

Digitization & digital archiving

Wallonia (Belgium)

This brochure provides an outline of the Walloon stakeholders involved in the various fields of the digitization and digital archiving sector. It features a short description of each stakeholder's area of expertise. As all these key players are involved in partnerships and networks, they are accustomed to joining forces with other parties whenever their complementary expert knowledge can be put to good use. By working together, they can offer custom end-to-end solutions for your digitization projects.



This brochure is the outcome of a partnership between the Trends Observatory and the business cluster TWIST. It is designed to provide an outline of the Walloon expertise in digitization and digital archiving.



Conscious of the importance of maintaining its tradition of openness to the world, Wallonia has set up an “Observatoire des Tendances” ([Trends Observatory]). The general task of this structure is to capture trends, needs and opportunities in terms of innovation and creativity worldwide and to communicate them within Wallonia and the Wallonia-Brussels Federation. The Trends Observatory is based on a partnership between the “Agence wallonne à l’Exportation et aux Investissements étrangers” (AWEX), “Wallonie-Bruxelles International” (WBI), the “Agence de Stimulation Technologique” (AST) and the “Agence wallonne des Télécommunications” (AWT).

Contacts

Oxana Rogozina [AWEX] [WBI]
o.rogozina@awex.be

Sophie Libioul [AST]
sli@stimtech.be

André Blavier [AWT]
ab@awt.be



[TWIST] is the business Cluster for Cinema & Digital Media in Wallonia. It is the main Belgian business cluster active in the sector of digital audiovisual and multimedia technologies. TWIST is mainly active on three markets: Cinema & Animation, Broadcast (development of technologies and facilities), Transmedia & Multimedia (communication, gaming, mobile applications, business intelligence, etc.) The cluster has over 100 members. Its specific market niches are Stereoscopic 3D, Motion Capture, Serious Game, Digital Media, Digitization & Digital Storage and Digital Content.

Contact

Pierre Collin
Executive Manager
p.collin@twist-cluster.com



Creative Wallonia

Supported by
www.creativewallonia.be

Contents

PRESENTATION OF THE SECTOR

04

A land of excellence
and innovation at the
heart of Europe

05

Integrated services
supporting your projects

PRESENTATION OF THE STAKEHOLDERS

06

Our companies
Digitization: service
providers

10

Our companies
Digitization: equipment
providers

11

Our academies
and research centers

13

Our educational
and training programs

A land of excellence and innovation at the heart of Europe

The south of Belgium offers fertile ground for the multiple companies and institutions active in the area of digitization and digital archiving.

A STIMULATING ENVIRONMENT

To maintain their position at the leading edge of innovation and R&D developments, our companies can rely on strong collaborative relationships with research centers and academic institutions. Our country is at the 5th place in the European Union in terms of collaboration between universities and private sector. This situation is explained by several factors:

- **A competitive market, fostering commitment for excellence:** In Wallonia and Brussels, there are numerous companies active in the sector. This geographical concentration pushes them to find innovative solutions.
- **A concentration of added value:** There is a dense network of university institutions and research centers in Belgium which is composed of internationally renowned institutions.
- **An effective clustering policy, promoting exchanges between universities and businesses:** Specifically focused on digital and multimedia technologies, the TWIST cluster is particularly dynamic. It promotes the development of companies active in the sector by enabling collaboration with universities, research centers and the authorities.

A TOP QUALITY EDUCATION

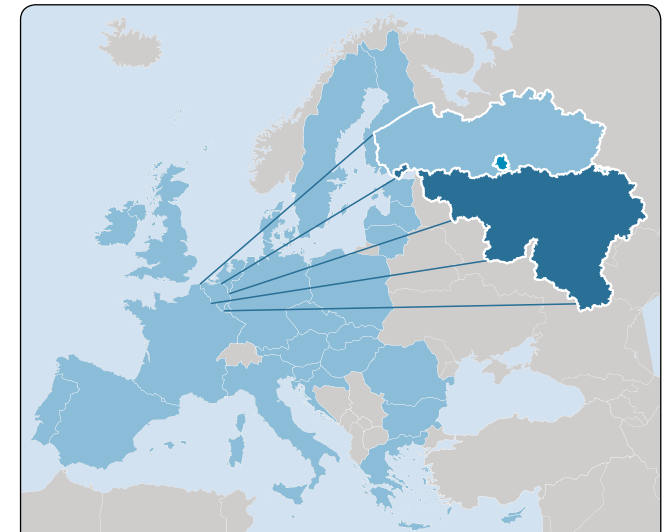
Appropriate education is essential in order to provide highly qualified and specialized workers in the areas of digitization and digital archiving. Our universities and higher education institutions have developed masters, training courses and workshops that cover the wide range of the sector.

All these training programs come from various disciplines and make our workers a significant asset for companies active in the sector.

A TRADITION OF OPENNESS TO THE WORLD

Belgium is one of the most globalized countries in the world according to a series of economic, social and political indicators. The remarkable degree of economic openness of the country is recognized worldwide.

Convinced of the advantages of maintaining its strongly internationally oriented positioning, Wallonia has set up a Trends Observatory. This structure captures trends, needs and opportunities in terms of innovation and creativity worldwide and communicates them within Wallonia and the Wallonia-Brussels Federation.



Integrated services supporting your projects

SPECIALIZATION TO FIT YOUR NEEDS ALL OVER THE WORLD

Many of our companies have managed to position themselves in expanding niche markets and offer highly specialized solutions to satisfy specific needs. From the identification of your workflow to the commercialization of your archives, through digitization, storage, indexation and information modeling, every step of the digital process is covered by highly specialized companies with a rich international experience and worldwide renowned references. In terms of R&D, our universities, research centers and spin-offs already have a large expertise in many topics such as Intelligent Content & Semantics or the JPEG 2000 format.

YOUR DIGITAL PROCESS FROM A TO Z

The know-how of our companies and institutions covers the entire range of digitization and digital archiving process. They can digitize any kind of media:

Your physical archive	Our companies able to digitize it
Video	Dame Blanche, EVS, IntoPIX, Memnon Archiving Services, Periactes, Sonuma, Studio l'Equipe, Studiotech, VP Media Solutions
Audio	Dame Blanche, EVS, IntoPIX, Memnon Archiving Services, Periactes, Sonuma, Studio l'Equipe, Studiotech, VP Media Solutions
Paper, Picture	Atelier de l'Imagier, IRIS, Mnemotique
Films	Dame Blanche, EVS, Memnon, Sonuma, Studio l'Equipe
Architectural heritage, Art objects, Archeological sites	Atelier de l'Imagier, Mémoire de Patrimoine

We understand that each situation is different. Together, our companies collaborate in order to better fit your needs and provide an **integrated solution** for your project.



For instance, your Walloon and Brussels' partners for indexation and information modeling are CETIC, Earlytracks, EVS, Memnon and TITAN.

Our companies

Digitization: Service providers



Atelier de l'Imagier

www.lesimagiers.eu

Created in 2002, [Atelier de l'Imagier] develops an European project aimed at bringing together a consortium of partners made up of players in the technological field, cultural institutions and academic authorities. L'Atelier de l'Imagier is specialized in the high definition digitization of cultural heritage (such as manuscripts, silver plates, paintings, jewelry, VR3D), HDR—giga resolution for fine arts and paintings and in the development of scientific educational projects and virtual exhibitions and museography.

References

Royal Museums of Fine Arts of Belgium, La Cambre-Ensav, Museum of Literature, Museum of Photography (Charleroi), Klassik Stiftung Weimar, Library of the University of Liège, Ministry of the Brussels-Capital Region, Royal Museum of Mariemont, German center of history and art (Paris), National Lottery, Folon Fondation, BAM Beaux-Arts Mons, Mac's Musée des Arts Contemporains (Grand Hornu).

Contact

Olivier Guyaux

Director

olivier.guyaux@imagier.be



DameBlanche

www.dameblanche.com

With its unrivalled equipment and expertise (ten sound and image studios), [Dame Blanche] is a comprehensive post-production center for digital cinema and television, offering a full range of services to productions. It should be noted that collaboration projects with partners in France and Luxembourg also offer a consistent post production follow-up for cross-border co-productions.

References

Dead Man Talking, Mister Nobody, Largo Winch, Tango Libre, Ernest et Célestine.

Contact

Etienne Dontaine

Chief Executive

hello@dameblanche.com



www.evs.com

[EVS] provides its customers with reliable and innovative technology to enable the production of live, enriched video programming, allowing them to work more efficiently and boost their revenue streams. EVS spans four key markets - Sports, Entertainment, News and Media. Founded in 1994, its innovative Live Slow Motion system revolutionized live broadcasting. Today, it continues to develop practical innovations to help customers maximize the value of their media content. The company is headquartered in Belgium and has offices in Europe, the Middle East, Asia and North America.

References

The world's leading broadcasters, including NBC, BSKyB, FOX, RTBF, RTL, NHK, CANAL+, ABC, ESPN, TF1, CCTV, PBS, CBS, BBC, ZDF, Channel One, Channel7, RAI, TVE, NEP, MEDIAPRO, EUROMEDIA, BEXEL.

Contact

Nicolas Bourdon

Senior Vice President Marketing

marketing@evs.com

Digitization: Service providers



www.irislink.com

[I.R.I.S.]' mission is to increase its customers' productivity and knowledge through helping them better manage their documents, data and information. Among various areas of expertise and distribution channels, I.R.I.S. brings companies and administrations innovative know-how, hi-tech solutions and customized IT infrastructures.

References

European Commission (EU), Belgian Ministry of Finance (BE), Pemex (Petróleos Mexicanos), Egyptian Ministry of Education (EG), SNCB / NMBS (Belgian national railways), Record Bank (BE), Crédit Agricole (NL), UKA - Hôpital Universitaire d'Aachen (DE), DSB (Danish national Railways), Hekkelman Advocaten (NL), CHdN - Centre Hospitalier du Nord(LU), Belgian chamber of representatives (BE), Bonn & Schmitt (LU).

Contact

Nicolas Sancinito
Solutions Product Manager
nicolas.sancinito@irislink.com



www.intopix.com

[IntoPIX] is a leading supplier of image and video compression technology to audiovisual equipment manufacturers. IntoPIX has developed solutions that enable leading-edge JPEG 2000 image compression for high speed and lossless quality Image and Video digitization for long term preservation.

References

National Library of United Kingdom.

Contact

Jean-Baptiste Lorent
Product Manager
jb.lorent@intopix.com



www.earlytracks.com

[Knowbel-EarlyTracks] is a spin-off of the UCL specialized in text mining, a field of data science focusing on the extraction, structuring and processing of the information contained in text. Our company's assets are a long standing and internationally recognized technical expertise in Natural Language Processing combined with an entrepreneurial corporate mindset.

Our long term vision is to provide tailored machine-readable data to companies looking to explore the value of information contained in unstructured text.

References

Several clients in the media and health care sectors as well as large companies.

Contact

Brice De Behault
Director
brice@earlytracks.com

Digitization: Service providers



www.memnon.eu

[Memnon Archiving Services] is an European leader to provide large scale audiovisual archives digitization services, content enrichment tools, services and content valorization. Memnon has been involved in the digitization of more than 1.000.000 hours of audiovisual archives for the most prestigious European broadcasters and International institutions. Digitization can be done in Brussels (outsourcing services) or Memnon also offers “on site” services.

References

European parliament, INA (France), BBC (UK), Swiss Radio and Television, Sonuma (Belgium -RTBF archives), VRT (Belgium -Flemish radio), French National Library, British Library, Swedish Television, Danish Radio.

Contact

Marlene Robinet
Sales Manager
Marlene.robinet@memnon.eu



www.memoiredepatriimoine.com

[Mémoire de Patrimoine] is specialized in high precision 2D/3D digitizing of museum collections, art objects, architectural heritage, archeological sites, buildings, civil engineering structures. Its digital models are based both on laser-scanner technology and very high definition photography. From these digital 2D/3D models we generate multimedia presentations: 2D graphic illustrations (plans, sections, elevations, orthophotos...); 360° objectVR / 360° panoramas; Virtual 3D models / Augmented reality / Virtual tours; 3D prints / Scaled models. We also develop and deploy geolocalized internet multimedia platforms for the touristic and cultural development, on the web, of museum collections, architectural and archeological heritage.

References

Mémoire de Patrimoine has digitized hundreds of art objects and architectural sites in Belgium and France for museums, private architecture and engineering companies, and governmental or public institutions involved in heritage preservation.

Contact

Jean-Pierre Godefroid
President
jpgodefroid@memoiredepatriimoine.com



www.mnemotique.eu

[Mnémotique] is active in the field of digitization of written and iconographic archives and the indexation (Content Management). Mnémotique offers its customers a complete and customized range of services combining the safeguarding of archives (sorting and classifying of archives, drawing up inventories, consulting in archiving and digitization) and valuing them (indexing, xml data recording, text databases, content management using linguistic and semantic search engines, broadcasting of digitized document).

References

Archives Générales du Royaume (Belgique), Musée Victor Horta (Belgique), Archives d'Architecture Moderne (Belgique), Fondation d'Auteuil (France), Archives Nationales de France (France), Missionnaires d'Afrique (Pères Blancs, Italie), Archives de l'Évêché de Liège.

Contact

Quentin Orban De Xivry
Account Manager
quentin.orban@mnemotique.eu

Digitization: Service providers



www.sonuma.be

[Sonuma] was created to preserve, digitize and promote thousands of radio and television hours produced by the RTBF. Strengthened by its experience, it now commands the technologies and expertise needed to safeguard any audio-visual holdings. From the cataloguing of analogue media to the on-demand provision of digitized formats, SONUMA projects yesterday's sounds and images on the screens of tomorrow.

Contact

François-Xavier Schlessier
Head of Sales
sales@sonuma.be

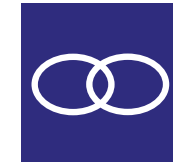


www.studio-equipe.fr

[Studio l'Equipe] has always been conscious how fragile works can be and how important it was to preserve machines of outdated formats. It has been active in the audiovisual field since 1961 and has kept a fair amount of old machines which find a new life thanks to storage. Studio L'Equipe can therefore read many old audio and visual media and preserve them on up-to-date ones. A great deal of its reputation comes from its analogical experience. Its film lab is one of the very few still active today! The great experience of its technicians is put into practice for the transfer of films through telecinema.

Contact

Carole Godfroid
Public Relations Manager
c.godfroid@studio-equipe.be



www.titan.be

20 years ago, some broadcasting partners founded an association to contribute to the study and development of digital television programs and services, called **[TITAN] (Televisual Interactive Terminal & Associated Networks)**. Through numerous conferences and fairs, the association contributes actively to the promotion of digital information management in reference to standards for exchange and archiving solutions. To this end, the association organizes an event called «European Media Wrapper Round Table.» The objective is to compare regular new perspectives on the issues of modeling and manipulation of cultural objects at the semantic level (Knowledge Management).

The association also supports the dissemination of R&D projects, such as «MediaMap.» In this one, members have developed semantic tools in accordance with Web 3.0 standards and Linked Open Data technology (LOD).

Contact

Roger Roberts
President
rro@rtbf.be

Our companies

Digitization: Equipment providers



www.periactes.com

[Periactes Broadcast Solutions] was founded in 1996 and develops integrated solutions, granted with support contracts, training and tailored assistance. Periactes gained its expertise in the field and became a reference in supplying Broadcast, Post, Production and compliance recording equipment in several ACP regions.

References

RTBF, VRT, CSA (Belgium), National Communication Council (Cameroon), RTNB (Burundi), Télé-Congo (Republic of Congo), TNTV (Tahiti).

Contact

Baptiste De Bemels
General Manager
baptiste@periactes.com



www.studiotech.be

[Studiotech] is a major player in the field of integration and engineering of mobile audiovisual systems for television and radio. Studiotech delivers turnkey projects such as: recording/mixing studios, editing suites and mobile OB units. Its team is held in high regard for its product knowledge, quality standards, attention to detail and customer care.

References

RTBF, VRT, VMMA, Canal C, Videohouse, TVCOM, Belgacom TV, RTL TVI, European Parlement, Keywall, Norking, Barco, Preview, European Commission, TéléBxl, Police, Cisco, BeTV, NATO, Televesdre, TV Brussel, Telesambre.

Contact

Werner Osselaer
Sales & Marketing Manager
osselaer@studiotech.be



www.vpmediasolutions.com

[VP Media Solutions]'s main activity is the distribution and installation of equipment dedicated to the Media industry, mainly in Belgium, Luxembourg and France. The company's expertise covers the ingest of Media content, transcoding, image processing, graphics, distribution and archiving. VP Media Solutions is a very well established company, based on standard products, associated to permanent and strong commitment in new products and new technology. The company is providing a dynamic approach with powerful service/maintenance support and turnkey projects capability.

References

Development and installation of the biggest MaM (Media Asset Management) system in Belgium, Public Senat France, VRT, RTBF, Antenne Centre, KNTV, Mostra, BCE, Belgacom, BeTV, Videohouse.

Contact

Bruno Thieffry
Co-Director
bruno.thieffry@vpmediasolutions.com

Our academies and research centers



www.cetic.be

[CETIC] is an applied research center supporting companies in their innovation in Software Engineering, Embedded Systems, Cloud Computing, Intelligent Content and Semantics. CETIC's expertise in Semantics allows to speed up the process that transforms data into knowledge. CETIC develops methods and tools for information management in business, targeting structured and unstructured data sources and documents for specific markets, like Media and Telecom. CETIC helps design information models that enable intelligent structured content creation, enrichment and search on small to large heterogeneous datasets (Big Data), based on legacy information systems and Semantic Web standards.

CETIC can also set up testbeds in order to evaluate IT architecture or data storage solutions. CETIC helps companies integrate these technological innovations into their products, processes and services.

Contact

Frédéric Fleurial Monfils
Head of Software and Services
Technologies Department
frederic.fleurialmonfils@cetic.be



www.crids.eu

[University of Namur / Research Center in Information, Law and Society]

From a legal perspective, electronic archiving raises a number of critical issues. The Research Center in Information, Law and Society (CRIDS) identifies and addresses these questions. The first and tricky issue raised by e-archiving is the legal value of the electronic archive, especially as a means of evidence. The question is important for “digital native” and scanned documents. Other questions are: compliance with rules imposed for control or validity purposes, privacy of archived personal data, outsourcing of companies' and administrations' archives (questions with regard to the level of service, contractual duties or reversibility, use of cloud computing).

Contacts

Séverine Dusollier [Head of CRIDS]
severine.dusollier@unamur.be
Hervé Jacquemin [Head of CRIDS's Electronic Trade unit]
herve.jacquemin@unamur.be



www.uclouvain.be/en-icteam.html
www.tele.ucl.ac.be
www.jpeg.org/sponsors/ucl.html

[Université catholique de Louvain / ICEAM / Electrical engineering]

The Electrical engineering (ELEN) department of UCL has a recognized expertise in video processing and compression technology based on CPU, GPU and FPGA platforms, as well as on interactive multimedia communications applications. Its reputation relies, among other achievements, on the creation of the spin-off IntoPIX (www.intopix.com), and on the OpenJPEG library (www.openjpeg.org). OpenJPEG is an open-source codec developed since 2001 to promote the use of JPEG2000, the well-known still-image compression standard from the Joint Photographic Experts Group (JPEG). OpenJPEG is one of the reference source codes for scientists and cinema/broadcast companies, and is still actively developed by the open-source community. The laboratory is also active in other standardization committees, including MPEG, DVB, and ITU.

Contact

Prof. Benoît Macq
benoit.macq@uclouvain.be

Our academies and research centers



www.numediart.org

[UMONS / Numediart Institute]

In 2007, the University of Mons (UMONS) established the Institute for New Media Art Technology (NUMEDIART). It has led to UMONS achieving internationally recognized appraisal in the field of sound, image, video, gestures and biosignals processing for applications where human-computer interaction is present. One of the main axes of NUMEDIART is the hypermedia navigation in large media content with the MediaCycle tool. The MediaCycle framework offers libraries, plugins and applications for multimedia navigation and content-based organization by similarity. Currently supported media types are: audio, image, video, text. Since 2008, it has been featured in: Bud Blumenthal Hybrid's DANCERS! Relational Navigator, the AudioGarden composite audio creation tool. This tool is a major actor for fast access to digital archives.

Contact

Prof. Thierry Dutoit

President

thierry.dutoit@umons.ac.be



ReSIC
RESEARCH CENTER IN
INFORMATION AND COMMUNICATION

resic.ulb.ac.be

[University of Brussels (ULB) / Research Center in Information and Communication]

ReSIC explores the vast and multidimensional field of Information and Communication sciences. The research conducted at ReSIC is devoted to the use of digital information, its organization and management in mechanisms of knowledge sharing, as well as data preservation, collection and transmission. More concretely: quality of the digital information (data quality), metadata, document and records management, digitization of cultural heritage, computational linguistics, knowledge management and e-learning.

Contact

Prof. Dr. Isabelle Boydens

iboydens@ulb.ac.be

Our educational and training programs



[Master in Digital Information Management]: this 2 years Master will begin as of September, 2013. This training focuses on the global management of digital technology, with 2 options: digital production and digital archiving.

The creativity present in all the stages of this Master's degree will prepare the future project manager to implement with relevance the diverse applications of the technologies, both in the company and in the non-commercial sectors: document management, digitization in any form and on suitable media supports, organization of the sustainability of the digital archiving, the organization of the interoperability, the operations management in a world, which, from now on, cannot avoid adopting a semantic approach.

Contact

Godefroid COURTMANS
godefroid.courtmans@helb-prigogine.be



www.uclouvain.be/cours-2012-lingi2348.html
www.uclouvain.be/cours-2012-lelec2885.html

Course: **[Information Theory and Coding]**

This program gives solid knowledge on 3 topics: information representation, information security and information correction. The goal is also to provide some design tools for multimedia (image, sound, date) information coding.

Course: **[Image processing and computer vision]**

This course assumes known notions of signal processing. The main objective is to introduce the key concept necessary for the understanding of what «images» are, from their initial recording until their final usage.



mastic.ulb.ac.be/mastic/presentation/

[Master in Information and Communication Technologies]: the aim of this 2 years Master is to give a general and deep understanding of the ICT sector. More specifically, it gives the ability to manage the information research process, the indexation and the construction of an information system.

Our educational and training programs



www.numediart.org/creative/

[Creative Workshops] are organized by NumediArt and the University of Mons.

The workshop focuses on 3 topics:

- “Creaction” gives an general overview of the technologies in digital art.
- “Connection” analyses the processing methods.
- “Programmaction” gives the tools for the management of Embedded systems.



<http://portail.umons.ac.be/en2/universite/facultes/fpms/Pages/default.aspx>

[TELEMEDIA]: UMONS has also developed a **Master of Science in Electric Engineering, specializing in Telecommunications and Multimedia**. During this master, students will learn to work with signal and information processing technologies, software development, hardware design and telecommunication networks.

More information about the stakeholders described in this brochure is available on the ICT Platform for Wallonia: awt.be/ict

