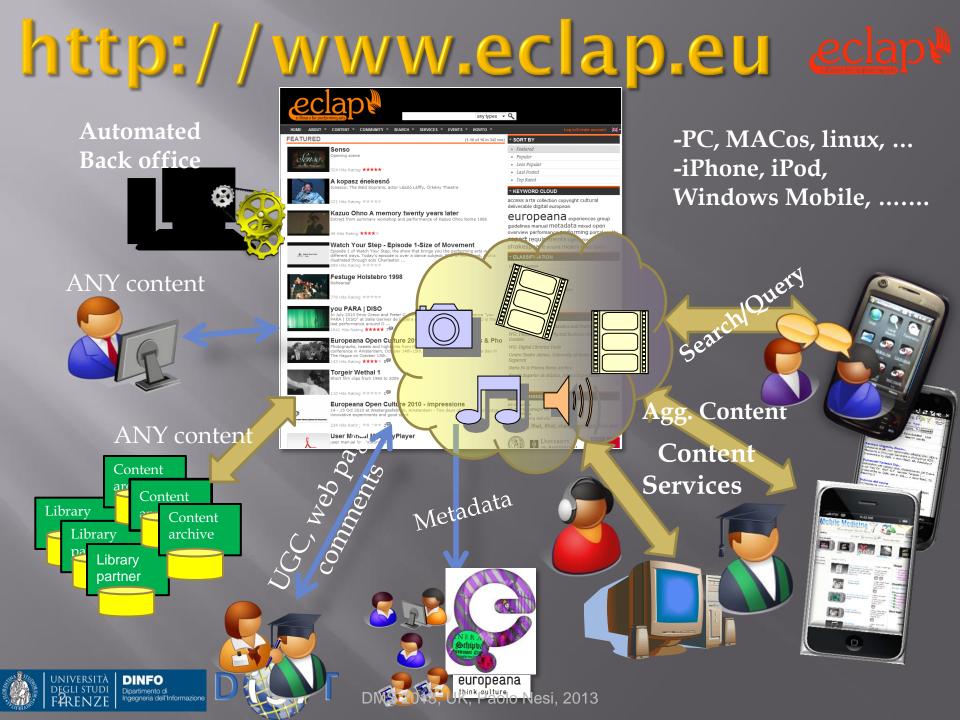
Institutional Services and Tools for Content, Metadata and IPR Management

P. Bellini, I. Bruno, <u>P. Nesi</u>, M. Paolucci Departmento di Ingegneria dell'Informazione University of Florence Via S. Marta 3, 50139, Firenze, Italy tel: +39-055-4796523, fax: +39-055-4796363, cell: +39-335-5668674

Paolo.nesi@unifi.it

UNIVERSITÀ DEGLI STUDI FIRENZE http://www.disit.dinfo.unifi.it/







Requirements



- Ingest a large range metadata formats (XML based or Dublin Core, METS, MPEG-21, etc.) coming from different channels (http, ftp, oai-pmh, etc.) and content files >500 ff.
- Perform human content enrichment, translations, validation; comments; social media, rating; promoting; publication; corrections; assessment, etc.
- Perform automated activities, technical parameters (duration, size, etc.), descriptors, indexing, translations, VIP names, geonames, LOD, assessment, IPR, verification
- IPR modelling, assignment and verification.
- Harmonising the activities of human and automated processing
- Scale up of the back office architecture to cope with a large number of transactions
- Support and model one or more workflows



UNIVERSITÀ DEGLI STUDI FIRENZE

ECLAP ANY content kind



Informative Content

- Video, audio, images, documents
- 3D, animations, Braille
- Slide, Video-Slide, courses
- eBook, ePub, Mpeg21, intelligent

Aggregated Content:

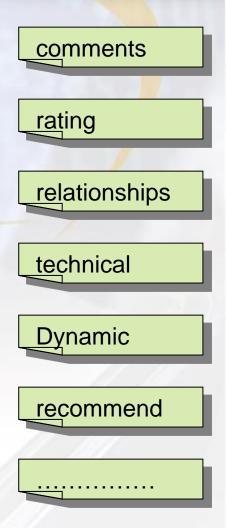
- Playlist, Collections
- Annotations, Synchronization
- Support and networking content:

ICT_{PS}

Blog, WebPage, Events, comments,

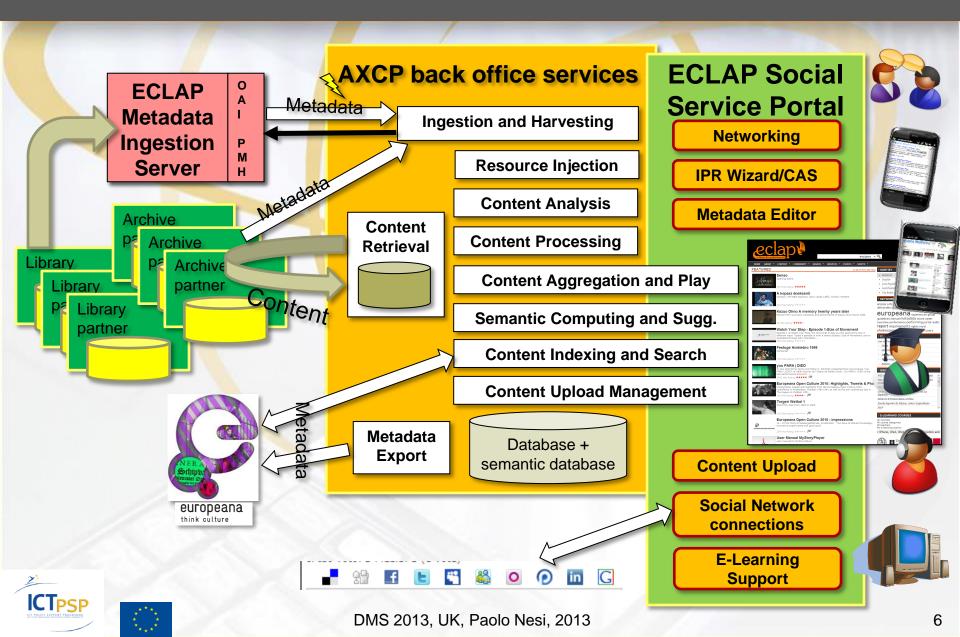
forum, votes, messages, ...

- Performance ٠
- Master classes
- Scene Sketches
- Scenography
- Scenes
- Private lives of artists
- Scores
- Braille
- **BackStage Stills** •
- Choreography
- Morals
- Poster
- **Booklets**
- **Magazines Music**
- Audio ballets



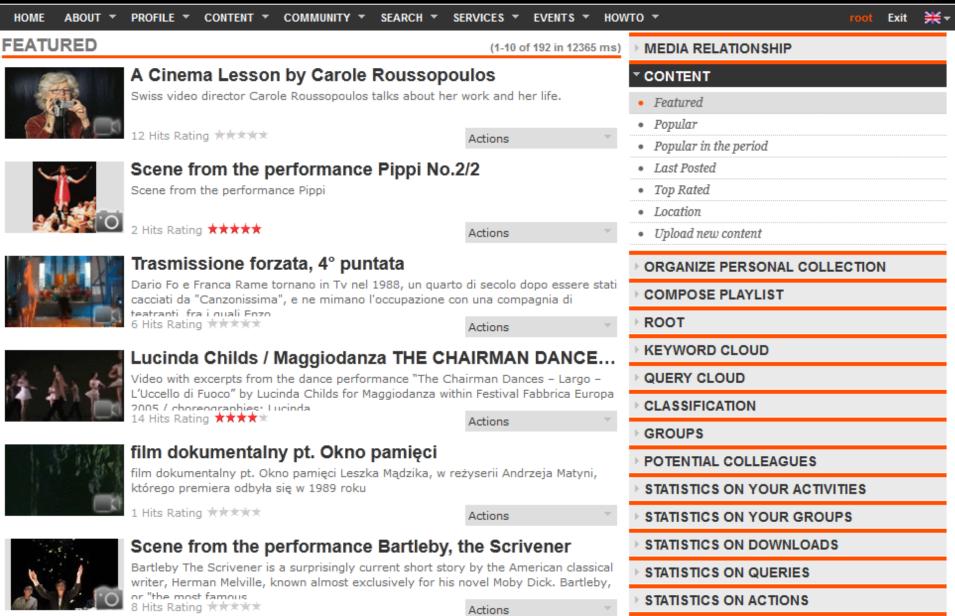


Architecture and Back-office









Technical

N° accesses 28

Format video

Type video

- 31

Duration 00:12:48.0

Video quality available LD MD

Available platforms PC, iPhone/iPad, Android, Windows Phone 7, Windows Mobile 6.5

Upload date Sun, 2012-01-15 04:08

Group

Centro Teatro Ateneo, University of Rome La Sapienza, UNIROMA, Italia

Published by CTA-UNIROMA

Upload user marcomaci

Original filename ITUR1CTAVGA09074.mov

Workflow type Europeana

Content-url link to this content

QR code



axoid urn:axmedis:00000:obj:03b7454d-6b7f-464a-9050-1d42e98cff88

-7	1.01	
lace	ificat	1071
Juss	uuu	LUIL

IPR information

De Caralina a de cardo

IPR information

Rights

Ferruccio Marotti, Centro Teatro Ateneo – "Sapienza" Università di Roma, Eredi Gassman

IPR owner page link to page

Europeana rights Europeana: Unknown copyright status

Public No

PC permission

	Public	Group	Educ.	Trusted
Download HD PC	No	No	No	Yes
Play HD PC	Yes	Yes	Yes	Yes
Download LD/MD PC	No	No	No	Yes
Embed	No	No	No	Yes
Play LD/MD PC	Yes	Yes	Yes	Yes

Mobile permission

	Public	Group	Educ.	Trusted
Download mobile browser	No	No	No	Yes
Play mobile browser	Yes	Yes	Yes	Yes
Download mobile app	No	No	No	Yes
Play mobile app	Yes	Yes	Yes	Yes
Performing arts meto	ıdata			
Location				

	Performing arts metadata 🛛 🚽
	First performance date 1983-07-
	Performance place Teatro Ateneo
	Performance city Roma
1	Performance country Italia

Performing Arts Group Compagnia del Teatro Manzoni diretta da Vittorio Gassman, con la collaborazione del 46º Maggio Musicale Fiorentino, della Bottega Teatrale di Firenze e dell'Estate Teatrale Veronese

Performers and crew Riprese: A. Muschietti; Tecnico audio e video: S. Casaluci; Interpreti e personaggi: Alessandro Esposito (Duncan, re di Scozia, un portiere), Danilo De Girolamo (Malcom), Roberto Medina (Donalbain), Vittorio Gassman (Macbeth), Carlo Montagna (Banguo), Luciano Virgilio (Macduff), Gian Franco Baroni (Lennox), Stefano De Sando (Ross), Luca Lazzareschi (Angus), Sergio Basile (Siward, conte di Northumberland, un capitano, un sicario), Lorenzo Gioielli (figlio di Siward, Fleance, figlio di Banquo), Alessandro Nisivoccia (un medico), Sergio Meogrossi (primo sicario), Federico Grassi (un sicario), Annamaria Guarnieri (Lady Macbeth), Giovanna Carcasci (Lady Macduff), Regina Senatore, Gabriella Chiari, Francesca Tardella, Franco Concilio, Franco Felici, Federico Grassi, Luca Lazzareschi, Stefano Molinari, Guido Paternesi (streghe). Scene e costumi: Paolo Tommasi; Musiche: Gianandrea Gazzola; Regia: Vittorio Gassman

Genre Teatro

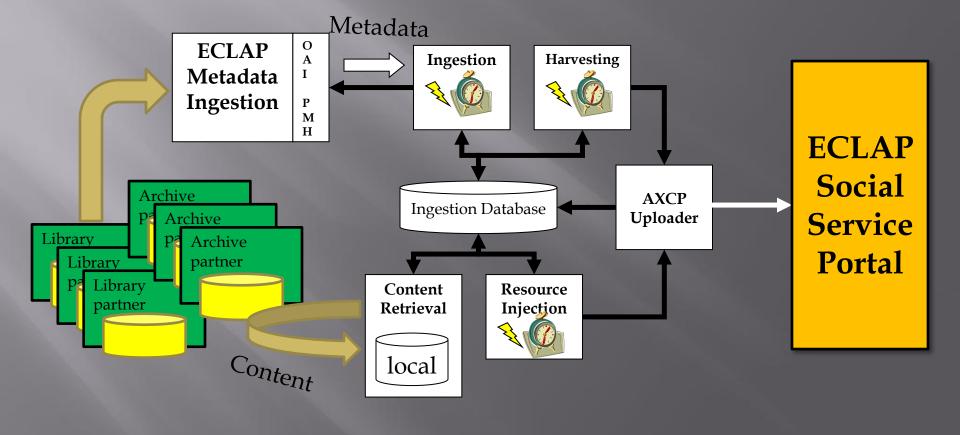


8

Back-office Ingestion

Back-office Ingestion Architecture







UNIVERSITÀ Degli studi

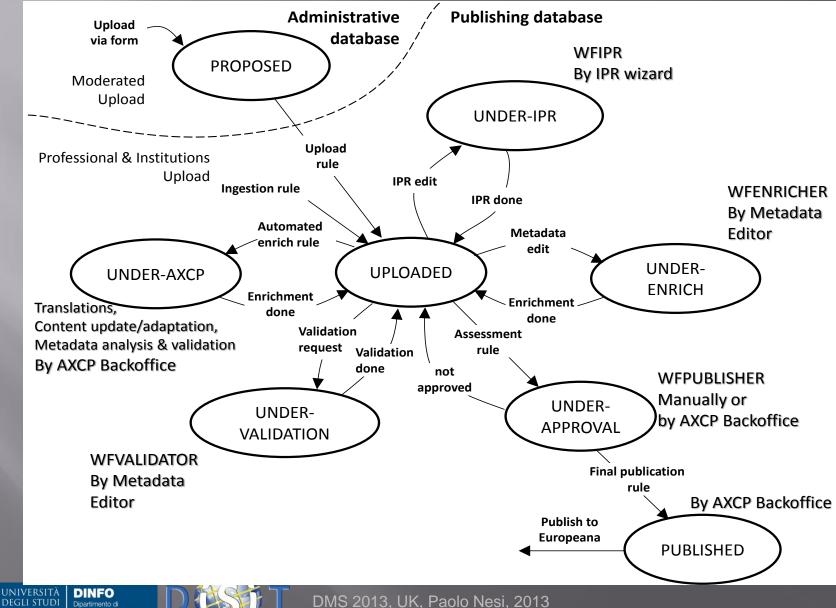
FIRENZE

ECLAP Workflow

Dipartimento di Ingegneria dell'Informazione

FIRENZE





Metadata Editor



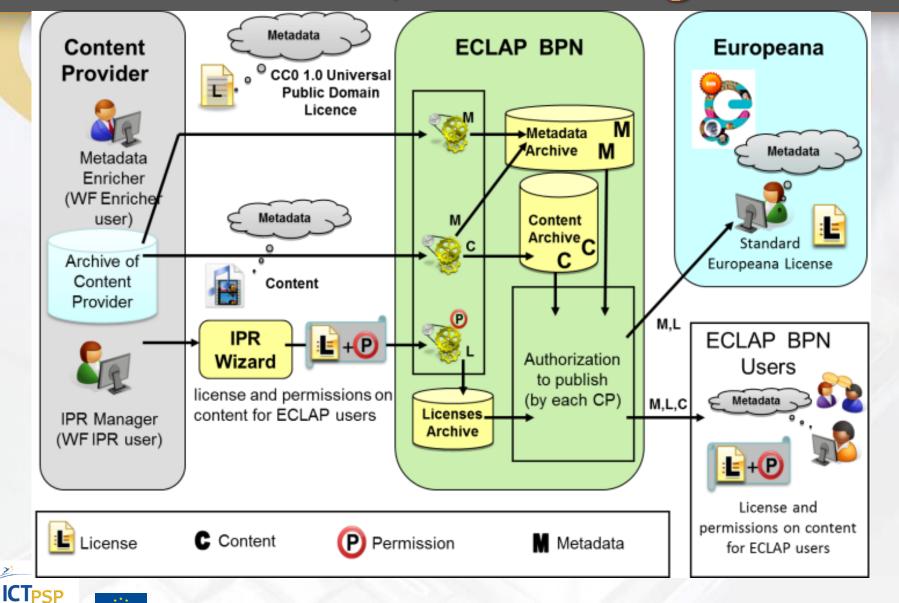
HOME ABOUT * PROFILE * CONTENT * COMMUNITY * SEARCH * SERVICES * EVENTS * HOWTO * root Exit 💥 *						
METADATA EDITOR	METADATA PANEL	- X				
Search Panel	DCMI TAXONOMY GROUPS PERFORMING ARTS PROPERTIES					
Metadata Panel	Changes	^				
Apply Changes	en ca da de el es fr hu >	el es fr hu >				
Content to be processed	dc.Title: DSI DISIT in trouble for the snow ! By: root By: root	für ??/+-				
History	den Schnee!					
Workflow						
Close Metadata Editor session	dc.Creator: paolo By: root dc.Creator:	? @ / +-				
WORKFLOW						
StateUnder-EnrichmentTypeEclapWorkflowTargetTestLast UserrootLast Access2012-07-15 20:06:05Native Metadata Number10Total Metadata Number46Validated Metadata0Enriching Activities2	dc.Description: DSI DISIT in trouble for the snow ! Do not be afraid, everithing will be fine for the verification meeting of dc.Subject: By: root dc.Subject: dc.Subject:	e la				
Last Comment	DSI DISIT in trouble for the snow ! By: root DSI DISIT in Schwierigkeiten den Schnee!	für ???/+-				
PREVIEW	dc.Publisher: DISIT By: root dc.Publisher:					
	dc.Contributor: paolo : By: root					

Content Management/Group



HOME ABOUT * P	ROFILE 🔻	CONT	ENT 🔻 (COMMUNITY -	SEARCH 🔻	SERVICE	S ▼ EVENTS	- нои	πo × root	Exit	₩-
Wall Edit Who online Members Blog Pages Objects Forum Broadcast											
List Manage Objects Select								ORGANIZE PERSONAL COLLECTION Select resources to add to collections Festuge Holstebro 1998	ا \$	×	
Hidden Workflow type Void content Published in Europeana IPR model type <any> ▼ <any> ▼ <any> ▼ <any> ▼</any></any></any></any>								Vertigo Bird (excerpt from dance film)	\$	×	
IPR model applied		Publi	shed by	WF state					👼 Discard		
<any></any>	•	<any< td=""><td>/> ▼</td><td><any> <any></any></any></td><td>- Ap</td><td>oply Filte</td><td>ers Reset (n</td><td>ow)</td><td>My published personal collections</td><td>5</td><td></td></any<>	/> ▼	<any> <any></any></any>	- Ap	oply Filte	ers Reset (n	ow)	My published personal collections	5	
 ✓ Actions Select the action you 		a anab	, to the c	Uploaded	chment afte				 europeana documents 	_	+
Set to hidden	u want t	o appiy	to the s	Underfick		:F.:			• Ipaddemo	8	+
- • Additional IPR Infor	mation-			Under-AXC Under-Vali					New collection		
- • Additional Taxonom	ıy Inform	ation		Under-App Published	roval				▶ ROOT		
						KEYWORD CLOUD					
Apply the Action choosen on the objects selected						VQUERY CLOUD					
WE Void		Published in	IPR model		, Published WF	WF					
	hidden	type	content	Europeana	applied	model type	by	state	GROUPS		
	not			not			AXMEDIS Cross Media		> STATISTICS ON YOUR ACTIVITIES		
SOFA score	bre hidden ECLAP not void published Public-as-it-is public Closs Hedia Upli hidden Finder (Incoherent)		Uploade	STATISTICS ON YOUR GROUPS							
							AXMEDIS		> STATISTICS ON DOWNLOADS		
APACHE 2 score	not hidden	ECLAP	not void	not published	None	NONE	Cross Media Finder	Uploade	> STATISTICS ON QUERIES		
				·			(Incoherent)		> STATISTICS ON ACTIONS		
Theatre curtain	not hidden	ECLAP	not void	not published	Public-as-it-is	public	AXMEDIS Cross Media Finder (Incoherent)	Uploade	SOCIAL NETWORK ANALYSIS Analysis of User Eccentricity Analysis of User Betweenness Analysis of User Betweenness		
							AXMEDIS		Analysis of Users' Connections		

Overall scenario, IPR management



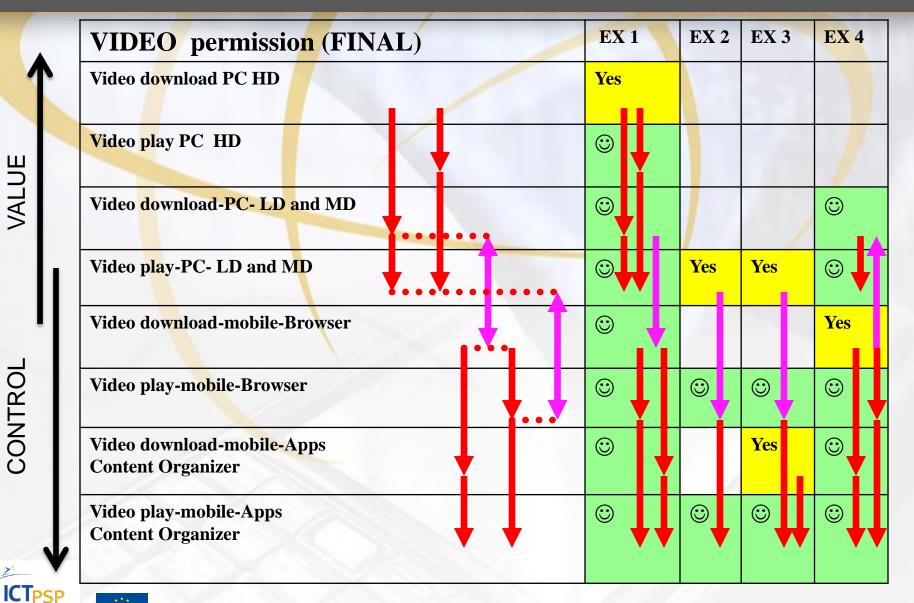
DMS 2013, UK, Paolo Nesi, 2013

IPR Model



Formalize the right per content access Stream / progressive download Download Embed user device: PC, mobile, iPad, etc. resolution per Video: low, med, HD content kind: audio, video, images, document, etc. metadata license (Creative Commons, etc.); publisher ECLAP page Europeana.Rights IPR ingestion identifier

Relationships among Permissions<u>eclap</u>





Workflow

Workflow Roles:

- 24 enrichers (WFENRICHER), 6 validators (WFVALIDATOR), 23 IPR users (WFIPR) and 9 publishers (WFPUBLISHER).
- Data flow in last 20 months
 - 706,052 workflow transitions for 117,861 content items
 - Average of: 6 transitions per content
 - Max: 104 transitions per content.
 - performed in 653 days, avg 1,014 transitions per day
 - maximum of 13,162 transitions in one day,
 - maximum of 14 different virtual nodes on AXCP grid,

Vip name Enrichment

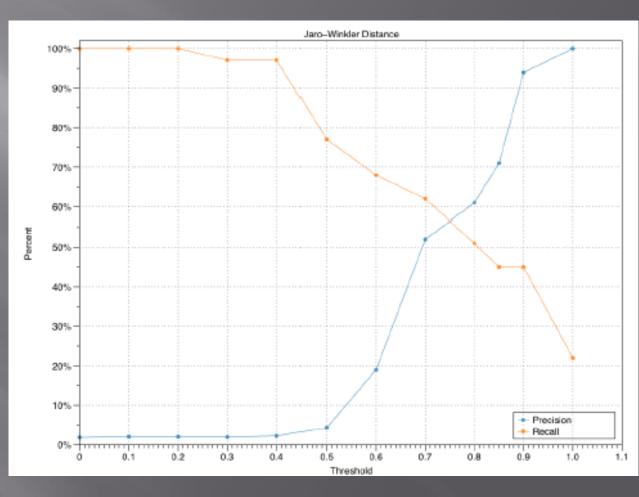


■ 172300 objects

- 23755Identified Names
 - 0,6% of user names into ECLAP
 - 9,95% of VIP names into dbPedia (2151 names)
 - 4294 names associated with dbPedia

UNIVERSITÀ Degli studi

DINFO Dipartimento di Ingegneria dell'Informazior

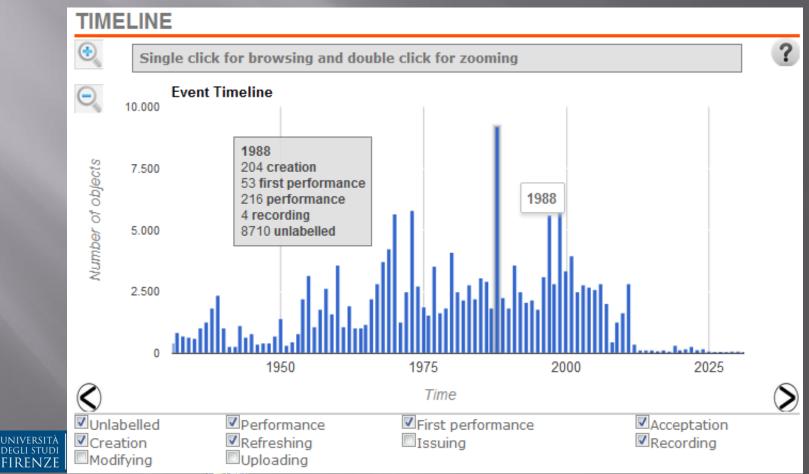


Date Enrichment

eclapt

- >170000 objects
- 35 different models

970.000 dates classified to several different semantics



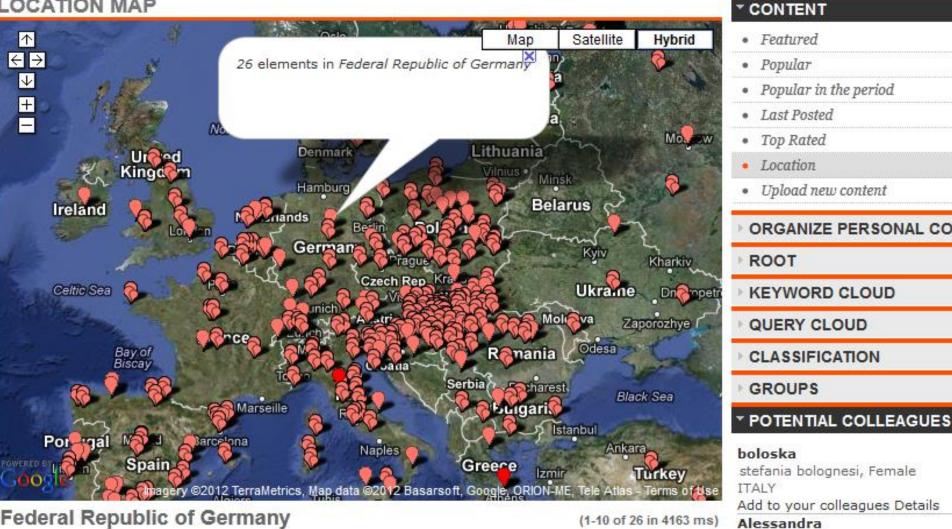






HOME ABOUT * ноwто 🔻 PROFILE CONTENT * COMMUNITY * SEARCH * SERVICES * EVENTS *

LOCATION MAP



Federal Republic of Germany

(1-10 of 26 in 4163 ms)

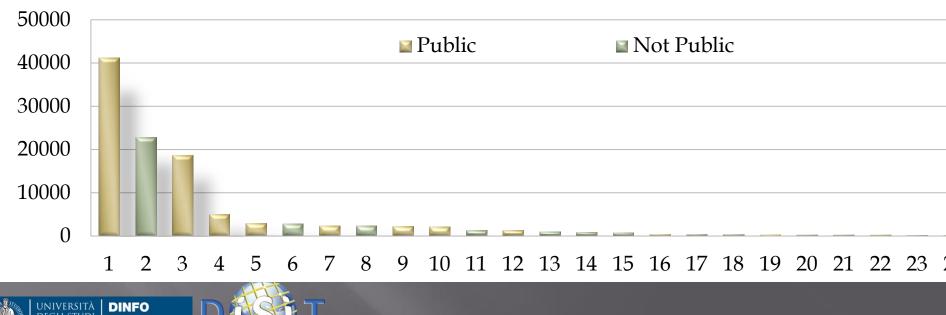


Tutta casa, letto e chiesa -1977. Monologhi satirici sull...

IPR Model Exploitation



- 67 Differente IPR models
 - 40 non public model with some restriction
 - 27 are public models, different CC profiles
- 68% of content is associatetd with Public IPR Model





IPR Models vs User Type profiling

Permission based on user profileMainly Education and Research

D • •	User type					
Permission	public	group	educ./research			
only play/access	11	13	19			
download & play	3	8	11			
no permission	19	12	4			





Conclusions

- Typically workflows and CMS for aggregator are manually managed and do not address enrichment
- The proposed solution to automate the content workflow for multipartner institutions has:
 - Processed over than 170.000 elements in 750 days, ingesting, enriching 35 collections from 15 countries in 13 languages
 - Reduced the number of manual interventions for: enrichment, assessment, validation and publication
 - Proposed an integration with a flexible IPR model and IPR Wizard tool for Conditional Access profiling and distribution
 - Only 1 IPR problem has been detected claimed.

