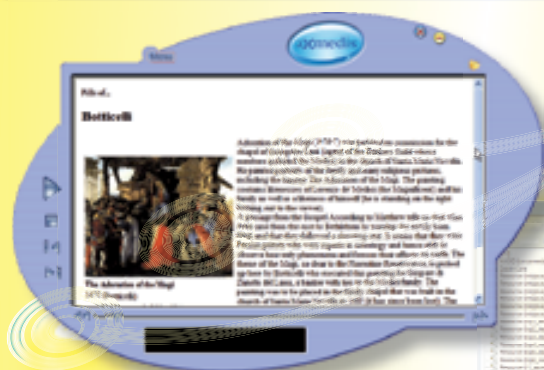
#### Metadata Capabilities:

- any identification model, default AXOID
- any classification model, default AXInfo with Dublin Core, B2B metadata, etc..
- any descriptor, default fingerprints, plus MPEG-7
- any file can be included into the package as additional metadata or info, from RDF to ontologies, free text, XML

#### Presentation and interaction Capabilities:

Any presentation model/format can be included into the AXMEDIS package.

- Presentation models of AXMEDIS players
- any combination of cross media content based on HTML, SMIL, MPEG-4 plus single multimedia.
  - SMIL for PC, Mobile and PDA
  - MPEG-4 for PC, STB(Linux) and PDA
  - HTML for PC and PDA
  - SCORM for PC
- any presentation/interaction paradigms depending on the presentation format used, such as:
  - Menus and collections
  - Hypermedia (internal and external links)
  - Cross media and Multimedia
  - animations
  - dynamic scripts
  - dynamic advertising integration
  - gaming, etc.



### DRM support and tools:

- MPEG-21 DRM model plus OMA interoperability
- MPEG-21 REL as licensing
  - AXMEDIS profile and OMA interoperability
  - AXMEDIS License Server (AXPMS)
- MPEG-21 Event Reporting
  - AXMEDIS Action Log extensions and servers
  - Statistics and reporting with CAMART and All tools of AXMEDIS

### Protection and security services and tools:

- AXMEDIS Protection Processor (AXPP)
  - extending and supporting MPEG-21 IPMP
  - dynamic replaceable protection tools as AXMEDIS Protection Tools plug ins
  - fully customizable protection tools
- AXMEDIS protection servers:
  - AXMEDIS Certifier and Supervisor (AXCS)
  - AXMEDIS Registration Service (AXRS)
  - AXMEDIS Certification Authority (AXCA)

### Dynamic Behavior Capabilities:

- Java script integrated at model level
  - MPEG-21 DIP, DIM, DIBO
  - AXMEDIS extensions
- Narrative capabilities of SMIL, HTML,... plus JavaScripting



### AXMEDIS players

For different devices and Operating Systems:

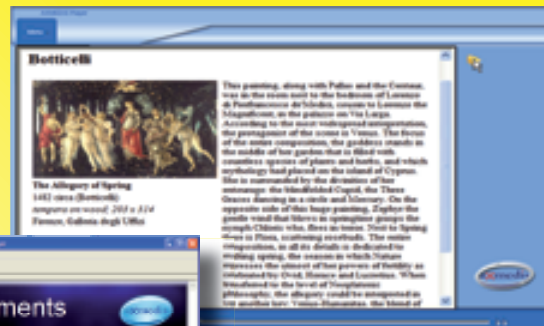
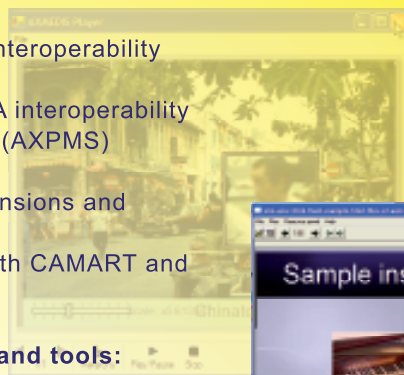
- PC windows
- STB/PVR and Media Centers
- PDA windows Mobile 5
- PC Apple MAC
- Pure java for mobiles
- PC windows, based on Active X, for usage into HTML and simple VB and .NET applications
- PC windows, based Mozilla plug in
- PC windows, based on .NET

### Players Capabilities:

- fully customizable with plug ins and GUI
- DRM support (MPEG-21)
- downloading and streaming
- dynamic behavior with scripting
- metadata viewer
- presentation and interaction layers: SMIL, HTML, SCORM, MPEG-4, etc.
- annotation support

### P2P and Final User Tools

- AXMEDIA P2P client tool
  - P2P community for content sharing
  - integrated with the players
  - version for Mobile is coming
- Content Posting Tool, COPOP
  - to involve final users in content production
  - automated packaging, protection and publication of AXMEDIS content of final users.



### AXMEDIS Content Processing GRID

To automate any business solution with and without DRM such as:

- advertising (including customized and/or real time personalized advertising inside the package or linked from outside)
- personalization (including personal content inside the package or linked)
- DRM with transaction model depending on the MPEG-21 REL
- content production on the final user side
- B2B content distribution
- B2C content distribution
- B2B2C content distribution and sharing
- P2P controlled content sharing
- Super-distribution and its control
- video on Demand, VOD
- production on demand
- Multi-channel experience and distribution
- Multi-business integration: several business and transaction models on the same distribution channel with a unique AXMEDIS-based production platform/factory (AXCP)
- etc.

### AXCP GRID as technical backoffice tool for

- content packaging: MPEG-21, OMA, MXF, SCORM, etc.
- content digital signature application
- content management system
- content processing and house keeping
- content transcoding, adaptation platform
- content fingerprinting
- content and metadata enrichment
- access to legacy CMS and Metadata
- license transcoding (MPEG-21, OMA)
- licensing platform, production of licenses on demand
- profiles management and processing
- metadata follower and integrator
- crawling resources and metadata
- valorization of legacy content and CMSs
- integration with OpenFlow and/or BizTalk workflow Management Systems
- recognition and channel monitoring
- etc.

See specific flyer and technical references for the AXCP.