

AXMEDIS Framework Catalogue

version 2.3



The AXMEDIS framework is an open solution capable to cover in an integrated manner content management of pre- and post-production, distribution and players.



AXMEDIS allows setting up automating solutions with scalable tools for managing single and multiple:

- o distribution channels: VOD, IPTV, WEBTV, DVB-T, web, P2P, FTP, WEBDAV, WebServices, etc.
- content formats: any video, any image, any document, any audio, SMIL, HTML, MPEG-21, MXF, NewsML, XML, XSLT, etc.;
- o final user devices: PC, STB/PVR, i-TV, Kiosks, PDA and mobiles;
- o interoperable DRM (digital rights management) models: MPEG-21 and OMA;
- business models on the same and multiple distribution channels and content: pay per play, subscription, counting, renting, billing, etc., for B2B and B2C;
- o services for content production and/or distribution on demands;
- o content factories and processing areas via workflows (OpenFlow and BizTalk);
- o content management systems, CMSs, and/or archives.

AXMEDIS has created a set of integrated tools and solutions in the following areas that can be also easily integrated in other architectures and solutions.

- AXCP: production, protection and distribution as stated above and in more details into the technical note: <u>http://www.axmedis.org/documenti/view_documenti.php?doc_id=3624</u>
- AXDRM, DRM servers and licensing tools for DRM, detection of attacks, black list management, collection of actions logs containing traces about the rights exploitation, tools for administrative management, etc. <u>http://www.axmedis.org/documenti/view_documenti.php?doc_id=3616</u>
- AXMEDIS Factory: AXMEDIS Editor for MPEG-21 and AXMEDIS authoring (SMIL, HTML, MPEG-4, or any other kinds of digital resources), DRM, licensing, protection, packaging, workflow, playing, etc. AXMEDIS authoring on Windows.
 - http://www.axmedis.org/documenti/view_documenti.php?doc_id=3634
- AXMEDIS Players running on: MS Windows, Mac OS X, Linux, Windows Mobile 5, and java mobiles, are available for PC, STB/PVR/HDR, Media Centers, PDA, and mobiles, acquisition of user behaviour. Their GUI and functionalities can be customized
 - http://www.axmedis.org/documenti/view_documenti.php?doc_id=3634
- AXP2P Controlled Network, for content distribution via P2P. It utilizes BitTorrent Technology with query support and cataloguing servers, for protected or non protected content. It has capabilities of



automating content publication, controlling P2P network, and extracting statistical data and reports. The AXMEDIS P2P solution allows to control the network by means of control nodes that can be geographically distributed: <u>http://www.axmedis.org/documenti/view_documenti.php?doc_id=3612</u>

- **Distribution**: supporting tools for content distribution, integrated into the AXCP (posting on satellite carousel, Web Services, FTP sites, etc.) and into the AXMEDIS show cases for VOD, RTSP, streaming, etc., see http://www.axmedis.org
- Content ingestion and COPOP, to involve your final users, to collect their content and metadata, to
 automatically transcoding, packing and redistributing user content for social networking and content
 enrichment. http://www.axmedis.org/com/index.php?option=com_content&task=view&id=79&Itemid=50
- Cross Media Finder: an integrated portal for demonstrating AXMEDIS content and distribution: <u>http://variazioni.axmedis.org:8080/CrossMediaFinder/</u>

Area	Tool	Snapshot	Short description
AXCP	AXCP Rule Editor	Interface Interface Interface Image: Interface Interface Interface Interface Image: Interface <td< td=""><td>Editing and debugging AXCP Rules, put in execution AXCP Rules, posting them on one or more AXCP schedulers. AXCP Rules are XML extensions of Mozilla JavaScript with more than 200 new function for content management and processing.</td></td<>	Editing and debugging AXCP Rules, put in execution AXCP Rules, posting them on one or more AXCP schedulers. AXCP Rules are XML extensions of Mozilla JavaScript with more than 200 new function for content management and processing.
AXCP	AXCP Scheduler	• Diamos Barbon Barbo	AXCP Rule Scheduler to manage the GRID comprised of a set of AXCP nodes, scheduling processes, etc. The AXCP Rules can be invoked via WebServices, Workflow, QuickStart, PHP, etc.
AXCP	AXCP Node		Executing AXCP Rules on windows based server. Connection with AXCP Scheduler



Area	Tool	Snapshot	Short description
AXCP	AXCP Plug in Collection	•	A large set of AXCP plug ins, see for details the AXCP Technical note #3901
AXCP	AXCP Rules collection		A large set of AXCP rules, see for details the AXCP manual and AXMEDIS portal
AXCP	AXCP Stand Alone Node	If ADDI Gold Head Image: Conserve of the optimizer in the formation in the optimizer in the opt	Stand alone AXCP rule node that can be invoked by command line. MS Windows application.
AXCP	AXCP Quick Starter	Accession Subsections Subsection Image: Subsection Subsection Subsection Image: Subsection Subsection	Technical tool to start AXCP rules actualizing parameters of the rules, making queries, monitoring activities, etc.
AXCP	AXCP Visual Designer		Visual designer for programming AXCP Rules. The Designer can be used to create visually the rules that can be put on execution on the AXCP Scheduler and GRID.
AXCP	OpenFlow Integration	Image: second	Integration of Open Flow with AXMEDIS CP tools. The Open Flow can be used to control the activities on AXCP Editor, AXCP Scheduler, AXMEDIS Editor, etc.

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Area	Tool	Snapshot	Short description
AXCP	BizTalk Integration	Cruther Cruthe	Integration of BizTalk work Flow manager with AXMEDIS CP tools. The BizTalk can be used to control the activities on AXCP Editor, AXCP Scheduler, AXMEDIS Editor, etc.
AXCP	Formatter	AXMEDIS Cross Media Content Formatting parameters Distributor Characteristics Terminal Capabilities Network Capabilities Natural Characteristics	Automated formatter of cross media content based on profiling
AXDRM	PMS, AXMEDIS Protection Manager Support Server	DiMMASSANCE (MASSA BARZANC 25 407-08 (31007)551:80 from 213.35.156.110 sock-292 sendLicense Fridated?1 25 407-08 (31007)551:80 from 213.35.156.110 sock-292 sendLicense Fridated?1 25 407-08 (31007)501:80 from 213.35.156.110 sock-292 sendLicense Barz recognised? Barz recognise	License Server, providing grants and licenses. MPEG-21 REL processing. It also manages the black list of licenses
AXDRM	PMS Domain, AXMEDIS Protection Manager Support for Domains Server	C10005500000010055011000 C123.35.156.1100 tock-392 sendLicense C1-07-080013100000000000000000000000000000000	License Server, providing grants and licenses. MPEG-21 REL processing. It also manages the black list of licenses. It also works for managing a domain on which the AXMEDIS player can be registered and the licenses made.
AXDRM	DUDManag er, Domain User Registratio n tools		Registration of AXMEDIS tools in the Domain and its management



Area	Tool	Snapshot	Short description
AXDRM	AXCS, AXMEDIS Certified and Supervisor Server	1 Registration x Authentication AXMEDIS or Distributor Registration Site 4 3 Content Access 5 4 Business Transaction Installation 0 G 0 Usage Control and Supervision 0 Control and Supervision AXMEDIS Protection 0 0 Usage 0 0 Control and Supervision	AXMEDIS Certifier and Supervisor, to collect user actions related to rights of DRM and provide IPMP information, verification of players and tools security and consistency. Detection of Attacks. Management of Blacklists of users and tools. This tool with CAMART and All tools can be used to manage accounting and monitoring.
AXDRM	AXCA, Certificatio n Authority Server		AXMEDIS Certification Authority, to produce Certificate
AXDRM	AXREG, AXMEDIS registration service and portal	AUXEDIA for particular for a format options of the part of the second opti	AXMEDIS registration service, to make user registration via WS and/or GUI. The distributors may register their customers directly via Web Services and via AXCP rules.
AXDRM	CAMART, Core Accounting Manager and Reporting Tools	CAMPEDDS Cannot Statistic Sarvice - Requisitiod Logs Train	Tool for re-collecting Actions Logs related to the Rights consumed by the final users from the AXCS server. The CAMART tool can be installed by Distributors, integrator, producers, Collecting Societies, etc. to monitor the rights consumptions. The collected information are stored into the AXMEDIS DB. The CAMART can be set up to work periodically.
AXDRM	AII, Administrati ve Information Integrator	Axmedis Administrative Information Integrator Tools Unions for their issuedSt-84-audtHargb-adm) Configur Expend URL die auför gehenes and proceeding in Biele og Weine Var Beine ender gehenes Chill gehe links auf Weine Push Dele Push Dele Find station Push Find station	Tool that allow to transcode the collected information from the CAMART in format suitable for your Administrative database.



Area	Tool	Snapshot	Short description
AXDRM	AXMEDIS DRM License maker wizard	Open Ends Constrained Server Constrained Server Server Server Server <	A wizard tool to create licenses for AXMEDIS DRMed content.
AXDRM	AXMEDIS DRM Creator License Maker Wizard	Version Bission	A wizard tool for content creators and publishers to create licenses for distributors of AXMEDIS DRMed content. At the same time a Wizard for the Distributor is created as well to facilitate their testing and operative starting.
AXMEDIS Factory	AXMEDIS Editor	Image: Section of the section of th	AXMEDIS Editor for authoring AXMEDIS and MPEG-21, SMIL, to protect content, etc.
AXMEDIS Factory	Metadata mapper in the AXMEDIS Editor	Carlow control Point and control Point an	A visual tool for visual creation of XSLT maps for converting metadata. From XML to AXMEDIS, from XML to XML, etc.



Area	Tool	Snapshot	Short description
AXMEDIS Factory	AXMEDIS Query Support and GUI	Construction Construction Construction	AXMEDIS database and query support can be accessed via GUI and/or via WebService and via AXMEDIS Editor, AXMEDIS quick Start, etc. the view on the left is only a web based.
AXMEDIS players	AXMEDIS player		AXMEDIS PC player, Full capabilities with AXMEDIS Model including a version with full JS capabilities, AXmethods, full intelligence. Support for interactive elements in SMIL, HTML, FLASH. Full support of MPEG-21 DI and of MPEG-21 REL DRM.
AXMEDIS players	AXMEDIS Bordans and Nathan player	Nation Éducation civique 3 Ele View Help Party III parse Operating III parse Charcell Parser Bylance Resource Byl	AXMEDIS player customized for Bordans and Nathan. AXMEDIS PC player, Full capabilities with AXMEDIS Model. Support for interactive elements in SMIL, HTML, FLASH. Full support of MPEG-21 DI and of MPEG-21 REL DRM.



Area	Tool	Snapshot	Short description
AXMEDIS players	AX Multiskin Player	Cub Italiaa.	AXMEDIS player for PC, with multiple skin. Examples on the left. The Player has full capabilities with respect to all the other AXMEDIS players. AXMEDIS PC player, Full capabilities with AXMEDIS Model. Support for interactive elements in SMIL, HTML, FLASH.
		Chitarra battente	Full support of MPEG-21 DI and of MPEG-21 REL DRM. The GUI skin can be customized in a very easy manner, 1/2 day of work for your designer.
AXMEDIS players	Continue from above AX Multiskin Player		Continue from above
		<section-header><section-header><section-header><section-header><image/><image/></section-header></section-header></section-header></section-header>	



Area	Tool	Snapshot	Short description
AXMEDIS players	AXMEDIS players Annotation Support	WINT TOCK	Annotation support for AXMEDIS players. Annotation of images, video and audio
AXMEDIS players	AX PDA player		AXMEDIS player for Windows Mobile 5 and 6. Support for AXMEDIS model and SMIL, HTML, images, MPEG-4, animations, document, video, etc. Full support of MPEG-21 DI and of MPEG-21 REL DRM.
AXMEDIS players	AX Mobile Player	NEOR - MALSANCHUAL	AXMEDIS java player for Sony Ericsson, and Nokia. Support for AXMEDIS model and SMIL interactivity, support for images, text, video and audio files. Full support of MPEG-21 DRM and as CAS. DRM and progressive download on Sony Ericsson CAS and streaming RTSP on Nokia.
AXMEDIS players	AXMEDIS Active X player	Attable Aligned tables, included and aligned. Image: Aligned ali	AXMEDIS Active X for internet explore PC player, Full capabilities with AXMEDIS Model. Support for interactive elements in SMIL, HTML, FLASH. Full support of MPEG-21 DI and of MPEG-21 REL DRM. AXMEDIS Active X player can be used for the rendering. The Video and audio can be rendered in progressive download. Support a large range of formats. The AXMEDIS Active X Player supports interactivity.



Area	Tool	Snapshot	Short description
AXMEDIS players	AXMEDIS Mozilla Firefox Plug In	Description of the second second second second and the back has to be careful as to be	AXMEDIS plug in for internet browser Firefox PC player, Full capabilities with AXMEDIS Model. Support for interactive elements in SMIL, HTML, FLASH. Full support of MPEG-21 DI and of MPEG-21 REL DRM. This AXMEDIS player can be used for the rendering. The Video and audio can be rendered in progressive download. Support a large range of formats. This AXMEDIS Player supports interactivity.
AXMEDIS players	AX STB Motorola	<complex-block></complex-block>	AXMEDIS STB player based on Kreatel Motorola, Only VOD and streaming. Full support of MPEG-21 DI and of MPEG-21 REL DRM.
AXMEDIS players	AX STB MBI	Strick Inventory Id Content Striker_Saddle.mp3 25006 011ndes.cmll 46474 Killolit.mp4 52216 The-Crossing-music-and-oil	AXMEDIS STB player, with capabilities of DVB-T, DVB-S, ADSL. Full interactivity of AXMEDIS model. AXMEDIS Cross Media content with SMIL and/or HTML. Full support of MPEG-21 DI and of MPEG-21 REL DRM.



Area	Tool	Snapshot	Short description
AXP2P	AXEPTool		AXMEDIS P2P tool that play the role of Supernode. Based on BitTorrent Technology.
		<text><text><text><text><text><text><text></text></text></text></text></text></text></text>	It can be controlled and monitored by AXCP Rules, to this end it exposed specific web services.
			It is suitable for B2B distribution via P2P.
			It also provides statistical information on client side that can be recollected from the control nodes.
AXP2P	AXP2P Control	Call Accord Resolution brown brown brown Difference No Difference Bin (D) No Difference Bin (D) No Difference Bin (D) No Difference Bin (D) Din	System of Control for AXP2P network. It is based on AXCP solution and rules. A single point of control AXCP can control several AXEPTools spread in Internet.
		6 Suppose Transform Suppose T	It is suitable for B2B and B2C distribution via P2P.
AXP2P	AXMEDIA	Normal Normal<	A simplified version of the AXMEDIS P2P tool that can I used by final users. It is base on BitTorrent Technology. It cannot be controlled.

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Area	Tool	Snapshot	Short description
AXP2P	AXTracker	International and the second secon	AXMEDIS P2P tracker. It is substantially a BitTorrent tracker that can be scaled up to manage large P2P networks. It is also endowed of a Catalogue. It can be integrated with the AXMEDIS Query Support and with the AXCP to control its activities. AXTracker also provide statistical information.
Distribution	AXPnP, Programme and Publication	Interface Programme and Produce Using 1 Interface Using Term Interface Using	AXMEDIS programme and Publication. A Tool for scheduling and actuating the publication of AXMEDIS content towards distributors and front end of distributions such as Satellite Carousels, etc.
Distribution	OpenSky receiver	Station Station Station 1012 Station 1012 <	OpenSky receiver for satellite distribution in Push integrated with the AXMEDIS player and capable of receiving AXMEDIS content. Frequency: 11,4280GHz SymbolRate: 30000kSymb/s Polarization: Horizontal Viterbi Rate: 5/6 PID: 2411



Area	Tool	Snapshot	Short description
Distribution	Kiosk	Welcome admin Nome Back Logout STEP 2/4 STEP 2/4 Back Logout STEP 2/4 Contents from query Rease choose contents to prepare for Mobile and confirm through buttons below. Angelco Beato Angelco Beato Arcimbold Glascope Balls Glascomo Balls Glascomo Bellini Gloscanni Bellini Gloscanni Bellini Glascope Brank Glascope Boccioni Umberto Descrini (Limberto Dep of 2 Iffest Ponci [Pressions Educi] [Rect Page] [Last Page] Add contents Select Al Next	AXMEDIS Kiosk manager and distributor. User access and administration.
Distribution	VOD, video on demand manager	Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation	VOD, video on demand Content manager to distribute Video on the basis of the reception of AXMEDIS content on the STB Motorola. Distribution of content in streaming.
Distribution	WEB Distribution Portal	Conjector Final Advection of the Control of the Contro of the Control of the Control of the Control of the Con	WEB portal for content distribution in the B2B area. Presenting prepaid content, distribution of content, profiling of users, metadata profile, etc.



Area	Tool	Snapshot	Short description
Distribution	Cross Media Finder Portal	<complex-block></complex-block>	A Portal to distribute Cross Media content, AXMEDIS model and to allow the users to provide the content. Fully automated, support for AX- DRM, MPEG-21. It can be integrated with AXDRM and with AXP2P solutions. It also may include the AXMEDIS Active X player for the rendering. The Video and audio can be rendered in progressive download. Support a large range of formats. The AXMEDIS Active X Player support interactivity.
Content Ingestion	COPOP, content posting portal client	* Attract Project 7 * Served Next ************************************	COPOP client to ingest high quantity of content from final users, authors, editor, publishers. This tool has high reliability (in the case of connection broken restart from the last blocks), batch processing, status save, SSL connection, java based, full support of DC metadata, any languages, ISRC, ISAN, etc. etc. Also usable for User Generated Content, UCG



Area	Tool		Snapsh	Short description					
Content Ingestion	COPOP Server	Pagina personale di Administrator - SIAE							COPOP server to collect content from the COPOP
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		emicalian doc Seconolidiya in dirence doc	Invertibre (mg) Accouncilation in Pierence (mg) Venereporting data for selected) [Deats see	1998 Noted (Fercient	• 11/10-2006	in the second se	Proceeding		
Content Ingestion	Uploader	Image: Select resource CVAXIB-PROJECTS/resourcePath good/Sequenzal Stoglia.				Simple WEB based interface to collect (i) files and metadata from users, or (ii) ready to be used AXMEDIS Object. The Uploader automatically invoke the AXCP Rule for processing the content and posting content on the database, distribute on P2P, via mobile, etc.			

AXMEDIS Tools for download

In the following, the links to download the most important AXMEDIS players are reported. It is also possible from the AXMEDIS portal to download demonstration AXMEDIS tools and content. Custom and optimized versions can be produced on demand:

• AXMEDIS PC players:

- AXMEDIS stand alone PC player; <u>http://www.axmedis.org/documenti/view_documenti.php?doc_id=3767</u>
- AXMEDIS Skin based PC player; <u>http://www.axmedis.org/documenti/view_documenti.php?doc_id=3716</u>
- AXMEDIS Active X, for usage into HTML pages and simple VB and/or .NET applications and PC players. .NET Player; <u>http://www.axmedis.org/documenti/view_documenti.php?doc_id=3717</u>

• Mobile player:

- AXMEDIS mobile player for Windows Mobile 5 and 6 player, supporting: SMIL, HTML, MPEG-4, video, audio, documents, images, etc.; http://www.axmedis.org/documenti/view_documenti.php?doc_id=3842
- AXMEDIS java phone Mobile p[layer http://www.axmedis.org/com/index.php?option=com_content&task=view&id=172&Itemid=91
- Content production tools of AXMEDIS from: http://www.axmedis.org/com/index.php?option=com_content&task=view&id=83&Itemid=55

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