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Ending date: 31 October 2012

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Title of the Deliverable: Case study report – Geocoded digital cultural content
Appendices

Task/WP related to the Deliverable: Task 5.3 Geocoded digital cultural content

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7 Appendices

| | |
|---|---|
| Appendix 1: Workshop: Geocoded digital cultural content | 3 |
| Appendix 2: Use cases of GCC | 8 |

Appendix 1: Workshop: Geocoded digital cultural content

The scope of the workshop geocoded cultural content can be stated as:

- to present best practice examples of the use of GIS technology for access to digital cultural content
- to discuss how e-Infrastructures can be used to enhance GIS cultural applications
- to analyse the resources which e-Infrastructures offer, and how they can be deployed to deal with GIS cultural implementations

The first part of the workshop introduced the INDICATE project, the topic of geocoded digital cultural content and concrete cases from Italy, Ireland, Egypt, France, Slovenia and Jordan were presented.

Second part of the workshop was organized as world café group activity, where partners discussed three topics: Archeological / architectural heritage and GIS, Libraries and GIS and Museums and cloud computing.

7.2.2012, Ljubljana, Slovenia

Hours: **9:00 – 15:40**

Venue: **National Museum of Slovenia, Maistrova 1, 1000 Ljubljana**

INDICATE (<http://www.indicate-project.eu>) is a two-years project (September 2010-August 2012), funded in the framework of the Seventh framework programme (e-Infrastructure).

The main issue of the INDICATE project is to develop the research pilots and to prepare case studies as exemplars and demonstrators of the issues and the processes which are relevant to establish cultural initiatives on the e-Infrastructures platform. This workshop is dedicated to the issue of the geographic information systems applied to the cultural heritage which is one of the case studies of the INDICATE project.

| | |
|-------------|---|
| 9:00 – 9:15 | Registration |
| 9:15 – 9:35 | Welcome messages from Slovenian authorities and institutions Damjana Pečnik, Director General, Directorate for Cultural Heritage, Ministry of Culture of the Republic of Slovenia Dr.Jelka Pirkovič, Director General, Institute for the Protection of Cultural Heritage of Slovenia Marko Bonač, Director, Arnes, The Academic and Research Network of Slovenia Dr.Marjeta Mikuž, Head of Office for Movable Cultural Heritage and Museums, National Museum of Slovenia Branko Oman, Director, AAS |
| 9:35 – 9:55 | The goal and content of the INDICATE project Antonella FRESA, Technical Coordinator, ICCU, Ministry of Culture, Italy |

- 9:55 – 10:15 **Introduction to geocoded digital cultural content: framework, use cases, geoparsing**
Franc J. Zakrajsek, scientific coordinator of Indicate for Slovenia, Slovenia
- 10:15 – 10:50 **Cases from Italy: Novel approach to 3D archeology, 3D semantics, open sources and open standards, experiences of geoparsing CulturalItalia**
Matteo Lorenzini, ICCU, Ministry of Culture, Italy
- 11:25 – 12:00 **Case from Ireland: AskAboutIreland, culture on the interactive map**
Annette Kelly, Library Council of Ireland, Ireland
- 12:00 – 12:30 **Coffee break**
- 12:30 – 12:50 **Case from Egypt: "Cultnat' experience in Geo-coding culture heritage content - The case of El Darb El Ahmer and downtown Cairo"**
Malak Wahba, assistant director of Cultnat and head of Architecture and Urbain Heritage section, Egypt
- 12:50 – 13:10 **Case from France: Atlas of heritage and architecture**
Genviève Pinçon, Directorate General for Heritage (Direction générale des patrimoines), Ministry of Culture and Communication, France
- 13:10 – 13:30 **Case from Slovenia: Register of cultural heritage of Slovenia (RCHS)**
Franc J. Zakrajšek, Developer of RCHS, Slovenia
Ksenija Kovacec Naglič, Head of INDOK Centre, Directorate for Cultural Heritage, Ministry of Culture, Slovenia
- 13:30 – 13:50 **Case from Jordan: MEGA-J Middle East Geographical and Archaeological database**
Ahmad Lash, Tawfiq Hunaiti, Department of Antiquities, Jordan
- 13:50 – 14:10 **Questions & Answers**
- 14:10 – 15:40 **Knowledge Café with lunch**
- 1. table: Archeological / architectural heritage and GIS**
Facilitator: Matteo Lorenzini
- 2. table: Libraries and GIS**
Facilitator: Annette Kelly
- 3. table: Museums and cloud computing**
Facilitators: Jernej Porenta, Luka Hribar
- Conclusions**
- 15:40 **End of Conference**

GUIDELINESS FOR KNOWLEDGE CAFÉ

1. table: Archaeological / architectural heritage and GIS

Facilitator: Matteo Lorenzini

Expected attendee: archaeological and architectural institutions (10+)

Questions:

- identification of additional use cases (regularly operating, research, planed) (additional form) navigation...
- benefits and weakness of open source
- effective browsing of 3D cities
- geographical coordinate systems
- the needs for grid and cloud computing (restoration, 3D rendering, cashing, ...)

2. table: Libraries and GIS

Facilitator: Annette Kelly

Expected attendee: libraries and other cultural institutions (10)

Questions:

- identification of additional use cases (regularly operating, research, planed) (additional form) navigation...
- benefits expected from GIS in libraries
- geocoding or geotagging geographical coordinates
- geocoding of the historical maps
- GIS in Europeana
- the need for grid and cloud computing

3. table: Museums and cloud computing

Facilitators: Jernej Porenta (Arnes), Luka Hribar

Expected attendee: museums and other cultural institutions (10)

Questions:

- identification of additional use cases (regularly operating, research, planed) (additional form) navigation...
- comparison the costs (in house server ITC vis-a-vis cloud computing)
- persistent Identifiers
- e-infrastructure expected from NRNs

Conclusions of the workshop

The Workshop on geocoded digital cultural content was interesting for the cultural sector and the Slovenian e-infrastructure providers. Especially were of value international presentations of use cases as they enlight the use of GIS in culture and deepend the understanding of e-infrastructure.

Beside presentations special results were given at Knowledge cafe where participants discussed on three topics: Archaeological / architectural heritage and GIS, Libraries and GIS and Museums and cloud computing.

Participants at first table discussed Archaeological / architectural heritage and GIS the identification of additional use cases (regularly operating, research, planed) (additional form) navigation..., benefits and weakness of open source, effective browsing of 3D cities, geographical coordinate systems and the needs for grid and cloud computing (restoration, 3D rendering, caching, ...).

The discussion can be summarize in few points. Open source for archeology and architecture in web mapping - MEGA-Jordan project (open source) raised the question on PostGIS and Geoserver as Open layers for front-end and data availability in SHP/AML format. Regarding managing of 3D architectural and archeological data open source/proprietary software has been discussed (Ex AutoCAD / format IMP/EXP and O.S problem)

Second table topics was the Libraries and GIS where discussed on identification of additional use cases (regularly operating, research, planed) (additional form) navigation..., benefits expected from GIS in libraries, geocoding or geotagging geographical coordinates, geocoding of the historical maps, GIS in Europeana and the the need for grid and cloud computing.

Discussion focuses on additional uses of GIS in libraries: location info for users (mobile library itineraries/routes), planning locations of libraries (catchment, populations), literary map of country (writers from Bled), content map (photographs, songs, music, postcards). Benefits of GIS in libraries has been identified: better information for users, planners, linking content & place benefits users, researchers, tourists, easy searching, improved possibilities of use. The topics on this table were also geocoding geographical coordinates and the importance of geocoding of historical maps and the need for grid and cloud computing. Finaly GIS in Europeana has been identified as very useful and with no doubt the added value.

Table Museums and cloud computing raised the questions on identification of additional use cases (regularly operating, research, planed) (additional form) navigation..., comparison the costs (in house server ITC vis-a-vis cloud computing), persistent Identifiers, e-infrastructure expected from NRNs.

Cultural institutions mostly already using cloud computing. Many use cloud based e-mail services, some use cloud based web hosting, but more advanced usage is not yet common. Some pilot services exist. Advantages of using cloud computing were identified: low hardware cost, mostly not even needed, dynamic scalability, paying only for what is needed, accessibility, only requirement is internet connectivity, agility, cloud based application can be quickly developed and deployed.

Further issues with Cloud Computing are trust (Where is my data? Who else can access it? What happens if provider gets in trouble? Not yet addressed properly by providers and legislation), standards (Can I move my applications and data to other public provider? Are there any costs associated?), Solutions are not yet easily transferable, costs to move data can skyrocket!), and legislation limits (many EU countries and EU legislation limits or prohibits data storage on privately owned public clouds like Amazon, Google or Microsoft if data contains private personal information (in culture it mostly does!), there are many unknowns in making proper legal work and agreements).

Cultural institutions should rely more on National Research Networks (NRN) if they provide cloud computing (e-Infrastructure). In this way we know where our data is and there is also less likely to have issues with low regulations. NRN are also less likely to unexpectedly stop their services. Some NRNs provide services for free! Museum workers have different experiences with NRN across EU. Some like Arnes in Slovenia are cooperative, but some are much less willing to address special needs of cultural institutions. NRNs should be encouraged to approach to cultural institutions. NRS should develop compatible interfaces! Most new projects are developed on Amazon, Microsoft or Google public clouds because developers are most familiar with these. Transfer to clouds provided by NRNs is then almost impossible. At least there should be some tools provided to assist with moving solutions form mentioned public clouds to clouds provided by NRN.

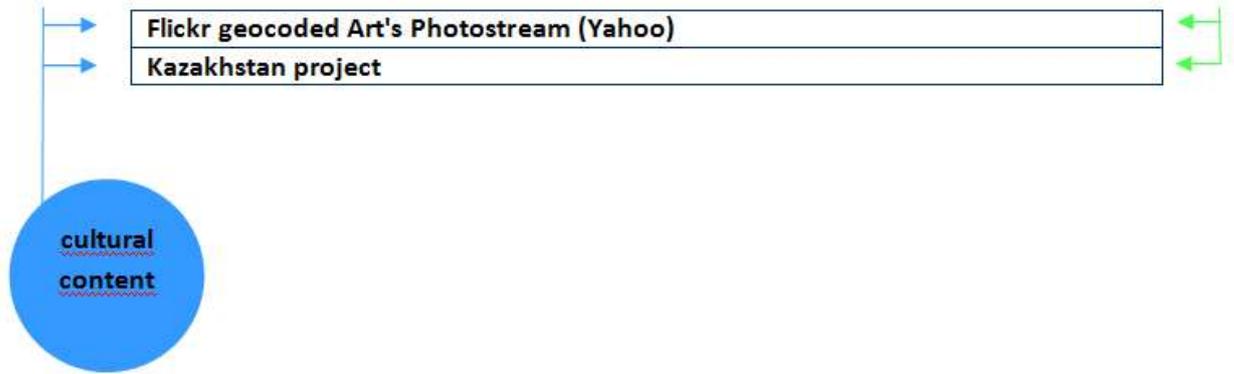
In general, the results and fit back of the workshop have been encouraging. Dialogue and discussions on e-infrastructure raised demand on cultural sector side and on the other side many the opportunities for progress when implementing e-infrastructure in cultural sector has been identified.

Appendix 2: Use cases of GCC

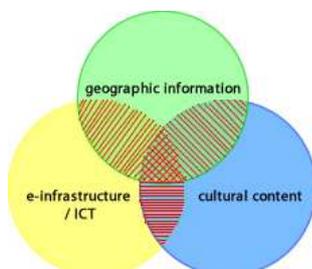


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|---|---|---|
| → | A Geo Grid Implementation for 3D GIS Taiwan | ← |
| → | Design of a Grid-based Geo-service Architecture | ← |
| → | Distributed Geo-rectification of Satellite Images using Grid Computing | ← |
| → | Geographic Information and Grid Computing : An introduction | ← |
| → | GeoMiddleware to Support Interoperability for Grid Computing | ← |
| → | Grid based 3D animation rendering | ← |
| → | Grid Computing Enabled Web Processing Service | ← |
| → | Research of the application of grid computing on geographical information system | ← |
| → | Using a Computational Grid for Geographic Information Analysis: A Reconnaissance | ← |
| → | Use of grid computing for modelling virtual geospatial products | ← |
| → | Using Grid Computing for Rendering to Support 3D Animation Training Courses | ← |
| → | Using Web Portal for 3D Grid-Based Rendering | ← |
| → | Digital library grid: A roadmap to next generation digital libraries using grid technologies | ← |
| → | Grid-Based Digital Libraries: Cheshire3 and Distributed Retrieval | ← |
| → | Cloud Computing in the Application of Digital Library | ← |
| → | Cloud Computing Primer: Steps for using the cloud in Your Museum | ← |
| → | Libraries and the Cloud | ← |
| → | Museums and Cloud Computing: Ready for Primetime, or Just Vaporware? | ← |
| → | Geographical Linked Data: a Spanish Use Case | ← |
| → | LinkedGeoData | ← |
| → | A GIS in cultural heritage based upon multiformat databases and hyper medial personalized queries | ← |
| → | Accessing Heritage Documents according to Space Criteria within Digital Libraries | ← |
| → | Advanced GIS technologies to support georeferencing of the Cultural Heritage | ← |
| → | Geographic Information Contribution and Retrieval - An Agenda for the Next Generation Gazetteer | ← |
| → | AskAboutIreland, culture on the interactive map | ← |
| → | Atlas of Heritage and Architecture | ← |
| → | Connecting Historical Authorities with Links, Contexts and Entities | ← |
| → | CultureMap London | ← |
| → | Culnat' experience in Geo-coding culture heritage content | ← |

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|---|--|---|
| → | Development of a GIS Based Information and Management System for Cultural Heritage Site, Case Study of Safranbolu | ← |
| → | Developing a Spatial Data Infrastructure for Cultural Heritage | ← |
| → | Digital Atlas on the History of Europe since 1500 | ← |
| → | Embedding GeoCrossWalk Final Report | ← |
| → | Explorative user interfaces for browsing historical maps on the Web | ← |
| → | Europeana Mapsearch | ← |
| → | Geocode your Twitter network with NodeXL | ← |
| → | German Heritage Register Bayern – Nürnberg | ← |
| → | Gis & Social Media Integration | ← |
| → | GIS system for the Catalan Cultural Heritage | ← |
| → | GIS technologies for the study of the Roman agricultural landscape | ← |
| → | Locating London's Past | ← |
| → | MEGA-J Middle East Geographical and Archaeological database | ← |
| → | Mobile cultural heritage guide: location-aware semantic search | ← |
| → | NAC Locator - A Universal Geocoding Solution for the Entire World | ← |
| → | National Heritage List for England | ← |
| → | National Heritage Register Netherlands | ← |
| → | National Register of Sites and Monuments Denmark - Fund og Fortidsminder | ← |
| → | Novel approach to 3D archeology, 3D semantics, open sources and open standards, experiences of geoparsing CulturalItalia | ← |
| → | Odysseus, www server of the Hellenic Ministry of Culture | ← |
| → | Past places - place names: www.hgis-germany.de ? | ← |
| → | Picture War Monuments: Creating an Open Source Location Based Mobile Platform | ← |
| → | Putting Museum Collections on the Map: Application of Geographic Information Systems | ← |
| → | Reorganizing the Topographic Databases of the Institut Cartogràfic de Catalunya applying generalization | ← |
| → | Register of cultural heritage of Slovenia (RCHS) | ← |
| → | Use of the Edinburgh Geoparser in the GeoDigRef and Embedding GeoCrossWalk Projects | ← |
| → | Virtual Museum via Flaminia Antica | ← |
| → | 3D Artefact Acquisition (3D COFORM Tools & Expertise for 3D Collection Formation) | ← |
| → | American Memory | ← |
| → | ArXiv | ← |
| → | Europeana Culture Globe | ← |
| → | Europeana portal | ← |
| → | Europeana4D | ← |
| → | 3D historical maps | ← |
| → | A guide to the magnificent Awqaf Mosques of Al Darb Al Ahmar Area | ← |
| → | Appia Antica archaeological Park | ← |
| → | EuropeanaConnect | ← |



Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|--|
| <p>Name</p> <p>Mobile cultural heritage guide: location-aware semantic search, L</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>In this paper explore the use of location aware mobile devices for searching and browsing a large number of general and cultural heritage information repositories is explored. Based on GPS positioning a user's location and context, composed of physical nearby locations, historic events that have taken place there, artworks that were created at or inspired by those locations and artists that have lived or worked there can be retrieved. Based on a geolocation, the user has three levels of refinement: pointing to a specific heading and selection and facets and subfacets of cultural heritage objects. In this approach two types of knowledge are combined: general knowledge about geolocations and points of interest and specialized knowledge about a particular domain, i.e. cultural heritage. Number of Linked Open Data sources and a number of general sources from the cultural heritage domain (including Art and Architecture Thesaurus, Union List of Artist Names) as well as data from several Dutch cultural institutions are used. Three concrete scenarios where a tourist accesses localized information on his iPhone about the current environment, events, artworks or persons, which are enriched by Linked Open Data sources are shown.</p> |
| <p>Main links and/or sources</p> <p>Van Aart, C., Van Hage, W. R., Wielinga, B., 2010. Mobile cultural heritage guide: location-aware semantic search. Proceedings of the 17th international conference on Knowledge engineering and management by the masses, Lisbon, Portugal (http://www.few.vu.nl/~wrvhage/papers/Mobile_cultural_heritage_guide_ekaw2010.pdf)</p> |

Graphical display



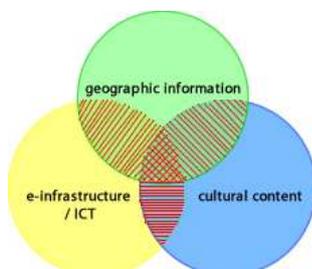
Fig. 8. (a): Photograph of the ending of the Maagdenhuis occupation. (b): Augmented reality view on the “Helios building”, showing the architect with selection [people/artist].

Source:

http://www.few.vu.nl/~wrvhage/papers/Mobile_cultural_heritage_guide_ekaw2010.pdf

Comments

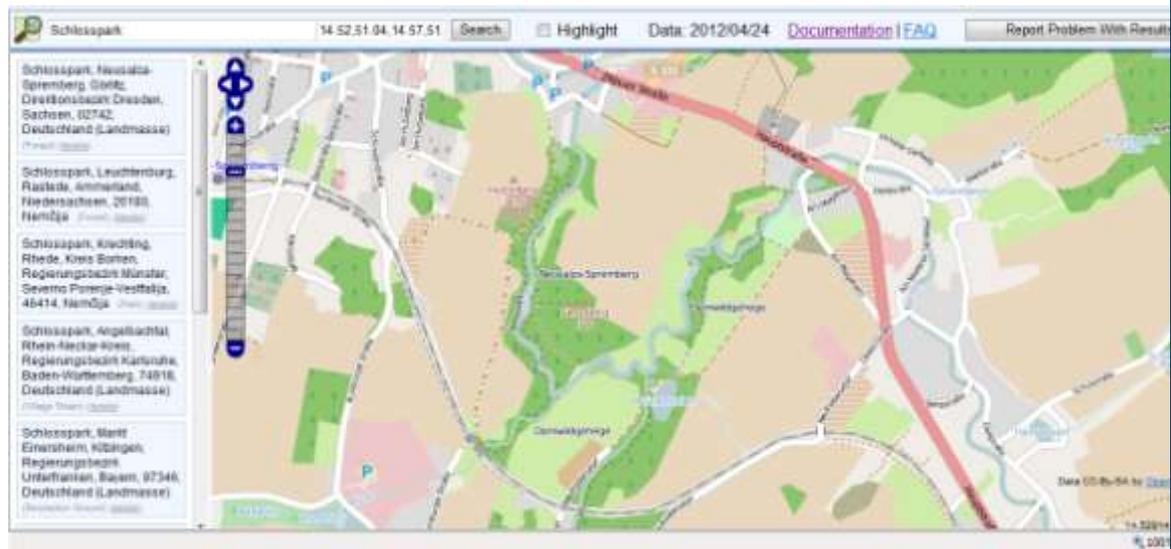
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|--|
| Name |
| LinkedGeoData |
| Type and geographical area |
| Geographic information, ICT, regularly operating system |
| Short description |
| <p>LinkedGeoData is an effort to add a spatial dimension to the Web of Data / Semantic Web. It uses the information collected by the OpenStreetMap project and makes it available as an RDF knowledge base according to the Linked Data principles. It interlinks this data with other knowledge bases in the Linking Open Data initiative. In order to employ the Web as a medium for data and information integration, comprehensive datasets and vocabularies are required as they enable the disambiguation and alignment of other data and information. Many real-life information integration and aggregation tasks are impossible without comprehensive background knowledge related to spatial features of the ways, structures and landscapes surrounding us. LinkedGeoData uses the comprehensive OpenStreetMap spatial data collection to create a large spatial knowledge base. It currently consists of information about approx. 350 million nodes and 30 million ways and the resulting RDF data comprises approximately 2 billion triples. The data is available according to the Linked Data principles and interlinked with DBpedia.</p> |
| Main links and/or sources |
| <p>http://linkedgeodata.org http://nominatim.openstreetmap.org/</p> |

Graphical display



Schlosspark

Name:
Schlosspark (name)
Type: landuse:forest
Admin Level: 10
Rank: Craft / Farm / Locality / Islet
Coverage: Polygon
OSM way: [35915805](#)
Extra Tags:
deciduous (wood)

Address

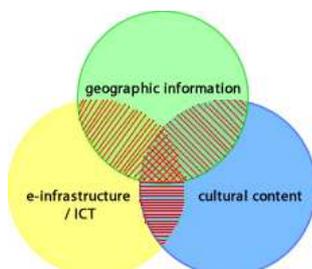
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Neustadt-Spremberg (Type: boundary:administrative, relation [1110910](#), 8, Polygon, 0.00541929537439075 [GOTO](#))
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[GOTO](#)
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02742 (Type: place:postcode, Polygon, 0.00891273959554224 [GOTO](#))
Deutschland (Landmasse) (Type: boundary:administrative, relation [52781](#), 2, Polygon, 4.15639946555206 [GOTO](#))
[GOTO](#)



Source: <http://nominatim.openstreetmap.org/search.php?q=Schlosspark&viewbox=-213.93%2C72.25%2C213.93%2C-54.66>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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|---|
| <p>Name</p> <p>Geographical Linked Data: a Spanish Use Case</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, regularly operating system</p> |
| <p>Short description</p> <p>GeoLinked Data (http://www.oeg-upm.net/) is an open initiative of the Ontology Engineering Group (OEG) whose aim is to enrich the Web of Data with Spanish geospatial data. This initiative started off by publishing diverse information sources belonging to the National Geographic Institute of Spain. Such sources are made available as RDF (Resource Description Framework) knowledge bases according to the Linked Data principles. These data are interlinked with other knowledge bases belonging to the Linking Open Data Initiative. With this work, Spain has joined this initiative, in which the United Kingdom and Germany also participate.</p> |
| <p>Main links and/or sources</p> <p>http://geo.linkeddata.es/</p> |

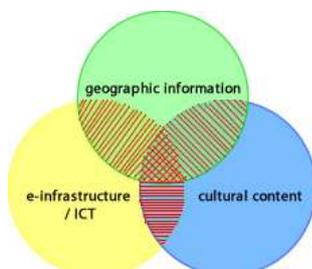
Graphical display



Source: <http://geo.linkeddata.es/web/guest/visualizacion-beta>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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| <p>Name</p> <p>A GEO Grid Implementation for 3D GIS Taiwan</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>A GEO Grid framework base on grid technology, remote sensing data, and geographic information developed at National Applied Research Laboratories (NARL) from Taiwan. The presented approach is initiated by synergy of NARL's core competence on environment monitoring and disaster reduction techniques which include high-resolution satellite image processing, virtual reality visualization, grid computing, and disaster mitigation technology along with the advanced cyber-infrastructure environment established within NARL. The framework is constituted by three layers, i.e. application module, service interface, and computing/data/sensor grids. A prototype platform entitled 3D GIS Taiwan uses 2m resolution FORMOSAT-2 data and 5m resolution Digital Terrain Model. The model can be displayed in 3D stereo visualization and in web pages for the island of Taiwan. The presented approach emphasize on the synergy of multidiscipline with cross-field cooperation for geosciences' application can become a benchmark in echo to implementation of GEOSS.</p> |
| <p>Main links and/or sources</p> <p>Premchaiswadi, W., Tungkasthan, A., Jongsawar, N., 2008. A GEO Grid Implementation for 3D GIS Taiwan. The 9th IEEE/ACM International Conference on Grid Computing. Tsukuba, Japan (http://www.grid2008.org/AGEOGridImplementation.pdf)</p> |

Graphical display



Figure 2. Flood mitigation grid (sensor network)

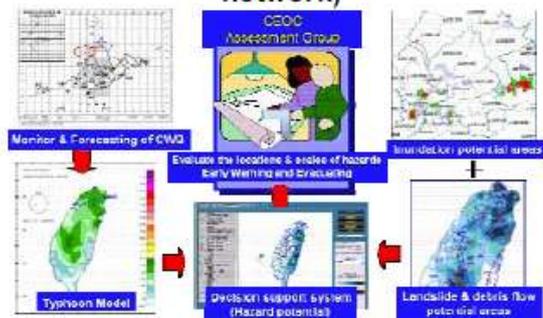
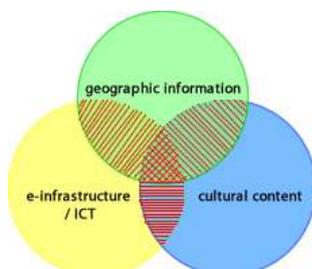


Figure 3. Typhoon & flood decision-making system

Source: <http://www.grid2008.org/AGEOGridImplementation.pdf>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|---|
| <p>Name</p> <p>Design of a Grid-based Geo-service Architecture ven</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>The need for decentralized management and customized GI services is pushing the GIS community to deploy distributed Geo-service architecture. The concept of the distributed Geo-service architecture is Geospatial data anywhere and Geo-service anywhere. The current distributed Geo-service architecture enables the application sharing through the network by employing Web Services infrastructure. However, the primary challenge faced by Geographic Information (GI) communities in the current distributed Geoservices architecture is to process large amount of geospatial datasets in the distributed computing environment. The fundamental issue is limitation of resource provisioning in the distributed environment and the services being fixed into computational node.</p> |
| <p>Main links and/or sources</p> <p>Ghimire, D. R., 2005. Design of a Grid-based Geo-service Architecture. Master of Sience in Geoinformation Thesis, Enschede, The Netherlands. (http://download.ebookgratis.info/msc-thesis-design-of-a-grid-based-geo-service-architecture/)</p> |

Graphical display

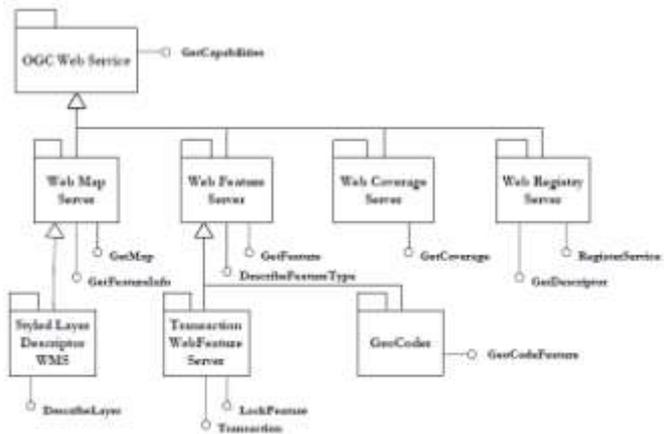
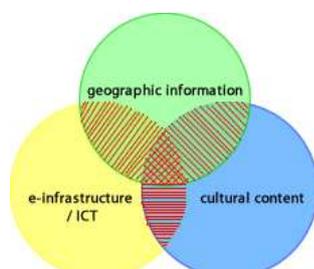


Figure 3.8: OGC Web Services Architecture (39)

Source: <http://download.ebookgratis.info/msc-thesis-design-of-a-grid-based-geo-service-architecture/>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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|---|
| <p>Name</p> <p>Distributed Geo-rectification of Satellite Images using Grid Computing</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Grid computing seeks to aggregate computing resources within an enterprise and leverage on resources you don't own for compute-intensive applications. Geo-rectification is a process for correcting spatial location and orientation of a satellite image. This paper focuses on the parallelization of the compute intensive satellite image geo-rectification problem on a cluster grid. Approach to data and task partitioning, visualization technique and the archival of data are presented. The computational tasks include wrapping satellite positional data to compensate the earth curvature, and consist of several steps such as image re-sampling, resolution conversion and image matching. Experimental results obtained using commodity PCs are discussed.</p> |
| <p>Main links and/or sources</p> <p>Teo, Y.M., Tay, S. C., Gozali, J. P., 2003. Distributed Geo-rectification of Satellite Images using Grid Computing. International Parallel & Distributed Processing Symposium, IEEE Computer Society Press, Nice, France. (http://www.comp.nus.edu.sg/~teoym/pub/03/ipdps03.pdf)</p> |

Graphical display

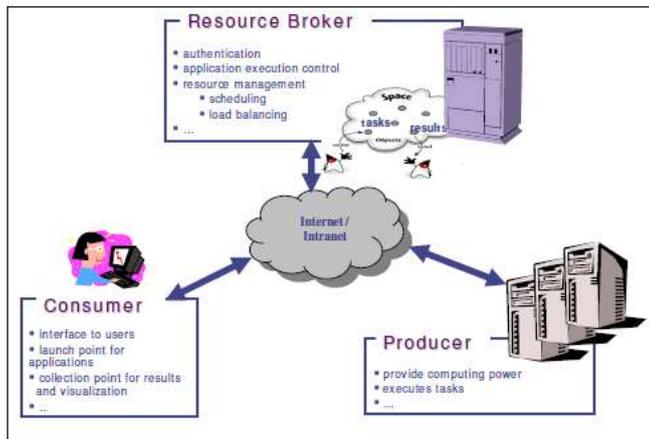
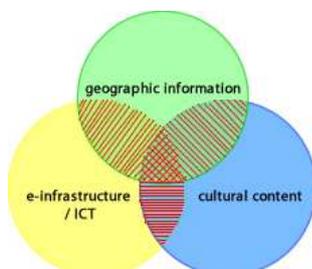


Figure 2: ALiCE Consumer-Producer Grid

Source: <http://www.comp.nus.edu.sg/~teoy/pub/03/ipdps03.pdf>

Comments

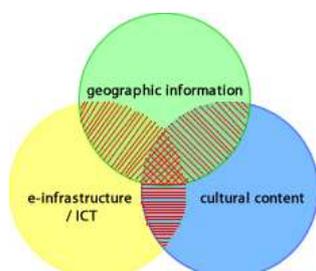
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|---|
| <p>Name</p> <p>Geographic Information and Grid Computing : An introduction</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Middleware is software that is designed to support the interoperability of computer applications that use (and/or produce) different types of information. Middleware for geographic applications is particularly important because required information may have scale dependent relationships, which may cascade to cause problems related to level of generalization, dimension change, and categorical precision. The challenge of supporting interoperability is especially vexing when multiple types of data (from various sources and with variable error characteristics) must be meaningfully integrated for use in distributed applications. Geographic information science (GIScience) must develop middleware that captures important geographic characteristics of problems. This GIScience-specific Grid middleware may provide interoperable geographic analysis services that are able to reconcile different data and metadata regarding formats and semantic.</p> |
| <p>Main links and/or sources</p> <p>Turner, A., 2009. Geographic Information and Grid Computing: An introduction. International Journal of Geographical Information Science. Volume 23 Issue 5. (http://www.google.si/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCcQFjAA&url=http%3A%2F%2Fwww.geog.leeds.ac.uk%2Fpeople%2Fa.turner%2Fpublications%2Fpapers%2Fworking%2FGeographic%2520Information%2520and%2520Grid%2520Computing.doc&ei=L9CXT97aGc6d-wai6sHeBg&usg=AFQjCNEXKXkSCsqKefexRp4rKGaIMDHhLA&sig2=3DPSkOnY7x9qEnmqZHBtaQ) </p> |
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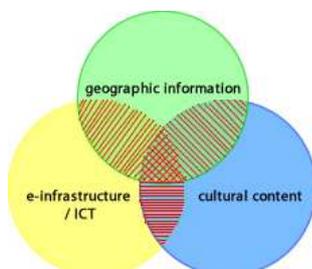
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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|---|
| <p>Name</p> <p>GeoMiddleware to Support Interoperability for Grid Computing</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Middleware is software that is designed to support the interoperability of computer applications that use (and/or produce) different types of information. Middleware for geographic applications is particularly important because required information may have scale dependent relationships, which may cascade to cause problems related to level of generalization, dimension change, and categorical precision. The challenge of supporting interoperability is especially vexing when multiple types of data (from various sources and with variable error characteristics) must be meaningfully integrated for use in distributed applications. In this position paper we set out a general geographic information processing problem as a way to motivate discussion about the use of middleware to support analyses in distributed, heterogeneous Grid computing environments.</p> |
| <p>Main links and/or sources</p> <p>7.1.1 Armstrong, M. P. and Shaowen, W.,2006. GeoMiddleware to Support Interoperability for Grid Computing. Digital Gazetteer Research and Practice. California, USA (http://www.ncgia.ucsb.edu/projects/nga/docs/Armstrong_Postition.pdf)</p> |
| <p>Graphical display</p> |
| <p>Comments</p> |

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>Grid based 3D animation rendering</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>The amount of animated videos, movies being produced is increasing rapidly. Today animated scenes are much more complex than they used to be earlier. Thus much more time is required to generate every individual animated scene today. If there was some way in which multiple computers could be used to generate the animated scenes in parallel the time required would be reduced significantly. Here comes the paradigm of distributed computing into picture called grid computing. A grid is basically a cluster of individual computers, geographically distributed, connected together to perform some task in parallel. The best candidates for grid computing are applications which can be divided into tasks that can be computed in parallel, independent of any other task's result. 3D animation rendering is one such suitable application.</p> |
| <p>Main links and/or sources</p> <p>Kaminsky, A., Parab, A., Koruthu, J., Pinto, K., 2008. Grid based 3D animation rendering. Final report. Rochester Institute of Technology, Department of Computer Science. http://www.cs.rit.edu/~ark/winter2008/730/team/3/report.pdf</p> |

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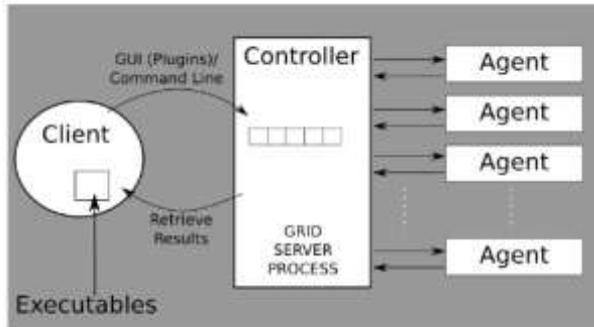
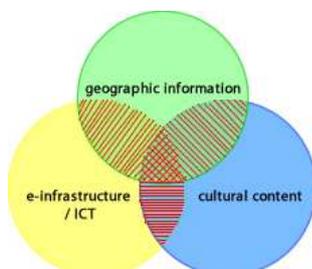


Fig 2.2.1 Xgrid Architecture

Source: <http://www.cs.rit.edu/~ark/winter2008/730/team/3/report.pdf>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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|---|
| <p>Name</p> <p>Grid Computing Enabled Web Processing Service</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Middleware is software that is designed to support the interoperability of computer applications that use (and/or produce) different types of information. Middleware for geographic applications is particularly important because required information may have scale dependent relationships, which may cascade to cause problems related to level of generalization, dimension change, and categorical precision. The challenge of supporting interoperability is especially vexing when multiple types of data (from various sources and with variable error characteristics) must be meaningfully integrated for use in distributed applications. In this position paper we set out a general geographic information processing problem as a way to motivate discussion about the use of middleware to support analyses in distributed, heterogeneous Grid computing environments.</p> |
| <p>Main links and/or sources</p> <p>Baranski, B., 2008. Grid Computing Enabled Web Processing Service. GI Days 2008: Interoperability and spatial processing in GI applications. Munster, Germany. (http://www.gi-days.de/archive/2008/downloads/acceptedPapers/Papers/Baranski.pdf)</p> |

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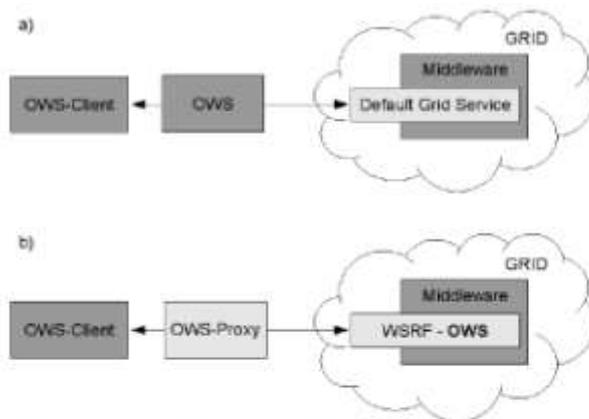
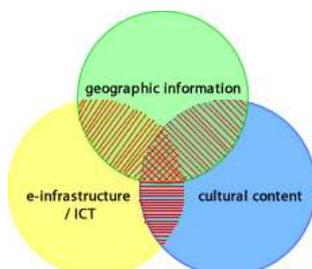


Figure 1: It is possible to distinguish between two categories of gridification of an OWS: a) low level gridification and b) high level gridification.

Source: <http://www.gi-days.de/archive/2008/downloads/acceptedPapers/Papers/Baranski.pdf>

Comments

Identification of use case



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| <p>Name</p> <p>Research of the application of grid computing on geographical information system</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Data Distribution of GIS has been made realization through WebGIS. With the increasing need of data sharing and GIS, WebGIS can no longer meet this need. Grid computing is a sharing model presented by computer experts to solve current network resources imbalance problem. This paper analyzes the weakness and problems of traditional GIS, and then gives the method of solving these problems with the technology provided by grid computing and web services. With the technology of middleware, this paper presents the architecture of Grid GIS and lists the techniques it needs. At last the paper discusses its implementation process of Digital Coal Mine Safety Grid GIS.</p> |
| <p>Main links and/or sources</p> <p>Cheng, J., Li, W., 2009. Research of the application of grid computing on geographical information system. IEEE International conference, Network Infrastructure and Digital Content. Beijing, China http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5360797&url=http%3A%2F%2Fieeexplore.ieee.org%2Fiel5%2F5353577%2F5360780%2F05360797.pdf%3Farnumber%3D5360797</p> |

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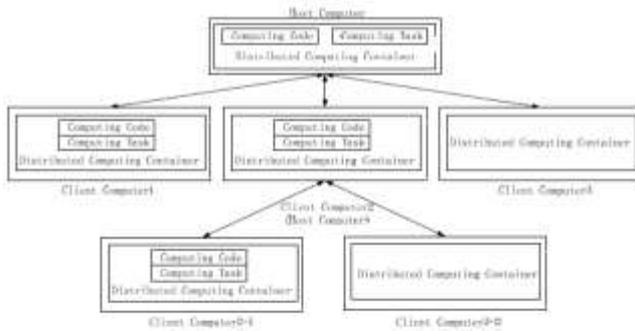


Figure 1. Framework of distributed parallel computing mode

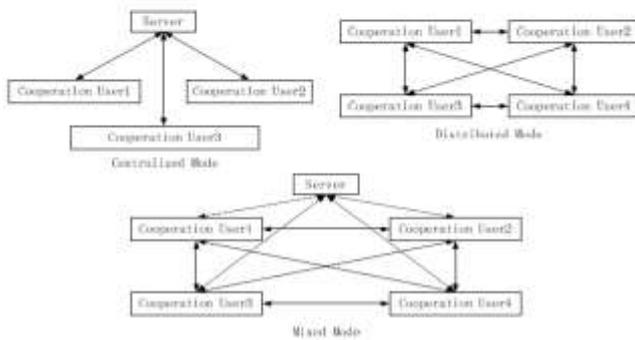


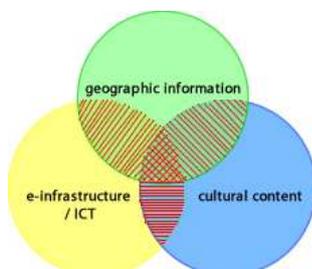
Figure 2. Framework of cooperation computing mode

Source:

<http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5360797&url=http%3A%2F%2Fieeexpl ore.ieee.org%2Fiel5%2F5353577%2F5360780%2F05360797.pdf%3Farnumber%3D5360797>

Comments

Identification of use case



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| <p>Name</p> <p>Using a Computational Grid for Geographic Information Analysis: A Reconnaissance</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>High performance computing has undergone a radical transformation during the past decade. Though monolithic supercomputers continue to be built with significantly increased computing power, geographically distributed computing resources are now routinely linked using high-speed networks to address a broad range of computationally complex problems. These confederated resources are referred to collectively as a computational Grid. Many geographical problems exhibit characteristics that make them candidates for this new model of computing. As an illustration, we describe a spatial statistics problem and demonstrate how it can be addressed using Grid computing strategies. A key element of this application is the development of middleware that handles domain decomposition and coordinates computational functions. The development of Grid portals that are designed to help researchers and decision makers' access and use geographic information analysis tools are also discussed.</p> |
| <p>Main links and/or sources</p> <p>Armstrong, M. P., Cowles, M. K., Wang, S., 2005. Using a Computational Grid for Geographic Information Analysis: A Reconnaissance. <i>The Professional Geographer</i>, 57(3) 2005, pages 365–375. (http://www.cigi.illinois.edu/publications/2005/ComputationalGridsGeographicalAnalysis-ProfetionalGeographer-Armstrong-et al.pdf)</p> |

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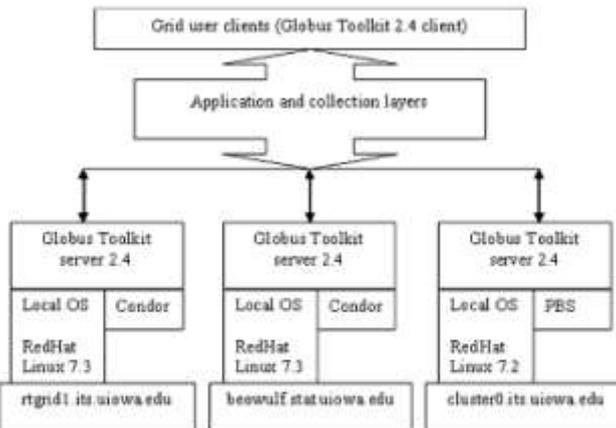


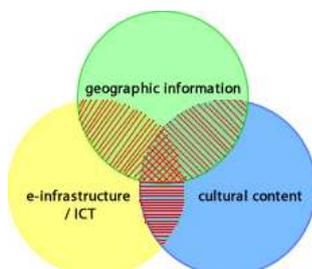
Figure 3. Software configuration of the Grid toolset.

Source:

<http://www.cigi.illinois.edu/publications/2005/ComputationalGridsGeographicalAnalysis-ProfetionalGeographer-Armstrong-et-al.pdf>

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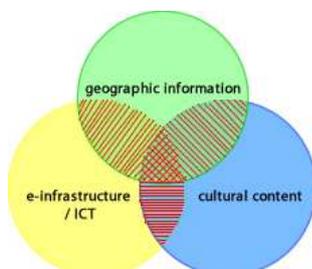
Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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| <p>Name</p> <p>Use of grid computing for modelling virtual geospatial products</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Earth science research and applications usually use Distributed Geospatial information Processing (DGIP) services and powerful computing capabilities to extract information and knowledge from large volumes of distributed geospatial data. Conceptually processing can be abstracted into a logical model that utilizes geospatial domain knowledge to produce new geospatial products. Using this idea, the geo-tree concept and the proposed geospatial Abstract Information Model (AIM) have been used to develop a Grid workflow engine complying with geospatial standards and the Business Process Execution Language. Upon a user's request, the engine generates virtual geospatial data/information/knowledge products from existing DGIP data and services. This article details how to define and describe the AIM in XML format, describe the process logically with an AIM, including the geospatial semantic logic, conceptually describe the process of producing a particular geospatial product step by step from raw geospatial data, instantiate AIM as a concrete Grid-service workflow by selecting the optimal service instances and data sets, and design a Grid workflow engine to execute the concrete workflows to produce geospatial products.</p> |
| <p>Main links and/or sources</p> <p>Chen, A., Di, L., Wei, Y., Bai, Y., Liu, Y., 2009. Use of grid computing for modelling virtual geospatial products. International Journal of Geographical Information Science – Distributed, Geographic Information Processing Research, Vol.23, Issue 5. (http://dl.acm.org/citation.cfm?id=1593581&CFID=78222516&CFTOKEN=19385863)</p> |
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Identification of use case



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| <p>Name</p> <p>Using Grid Computing for Rendering to Support 3D Animation Training Courses</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Rendering of an animated scene is considered to be one of the most important steps in 3D animation construction. Rendering basically converts 3D geometric models into graphic images. In 3D animation training courses, rendering complex 3D models is a very time consuming task since thousands of frames are needed to create an animation. It is considered one of the major limitations for creating professional 3D animation. This paper presents the use of grid computing for 3D rendering. It can reduce the rendering time and still maintain the quality of the final animation. Software and system architecture solutions are proposed and enveloped. A graphical user interface (GUI) plug-in and web portal were developed in order to access grid computing facilities. Animators are able to render highly complex 3D models in order to create their animation sequences by using high performance grid computer technologies, monitor rendered scenes, and download the finished images from the server to their own computer. These applications can be used as tools to assist animators in developing their animations.</p> |
| <p>Main links and/or sources</p> <p>Premchaiswadi, W., Tungkasthan, A., Jongsawar, N., 2009. Using Grid Computing for Rendering to Support 3D Animation Training Courses. Proceedings of world Conference on E-Learning on Cooperate, Government, Healthcare, and Higher Education, Vancouver, Canada (http://phditsiamuresearch.pbworks.com/f/017.pdf)</p> |

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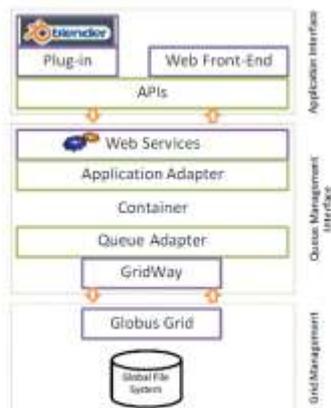
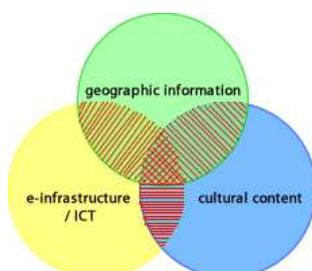


Fig. 1. Software architecture for 3D animation rendering on grid computing.

Source: <http://phditsiamuresearch.pbworks.com/f/017.pdf>

Comments

Identification of use case



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| <p>Name</p> <p>Using Web Portal for 3D Grid-Based Rendering</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>This paper presents the system architecture and the use of web portal¹ for 3D animation rendering on grid computing. A web portal was specifically designed and developed to facilitate the animators for accessing grid computing facilities more conveniently. Animators are able to render highly complex 3D models in order to create their animation sequences by using high performance grid computer technologies, monitor rendered scenes, and download the finished images from the server to their own computer through web portal. It can be used as a tool to assist animators in developing their animations and motivate them to produce a better quality animation within optimum cost and time parameters.</p> |
| <p>Main links and/or sources</p> <p>Premchaiswadi, W., Tungkasthan, A., Jongsawar, N., 2008. Using Web Portal for 3D Grid-Based Rendering. International Conference on ICT & Knowledge Management, Bangkok, Thailand. (http://phditsiamuresearch.pbworks.com/f/011.pdf)</p> |

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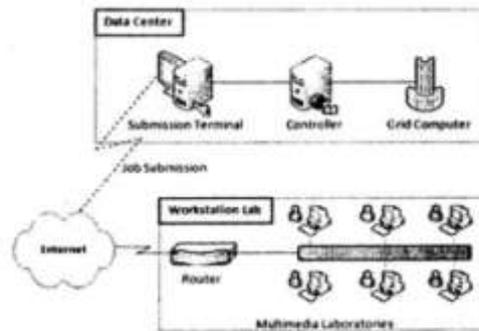
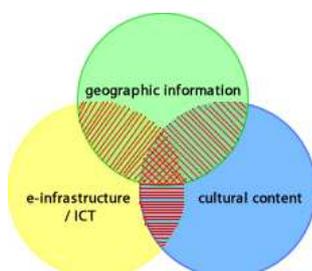


Fig. 1. System architecture for 3D animation rendering on grid computing.

Source: <http://phditsiamuresearch.pbworks.com/f/011.pdf>

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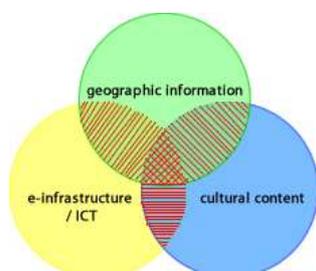
Identification of use case



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| <p>Name</p> <p>Digital library grid: A roadmap to next generation digital libraries using grid technologies</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>In the current scenario, data is increasing rapidly. A chunk of data is being accumulated resulting in knowledge generation. Access to global literature, books, and articles require efficient data management and querying techniques. The consequences associated are requirements of very large storage resources, complex queries, interoperability and scalability across global environment. The Integration of grid, data grid, and digital library solves various issues related to the upcoming globalization of digital libraries. Grid based digital library concept & examine the synergies between these data management systems, which would help in future evolution of digital libraries is proposed.</p> |
| <p>Main links and/or sources</p> <p>Joshi, H., Jakhaira, J. C., 2006. Digital library grid: A roadmap to next generation digital libraries using grid technologies. International Convention CALIBER-2006, Gulbarga, Ahmadabad. (http://ir.inflibnet.ac.in/dxml/bitstream/handle/1944/561/19(cal%2006).pdf?sequence=1)</p> |
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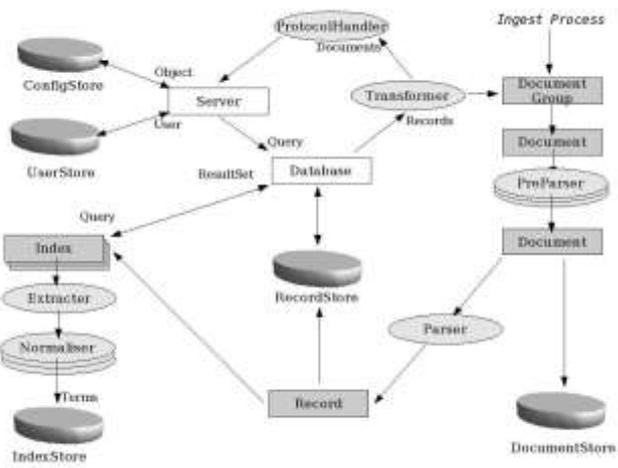
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| <p>Name</p> <p>Grid-Based Digital Libraries: Cheshire3 and Distributed Retrieval</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>The University of California, Berkeley and the University of Liverpool are developing an Information Retrieval and Digital Library system (Cheshire3) that operates in both single-processor and "Grid" distributed computing environments. This paper discusses the architecture of the system and how it performs Digital Library tasks in a Grid computing environment. In order for Information Retrieval in the evolving Grid parallel distributed computing environment to work e-actively, there must be single edibles and extensible series of Grid Services with identifiable objects and a known API to handle the IR functions needed for Digital Libraries and other retrieval tasks. The Cheshire3 system builds upon the Cheshire project to define and implement an set of objects with precisely defined roles that permit DL operations to be distributed over many nodes on a network, vastly increasing the throughput of data for compute and storage intensive processes with little overhead beyond single processor solutions.</p> |
| <p>Main links and/or sources</p> <p>Larson, R. R., Sanderson, R., 2005. Grid-Based Digital Libraries: Cheshire3 and Distributed Retrieval 5th ACM/IEEE Joint Conference on Digital Libraries, Colorado, USA. (http://cheshire.berkeley.edu/sp245-Larson.pdf)</p> |

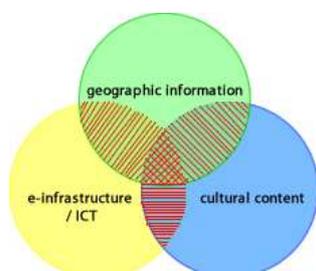
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Source: <http://cheshire.berkeley.edu/sp245-Larson.pdf>

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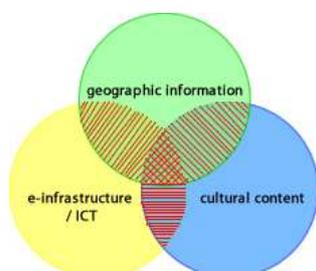


Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>Cloud Computing in the Application of Digital Library</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Digital library is a development-oriented hw and sw integration platform, through to technical and the product integration, each kind of carrier digitization, carries on the effective deposit and the organization, provides the network the effective service. After Digital library technology popularization, provided the high grade information service but simultaneously also to expose all sorts of questions unceasingly, because the zones of different the current economic condition limit presented the development not balanced phenomenon, the regional resources shared with difficulty, form each one information isolated island or the resources are redundant, create the resources the waste, satisfied the aggregate demand with difficulty, the cloud computing possibly provides a good plan day by day for this kind of phenomenon. Cloud computing is distributed and parallel processing, and the development of grid computing, which will focus on the task of computing and access to the cluster server on the network, users can be calculated by clouds of information platform of Internet use, thus solving storage resources sharing and share data.</p> |
| <p>Main links and/or sources</p> <p>Lie, Y., Wunjan, L., 2010. Cloud Computing in the Application of Digital Library. International Conference on Intelligent Computation Technology and Automation, Changsha, China. (http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5523201&url=http%3A%2F%2Fieeexplore.ieee.org%2Fiel5%2F5521356%2F5522426%2F05523201.pdf%3Farnumber%3D5523201)</p> |
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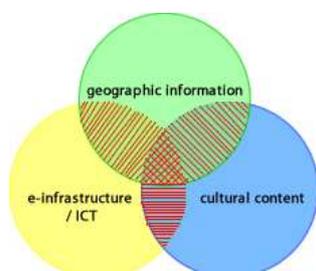
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| <p>Name</p> <p>Cloud Computing Primer: Steps for using the cloud in Your Museum</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Cloud Applications eliminate the need to install and run the application on the customer’s own computer, thus alleviating the burden of software maintenance, ongoing operation, and support. Utility computing is a style of computing where scalable and elastic IT-related capabilities are provided as a service to external customers using Internet technologies. Cloud computing is one of the top 15 technology trends and that it warrants investment to gain the experience necessary to take advantage of it in its many forms to transform the organization into a more efficient and responsive service provider to the business.</p> |
| <p>Main links and/or sources</p> <p>Dawidow, A., Moad, C., Stein, R., 2009. Cloud Computing Primer: Steps for using the cloud in Your Museum. Museum Computer Network Conference 2009, Portland, USA (http://www.slideshare.net/cwmoad/cloud-computing-workshop)</p> |

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>Libraries and the Cloud</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>Cloud computing is a major shift in the way we're approaching computing as both individuals and organizations, and is being referred to by many as an IT revolution. Today's cloud services make data and computing capabilities portable, sharable, and accessible from any online device, are OS-neutral, and usually easy to use. Libraries have already begun to adopt cloud services to alleviate their IT departments and increase efficiency. They are using these new services to host their library websites, back up media collections, store and access bibliographic data and much more. This workshop explores the major types of cloud solutions which are available, their benefits and limitations, and the different ways libraries are implementing them.</p> |
| <p>Main links and/or sources</p> <p>Kroski, E., 2010. Grid Libraries and the Cloud. Online Information 2010. London, UK. (http://www.ellyssakroski.com/workshops.html)</p> |

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"The days of each library operating its own local servers have largely passed. This approach rarely represents the best use of library space and personnel."

Marshall Breeding

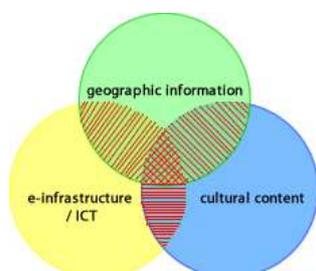
Director for Innovative Technologies and Research, Jean and Alexander Heard Library, Vanderbilt University



Source: <http://www.ellysakroski.com/workshops.html>

Comments

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|---|
| <p>Name</p> <p>Museums and Cloud Computing: Ready for Primetime, or Just Vapourware?</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, research</p> |
| <p>Short description</p> <p>The promise of distributed computing has long been touted by computer scientists working on Grids or in Clouds, but is the realization of these goals finally at hand? Recently several commercial offerings have generated a lot of attention for their potential to revolutionize the way business computing is conducted. The field has already seen several interesting and innovative business models spring up with their core computing process firmly anchored in the cloud (Horrigan, 2008). Does the same hold true for museums? What are the benefits and risks associated with moving our institutional computing to the cloud? Is cloud computing a viable option for hosting the rich media and content common to many museums today, or is it still vaporware in need of more time? This paper discusses these questions and poses suggestions regarding how museums can begin to utilize cloud computing services.</p> |
| <p>Main links and/or sources</p> <p>Moad, C., Bacht, E., Stein, R., 2009. Museums and Cloud Computing: Ready for Primetime, or Just Vaporware? Museums and the web 2009. The international conference for culture and heritage on-line, Indiana, USA (http://www.museumsandtheweb.com/mw2009/papers/moad/moad.html)</p> |

Graphical display

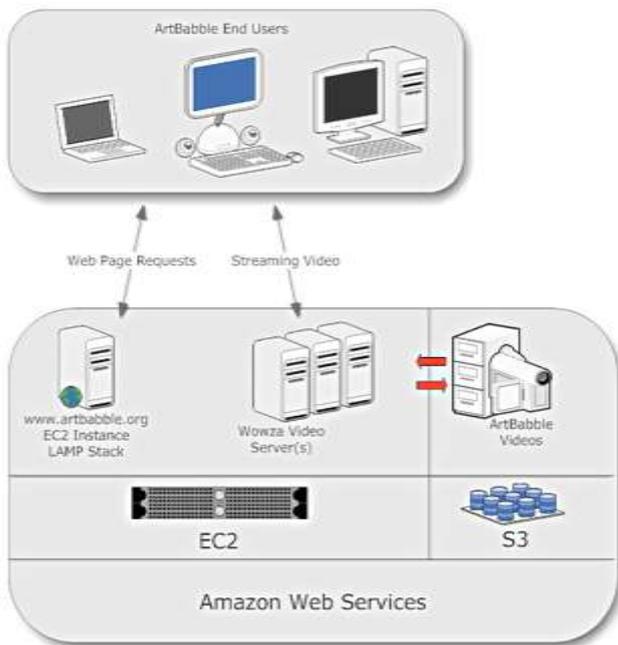
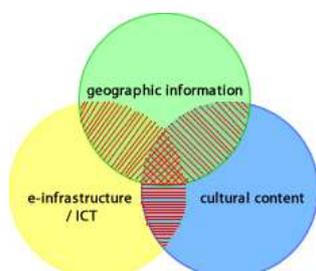


Fig 1: Network Layout for ArtBabble

Source: <http://www.museumsandtheweb.com/mw2009/papers/moad/moad.html>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

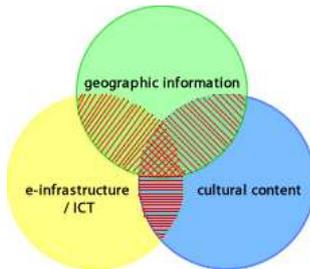
| |
|--|
| <p>Name</p> <p>A GIS in cultural heritage based upon multiformat databases and hyper medial personalized queries</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research, Atienza in Guadalajara, San Lorenzo de El Escorial in Madrid, Spain</p> |
| <p>Short description</p> <p>The Cultural Heritage has been usually studied from an objective perspective, using the objective data that can be collected through quantitative methods. But the study of the Cultural Heritage has also other perceptive dimensions -not just the visual ones- that must be considered when the final target is to investigate the Cultural Heritage as a whole. Those perceptive dimensions add subjective information as they complete the usual objective data with other multiformat data sets that bring to the investigation other important informations, such as the urban soundscape or the historical memory of the users. The perceptual data sets must be obtained by means of other methods such as inquiries, mental maps, soundwalks, etc. that are yet being applied in other scientific branches like Sociology or the Environmental Psychology. With these transdisciplinary techniques we incorporate the user's point of view to the search and not only the experts' one.</p> |
| <p>Main links and/or sources</p> <p>Chiasa, P., Abada, T., Echeverría, E., Da Casaa, F., Celisa F., 2007. A GIS in cultural heritage based upon multiformat databases and hyper medial personalized queries. XXI International CIPA Symposium, Athens, Greece (http://www.isprs.org/proceedings/XXXVI/5-C53/papers/FP043.pdf)</p> |
| <p>Graphical display</p> |

Comments

GEOCODED CULTURAL CONTENT



Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

Name

Accessing Heritage Documents according to Space Criteria within Digital Libraries

Type and geographical area

Geographic information, ICT, cultural content, research

Short description

Local cultural heritage document collections are characterized by contents strongly attached to a territory and its associated land history. Our contribution aims at enhancing such a content retrieval process efficiently each time a query includes geographic criteria. We propose a unified model for a formal representation of geographic information. This geographic model allows space features to be described independently of their representation mode (text, graphics) in the documents.

A prototype implementing geographic Information Extraction (IE) and geographic Information Retrieval (IR) processes has been developed. Geographic IE with semantic techniques combined to classic IE approaches has been processed and then implemented implement geographic IR with intersections researching algorithms: these algorithms search for all geocoded entities in the documents collections indexes which intersect any entity in the user's query.

Main links and/or sources

Marquesuzaà, C., Etcheverry, C. P., Sallaberry, C., Baziz, M., 2008. Accessing Heritage Documents according to Space Criteria within Digital Libraries. Journal of Digital Information Management 6, 1 (http://hal.inria.fr/docs/00/35/30/89/PDF/Marquesuzaa_alJDIM.pdf)

Graphical display

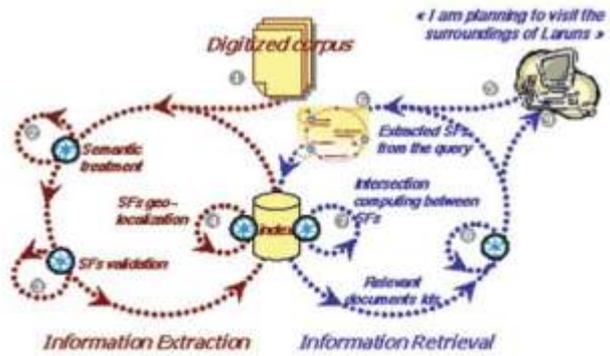
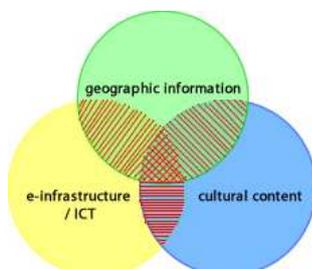


Figure 2. The PIV system – Information Extraction and Retrieval processes

Source: http://hal.inria.fr/docs/00/35/30/89/PDF/Marquesuzaa_aIJDIM.pdf

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>CultureMap London</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, prototype, London, UK</p> |
| <p>Short description</p> <p>CultureMap is the pilot for a new online resource bringing information about cultural provision in London together with data about users and audiences, all linked to maps showing the city's infrastructure and population. Much of this information is already available through different sources, but it's not joined up and not easily accessed. CultureMap changes that and makes it easy to see how provision, users and infrastructure are inter-related. It is possible to view provision and audiences as they are distributed across the city as a whole, or to focus on a particular sub-region, borough or ward. The data can be viewed from a range of perspectives, to look instead, say, at the distribution of certain kinds of provision, or types of audiences, related to demographic information. It will help us to understand who does use cultural services - and to target those that don't. The possibilities are endless but CultureMap will be developed to deliver the information that partners find most useful.</p> |
| <p>Main links and/or sources</p> <p>http://www.culturemaplondon.org/explained_cm.htm (Arts Council England, Audiences London)</p> |

Graphical display

CultureMap London

[CultureMap explained](#) [Launch the maps](#) [Tips on mapping](#) [Data and resources](#) [Feedback/contact](#) [Home page](#)

Tips on mapping

Note: The pilot stage for this project has come to an end and the mapping section is no longer updated. The page below is for information only.

There is a wealth of detailed information that can be accessed on the interactive map. The following page will help you to see the maps to their full potential. Click on a topic or scroll down the page:

Quick tutorial:

- >> [Click here for mapping overview](#)

Additional topics:

- >> [Different map versions \(London wide / Regional\)](#)
- >> [Using layers](#)
- >> [Load times](#)
- >> [Map buttons & controls](#)
- >> [Queries explained \(the links to thematic layers\)](#)
- >> [Manual zooming](#)

WANT TO FIND OUT MORE ABOUT THE DATA?
- See our [Data & resources](#) section by clicking here

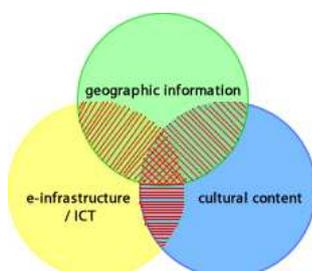


Source: http://www.culturemaplondon.org/explained_cm.htm

Comments

The pilot stage for this project has come to an end and the mapping is no longer available as an interactive online resource. The page is for information only.

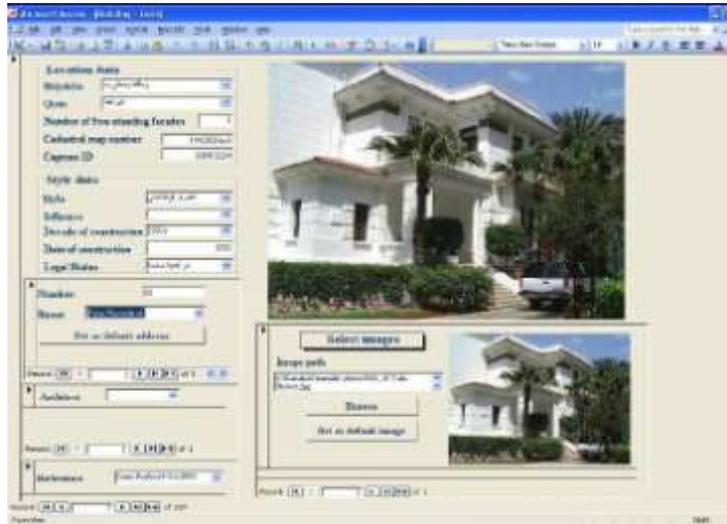
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>Cultnat' experience in Geo-coding culture heritage content - The case of El Darb El Ahmer and downtown Cairo</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research, examples from Egypt</p> |
| <p>Short description</p> <p>The aim of Cultnat is to carry out the documentation of Egyptian heritage both cultural and natural. For that purpose there are ongoing documentation programs. First one is to carry out the documentation of Egyptian 19th and 20th century architectural and urban heritage: Systematic inventories of architectural and urban heritage, Photographic documentation, Geographic information systems (GIS), Databases for information, Collection of massive archival material (maps, architectural drawings, old photographs...). The second one is to Digitalize Architectural Archive.</p> <p>Overlays in Cultnat are: The archeological map of Egypt, The architectural and urban heritage of Egypt, Egyptian cartographic heritage, Egyptian intangible heritage, Egyptian arts and music, The photographic memory of Egypt, Islamic scientific manuscripts, The natural heritage of Egypt.</p> |
| <p>Main links and/or sources</p> <p>http://www.cultnat.org/</p> <p>Wahba, M., 2012. Cultnat' experience in Geo-coding culture heritage content - The case of El Darb El Ahmer and downtown Cairo. Indicate international workshop in Ljubljana: Geocoded digital cultural content. (http://www.indicate-project.eu/getFile.php?id=357)</p> |

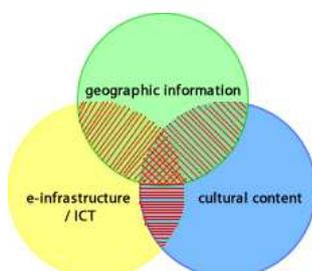
Graphical display



Source: <http://www.indicate-project.eu/getFile.php?id=357>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
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| <p>Name</p> <p>Development of a GIS Based Information and Management System for Cultural Heritage Site, Case Study of Safranbolu</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research, Safranbolu, Turkey</p> |
| <p>Short description</p> <p>Documentation of the cultural heritage sites is extremely important for monitoring and preserving them. Turkey has many cultural heritage sites originating from the first human settlements in Catalhoyuk and Alacahoyuk and civilizations such as Byzantine, Seljuk and Ottoman. 3D modeling and digital recording of historical buildings in several locations of Turkey have been conducted and still continuing. The nine cultural sites in Turkey are included in the protection list of UNESCO as cultural heritage and one of them is the city of Safranbolu. In this study, outcomes and further studies of a research project related to study area was discussed in details.</p> |
| <p>Main links and/or sources</p> <p>Seker, D. S., Alkan, M., Kutoglu, H., Ackin, H., Kahya, Y., 2010. Development of a GIS Based Information and Management System for Cultural Heritage Site, Case Study of Safranbolu. FIG congress 2010. Facing the Challenges – Building the Capacity Sydney, Australia (http://www.fig.net/pub/fig2010/papers/fs02b%5Cfs02b_seker_alkan_et_al_4328.pdf)</p> |

Graphical display

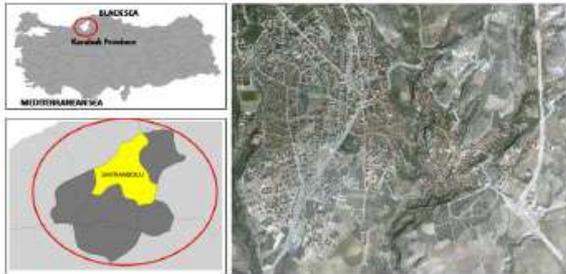


Figure 1. Location of the study area

Safranbolu consists of four distinct districts - the market place area of the inner city, known as Cukur (The Hole), the area of Kirankoy, Baglar (The Vineyards), and an area of more recent settlement outside the historic area. The city has about 2000 traces that are being protected in the natural tissue as an expression of the historical and cultural wealth. Rock Graves, mounds, Caravanserai and Turkish Baths, The Old Mosques, Shopping Districts, Water Vaults, Fountains, Tombs and Historical Houses are some of the traces that have survived.

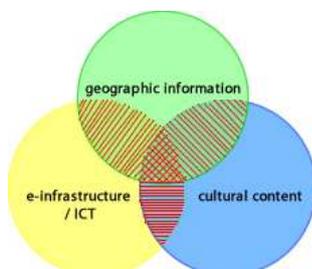


Figure 2. Different views of the historical buildings of Safranbolu (Ergin, 2005; Gunay, 1998).

Source: http://www.fig.net/pub/fig2010/papers/fs02b%5Cfs02b_seker_alkan_et_al_4328.pdf

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>Developing a Spatial Data Infrastructure for Cultural Heritage</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>This paper discusses the requirements for maintaining spatial datasets of the historic environment and their delivery through INSPIRE compliant services. Whilst there is a clear need for access to historic environment information by a range of audiences actively engaged in the management of the historic environment of Europe, delivery of relevant services is restricted to a narrow interpretation of the Protected Sites theme as statutory designations. A more expansive view of the theme is argued for to support policies and activities that impact upon the wider historic environment. The range and potential of information created through investigation and recording of the historic environment, often at public expense or interest, is discussed. The potential for data reuse generating savings, inspiring smarter working practices, and developing sustainable datasets is explored through case studies and proposals to establish a thematic geo-portal, web services and applications through the project ArchaeoLandscapes (ArcLand), are discussed.</p> |
| <p>Main links and/or sources</p> <p>McKeague, P., Corns, A., Shaw, R., 2011. Developing a Spatial Data Infrastructure for Cultural Heritage. Article under Review for the International Journal of Spatial Data Infrastructures Research. (http://inspire.jrc.ec.europa.eu/events/conferences/inspire_2011/presentations/67.pdf)</p> |

Graphical display

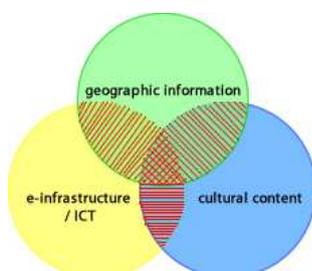
Figure 1: The Roman Empire: - a common cultural heritage



Source: http://inspire.jrc.ec.europa.eu/events/conferences/inspire_2011/presentations/67.pdf

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>Digital Atlas on the History of Europe since 1500</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, prototype, Central Europe</p> |
| <p>Short Description</p> <p>The "Digital Atlas on the History of Europe since 1500" is a project undertaken in an area of study on "Spatial Research in European History since 1500" at the Institute of European History, Mainz, Germany. The atlas combines thematic cartography with GIS-based mapping in order to create a visual and interactive history of the European state system since 1500.</p> |
| <p>Main links and/or sources</p> <p>www.atlas-europa.de</p> <p>http://www.digihist.de/html/HRR1648/WEB/INDEX.HTML (prototype of GIS)</p> |

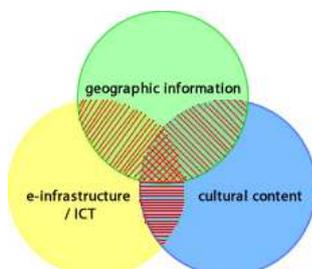
Graphical display



Source: www.atlas-europa.de

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|--|
| <p>Name</p> <p>Embedding GeoCrossWalk Final Report</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>The Embedding GeoCrossWalk project sought to provide a deeper understanding of how references to place in structured text can be researched and automatically extracted. The text collection used was the Hansards (proceedings) of the Lower House of the devolved Stormont Assembly between 1921 and 1972, usually known (and referred to hereafter) as 'The Stormont Papers'. The project's aims were threefold. Firstly it sought to deploy the GeoParser tool, developed previously by the Language Technology Group of Edinburgh University's School of Informatics, to georeference the Stormont Papers, using Natural Language Processing (NLP). The project used the Geoparser in conjunction with geonames.org, an open-source global gazetteer, to identify, tag and (where appropriate) disambiguate all references to location. Secondly, the project refined and developed a better understanding of the Geoparser tool's application to content of this kind, and highlighted. Finally, it laid the foundations for an expanded geospatial browsing capability for the Stormont collections, which will be implemented alongside the existing interface.</p> |
| <p>Main links and/or sources</p> <p>Dunn, S., Grover, C., 2009. Embedding GeoCrossWalk Final Report. JISC IE. Centre for e-Research, King's College London. London, U.K. http://www.jisc.ac.uk/media/documents/programmes/sharedservices/geoxwalk_embedding_report_final.pdf</p> |

Graphical display

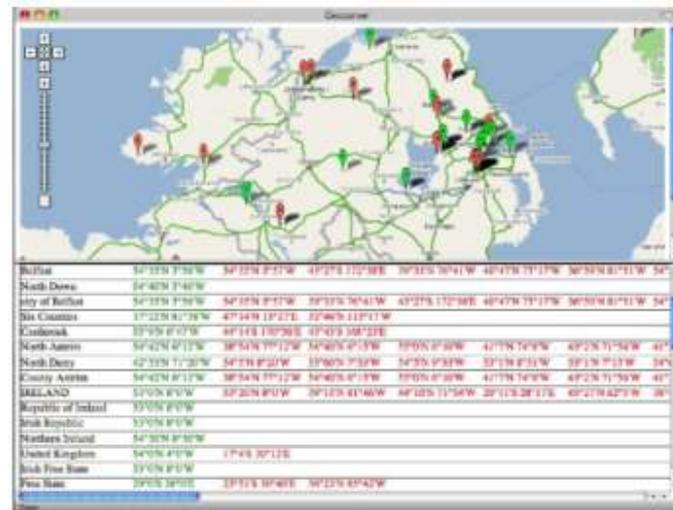


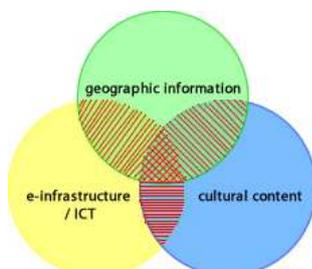
Fig. 1. Spatial locations in the Stormont Papers (from vol 45, 1959) identified with the GeoParser and resolved with GeoNames.

Source:

http://www.jisc.ac.uk/media/documents/programmes/sharedservices/geoxwalk_embedding_report_final.pdf

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|---|
| <p>Name</p> <p>Explorative user interfaces for browsing historical maps on the Web</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>Historical maps are a particularly interesting category: they are not only an illustration of accumulated geographical knowledge of the time; they also draw a fascinating picture of the cultural, political, scientific, religious and mythological context in which they were created. To the trained scholar, characteristics such as the style of cartographic representation, text inscriptions and legends, symbols and ornamental features, or specific geographical errors and misconceptions reveal a wealth of historical background information. To the student or the layperson, this information is not easily accessible. We propose a Web-based system that will make it possible for scholars to collaboratively work together in the interpretation of these features. To the general user, this information will become easily accessible when interpretations are made public. Thus the system represents a collaborative academic tool, as well as a showcase of academic work. Community involvement, joint aggregation and filtering of user contributed as well as externally linked data.</p> |
| <p>Main links and/or sources</p> <p>Simon, R., Korb, J., Sadilek, C., Baldauf, M., 2010. Explorative user interfaces for browsing historical maps on the Web. Published in e-Perimtron, Vol. 5, No. 3 (http://www.e-perimtron.org/Vol_5_3/Simon_et_al.pdf)</p> |

Graphical display

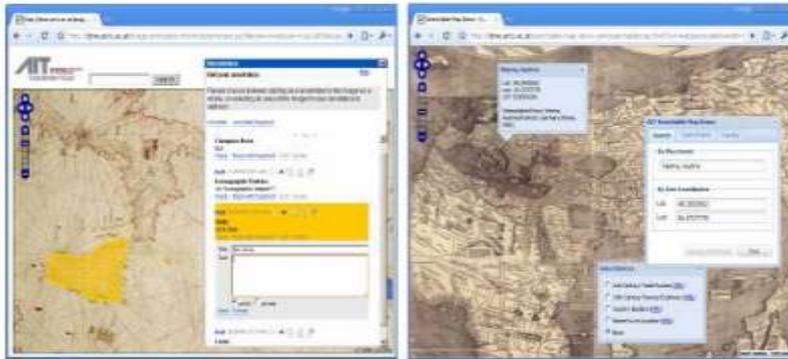
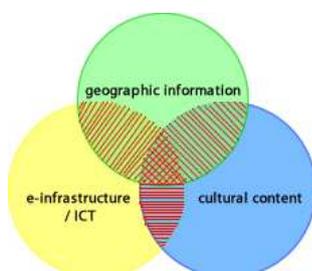


Figure 2: Map viewer prototype screenshots – phase I, annotations (left); phase II, geo-referencing and search (right).

Source: http://www.e-perimetron.org/Vol_5_3/Simon_et_al.pdf

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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|---|
| <p>Name</p> <p>Judaica Europeana Mapsearch</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Europe</p> |
| <p>Short description</p> <p>Judaica Europeana brings digitized Jewish heritage collections online to a single multilingual access point: Europeana.eu and it documents Jewish history and heritage in Europe with a focus on urban life. It offers online access to 3.5 million digital objects.</p> <p>Objects can be searched through Europeana collections or through Mapsearch to search by geographic area or by address. This API allows users to search Europeana for collection objects related to a geographic area. Users just drag the marker on the map to the desired location, or look up an address by typing in the address in the search box.</p> <p>Mapsearch works on Google Maps background.</p> |
| <p>Main links and/or sources</p> <p>http://www.judaica-europeana.eu/map/index.php?option=com_europeana&view=mapsearch&Itemid=108</p> |

Graphical display



The screenshot shows the Europeana Judaica Europeana website's map search interface. At the top left is the Europeana logo with the text 'Judaica Europeana' and the tagline 'Jewish contributions to Europe's cultural heritage'. Below the logo is a search bar with 'Mapsearch' and 'Advanced search' options. A text box explains: 'This API allows you to search Europeana for collection objects related to a geographic area. Drag the marker on the map to the desired location, or type up an address by typing it in the searchbox and press the 'Search' button.' Below this is a search box containing 'München' and a 'Search' button. A map of Europe is shown with a red pin in Munich, Germany. A pop-up window on the map displays the text: 'Found 1000 objects within 25 km of 80331 München, Germany' and a link 'click here to see the objects'. On the left side of the map, there is a vertical sidebar with navigation links: Home, About, Partners, About Europeana, Contact resources, Events, Knowledgebase, News and press releases, Contact, Information, Project structure, Virtual exhibitions, and Contact.

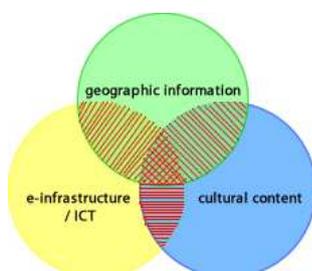
Source:

http://www.judaica-europeana.eu/map/index.php?option=com_europeana&view=mapsearch&Itemid=108

[http://www.judaica-](http://www.judaica-europeana.eu/map/index.php?option=com_europeana&view=mapsearch&Itemid=108)

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|---|
| <p>Name</p> <p>Geocode your Twitter network with NodeXL</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>As mobile devices become a major method for authoring and consuming social media, location data is increasingly a part of many posts, tweets, check-ins, and messages. Using this location data in network analysis opens up a range of new opportunities. Instead of a person – to – person social network, location data allows people to be linked to places and, by extension, places can be linked to other places based on the patterns of connection people create when located in a particular place. A convergence of network analysis and Geographic Information Systems is underway.</p> <p>NodeXL (v.156) has the first of a series of features that will start to approximate the experience displayed in the video by supporting the import of location data about networks and plotting networks onto maps. For now, you can import latitude and longitude data that Twitter makes available. If you check “Add a Tweet column to the Vertices worksheet” in NodeXL, Data, Import, From Twitter Search Network or From Twitter User Network, the Twitter user’s geographical coordinates will be added to the Vertices worksheet when they are available.</p> |
| <p>Main links and/or sources</p> <p>Smith, M. A., 2010. Geocode your Twitter network with NodeXL. Report published on website: Connected Action - Sociology and the Internet, Social Media, Networks and Mobile Social Software (http://www.connectedaction.net/2010/12/19/geocode-your-twitter-network-with-nodexl/).</p> |

Graphical display

The screenshot shows the 'Connected Action' website. The main heading is 'Connected Action' with the subtitle 'Sociology and the Internet, Social Media, Networks and Mobile Social Software'. The navigation menu includes 'HOME', 'SITE', 'NODEXL', 'BOOK', 'CONSULTING & SPEAKING', 'MARC SMITH', and 'RSS'. The main content area features a search bar, a 'SUBSCRIBE TO CONNECTED ACTION' form, and a 'RELATED CONTENT' section with social media icons. The featured article is 'Geocode your Twitter network with NodeXL' by Marc Smith, dated December 19th, 2010. It includes a table of latitude and longitude data and a paragraph about mobile devices and social media.

Geocode your Twitter network with NodeXL
December 19th, 2010 by Marc Smith · 4 Comments

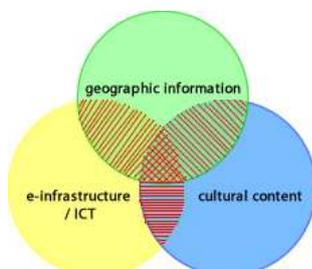
| Latitude | Longitude |
|----------|-----------|
| 51.2289 | 6.7757 |
| 50.2632 | 15.8117 |

As mobile devices become a major method for authoring and consuming social media, location data is increasingly a part of many posts, tweets, check-ins, and messages. Many Twitter clients, for example, can add the user's current latitude

Source: <http://www.connectedaction.net/2010/12/19/geocode-your-twitter-network-with-nodexl/>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|--|
| <p>Name</p> <p>German Heritage Register Bayern – Nürnberg</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Nürnberg</p> |
| <p>Short description</p> <p>Building Authority (The Local Monument Protection Authority) provides information on historic buildings. Register includes the protected status of nearly 3,000 individual landmarks and 33 land sites, including the entire Old Town.</p> <p>The city of Nuremberg is one of the ancient imperial cities, and looks back on nearly a thousand years of history. Despite the almost complete destruction of the old city during the Second World War, the face of the medieval market town has been restored and preserved. In the register, the Building Authority, as lower conservation authority, offers information for property owners, planners, property consultants and other interested parties and gives the opportunity to learn extensively about the monument in Nuremberg.</p> |
| <p>Main links and/or sources</p> <p>http://www.nuernberg.de/internet/denkmalenschutz/</p> <p>http://online-service.nuernberg.de/denkmalenschutz/index.aspx?user=640100&lang=de</p> |

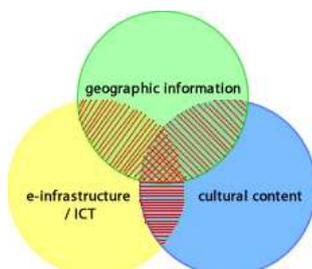
Graphical display



Source: <http://online-service.nuernberg.de/denkmalschutz/index.aspx?user=640100&lang=de>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>Atlas of Heritage and Architecture</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, France</p> |
| <p>Short description</p> <p>Atlas of Heritage and Architecture contents documentary and geolocation of documented heritage repositories for data from National database. Thematic are: architecture, industrial heritage and archaeological sites. The objectives of project are:</p> <ul style="list-style-type: none"> - compiling, for a specific territory, information about existing and potential heritage (archaeology, architecture, urban space, landscapes) and its status towards protection - to facilitate the knowledge and the management of cultural heritage - to guarantee data continuity - to allow exchanges of technical data with operational partners for territorial management and development - to provide access to the data for the widest possible public. |
| <p>Main links and/or sources</p> <p>http://atlas.patrimoines.culture.fr/atlas/trunk/</p> <p>Pinçon, G., 2012. Atlas of Heritage and Architecture. Indicate international workshop in Ljubljana: Geocoded digital cultural content. (http://www.indicate-project.eu/getFile.php?id=355)</p> |

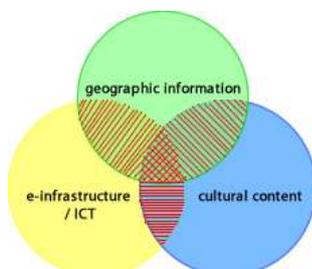
Graphical display



Source: <http://atlas.patrimoines.culture.fr/atlas>

Comments

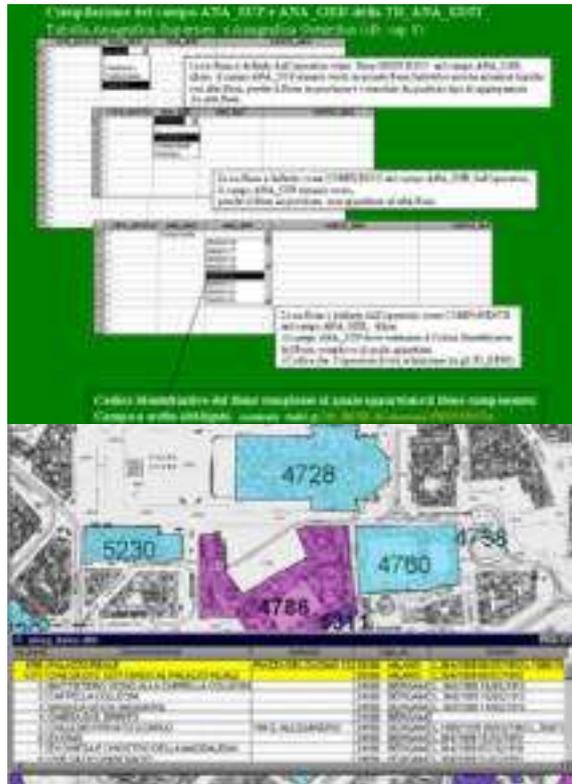
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|--|
| <p>Name</p> <p>Advanced GIS technologies to support georeferencing of the Cultural Heritage</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research, Lombardia, Italy</p> |
| <p>Short description</p> <p>The project “Georeferencing of Architectural Heritage” is part of a larger Regional Program of Development that provides the carrying out of the management aim “Achievement and optimization of the Informative System of Lombardia for the Risk Chart of Cultural Heritage”. The project aims to build, as pointed out in laws, the co-ordination of activities and specific competences that are necessary to reach the definitions of rules, methodologies and specific techniques for the Georeferencing of monumental heritage in the entire regional territory. Georeferentiation means the base to manage the cultural heritage integrated by environmental thematic coverage of soil characteristics and risk (multiple indexes ...) related to the physical and spatial geographical position of monuments. Here are related different methods for the acquisition of the geographic position of monuments, the spirit of draft proposal of specification and guide lines, new perspectives opened by the research and new fields of apply.</p> |
| <p>Main links and/or sources</p> <p>Achille, C. and Brumana, R., 2003. Advanced GIS technologies to support georeferencing of the Cultural Heritage. CIPA XIX International Symposium “New perspectives to save cultural heritage”, Antalya, Turkey (http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.125.5857&rep=rep1&type=pdf)</p> |

Graphical display

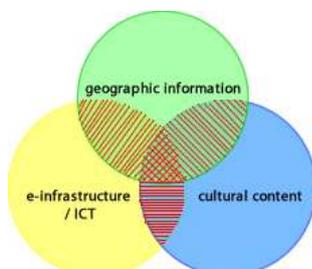


Source:

<http://citeseeerx.ist.psu.edu/viewdoc/download?doi=10.1.1.125.5857&rep=rep1&type=pdf>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|---|
| <p>Name</p> <p>Gis & Social Media Integration</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>This is a slide set that covers some ideas on how to integrate GIS and Social Media. It pulls ideas and concepts from other slide sets, but is specific to GIS and Social Media development, and covers important issues to be aware of for developers and users of Social media as twitter.</p> |
| <p>Main links and/or sources</p> <p>Laframboise, A., 2009. Gis & Social Media Integration. Slide show on Slideshare.net (http://www.slideshare.net/aGISGuy/gis-social-media-integration)</p> |

Graphical display



Social media data

1. **Text** – messages, tweets, streams, timelines...
2. **Media** – files, images, video...
3. **Profiles** – name, location, website, bio...

Benefits

Innovate new types of GIS applications

Real-time information (pull)

Reach wider audience (push)

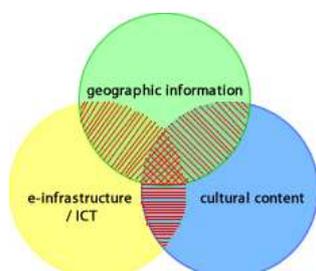
Improve collaboration and sharing

Source: <http://www.slideshare.net/aGISGuy/gis-social-media-integration>

Comments



Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>GIS system for the Catalan Cultural Heritage</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research, Catalonia, Spain</p> |
| <p>Short description</p> <p>The Geographical Information System for the Catalan Cultural Heritage is the main tool used for the geographical management of the Catalan Cultural Heritage. It offers analysis and data exploitations capacities and, through the eGIPCI application, becomes a useful database for dissemination and consultation needs.</p> |
| <p>Main links and/or sources</p> <p>Sala, N., 2011. GIS system for the Catalan Cultural Heritage. Indicate international workshop in Barcelona: Digital Cultural Heritage e-Infrastructure (http://www.i2cat.net/documents/Indicate_Slides/nuria_sala_gencat.pdf)</p> |

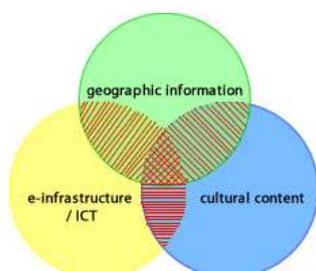
Graphical display



Source: http://www.i2cat.net/documents/Indicate_Slides/nuria_sala_gencat.pdf

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>GIS technologies for the study of the Roman agricultural landscape</p> |
| <p>Type and Geographical area</p> <p>Geographic information, ICT, cultural content, research, examples from Spain</p> |
| <p>Short Description</p> <p>This project aims to implement new technologies in GIS for the study of Roman agricultural landscape. It will work through case studies in coastal plains of northeast mainland (Tarragona, Barcelona and Empordà) that have conducted research with outstanding results. It is also expected to make comparative studies of specific cases with other sectors of the Mediterranean: Banta (Italy), Carthage (Tunisia) and Corinth (Greece).</p> <p>The project's main objective is to develop new methodologies based on geographic information systems (GIS) for verification, characterization and conceptualization of forms of territorial organization of the Roman period, especially the system of centuriation. The results of these studies will be reviewed after the introduction of digital technologies such as automated metrology, photogrammetry and remote sensing techniques for calculating visibilities, statistical systems and 3D representation.</p> |
| <p>Main links and/or sources</p> <p>http://www.icac.net/index.php?option=com_gprojects&task=prjshow&id=60&lang=en&Itemid (Classical Archaeology Catalan Institute, URV-ICAC)</p> |

Graphical display

The screenshot displays the ICAC website interface. At the top, there is a navigation bar with the ICAC logo and menu items: Home, What's going on, Sponsors, News & activities, and Contact. Below the navigation bar is a main content area with a sidebar on the left containing a 'SUBMISSIONS' menu. The main content area features a project titled 'Avances en tecnologies SIG per a l'estudi del paisatge agrari romà'. The project description includes the following text:

Data base: 01-01-2008 - **Data finalment:** 31-03-2010
Investigadors responsables: Ignasi Rà (URV-ICAC)
Investigadors participants: Inmaculada Ferrer (ICAC), Inmaculada Ferrer (ICAC), Marc Gilabert (Universitat de Jaume I), Jordi Indurain (University of Central Lancashire), Vicent Ferrer (Universitat d'Alacant)
Investigadors col·laboradors: Hèctor Pérez (ICAC), Oriol Garcia (ICAC)

The project aims to improve GIS technologies for the study of the agricultural landscape in the Roman period. It involves the development of a GIS database and the analysis of the landscape evolution in the Roman period. The project is part of the 'Avances en tecnologies SIG per a l'estudi del paisatge agrari romà' project, which is part of the 'Avances en tecnologies SIG per a l'estudi del paisatge agrari romà' project.

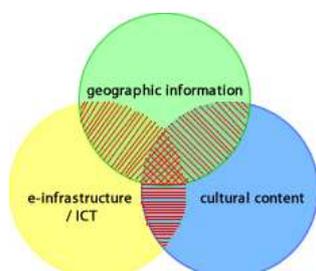
At the bottom of the page, there is a footer with contact information and logos for the Universitat de Tarragona, Departament d'Història i Geografia, and the project itself.

Source:

http://www.icac.net/index.php?option=com_gprojects&task=prjshow&id=60&lang=en&Itemid

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|---|
| <p>Name</p> <p>Locating London's Past</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, London, UK</p> |
| <p>Short description</p> <p>Locating London's Past provides an intuitive GIS interface enabling researchers to map and visualize textual and artefactual data relating to seventeenth and eighteenth-century London against John Rocque's 1746 map of London and the first accurate modern OS map. Records of crime, poor relief, taxation, elections, local administration, plague deaths and archaeological finds can all be searched and mapped on this site.</p> <p>First, Museum of London Archaeology (MOLA) created geo-referenced versions of John Rocque's 1746 map of London and the 1869-80 Ordinary Survey map. Second, place names in all the datasets (except the archaeological datasets of clay pipes and ceramic shards which were already geo-referenced) needed to be linked to the indexed place names on the maps. Third, to enable per-capita statistics to be compiled, population data were compiled for all of London's parishes. Fourth, a new web-based user interface was created using a Google maps container.</p> |
| <p>Main links and/or sources</p> <p>http://www.locatinglondon.org/</p> |

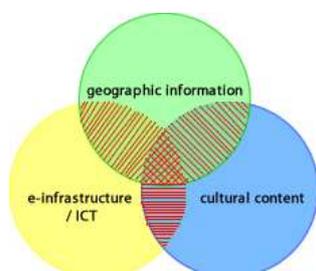
Graphical display



Source: <http://www.locatinglondon.org/>

Comments

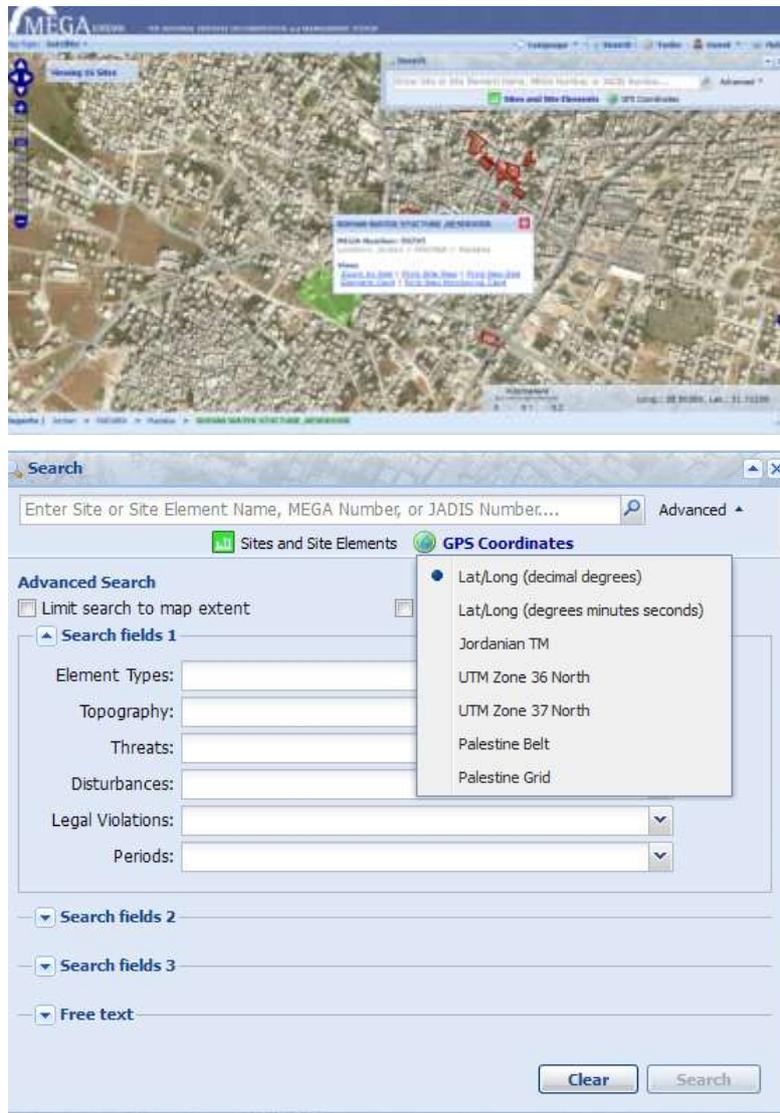
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
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| <p>Name</p> <p>MEGA-J Middle East Geographical and Archaeological database</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Jordan</p> |
| <p>Short description</p> <p>The Middle Eastern Geodatabase for Antiquities (MEGA)- Jordan is a custom-built geographic information system (GIS) specifically designed to inventory, manage and protect Jordan's archaeological sites at the national level.</p> <p>It has been developed using state-of-the-art technology and requires no more than basic computer skills to enter site and site element boundaries and buffer zones, site details such as condition, threats and other monitoring updates; and to print out detailed, up-to-date reports on Jordan's vast number of archaeological sites. The system, in both Arabic and English, is web-based and will standardize and centralize data for the Jordan territory.</p> |
| <p>Main links and/or sources</p> <p>http://megajordan.org/</p> <p>Lash, A. and Hunaiti, T., 2012. MEGA-J Middle East Geographical and Archaeological database. Indicate international workshop in Ljubljana: Geocoded digital cultural content. (http://www.indicate-project.eu/getFile.php?id=353)</p> |

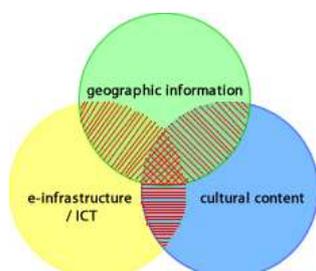
Graphical display



Source: <http://megajordan.org/Map>

Comments

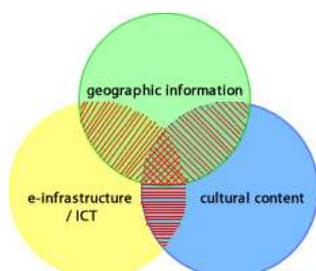
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|--|
| <p>Name</p> <p>NAC Locator - A Universal Geocoding Solution for the Entire World</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, World</p> |
| <p>Short description</p> <p>The Geocoding Solution is for websites to geocode any location in the world. The user input is just their NAC (Natural Area Code) on the web form as more people know their NAC or can get their NAC on this map that will be more reliable than any geocoding software. With the NAC, you can map the exact location, get the driving directions to it or search its nearby businesses with links.</p> <p>The map enables basic GIS functionalities and identification of a certain location..</p> |
| <p>Main links and/or sources</p> <p>http://www.nacgeo.com/nacconversion.asp</p> |

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>National Heritage List for England</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, England</p> |
| <p>Short description</p> <p>The National Heritage List for England (NHLE) is the official database which provides access to up to date information on all nationally designated heritage assets. It is a searchable database including Listed Buildings, Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields and Protected Wreck Sites.</p> <p>This information has been transferred from a number of different systems to create a unified database.</p> |
| <p>Main links and/or sources</p> <p>http://list.english-heritage.org.uk</p> <p>http://www.english-heritage.org.uk</p> |

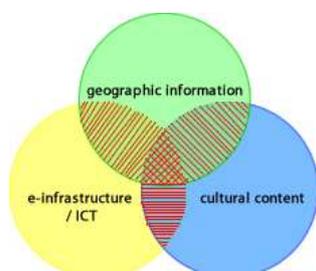
Graphical display

The screenshot shows the English Heritage website's 'Map Search' interface. At the top, there is a navigation menu with 'HOME', 'PROFESSIONAL', and 'ABOUT US'. Below this is a search bar and a 'Search etc.' button. The main heading is 'The National Heritage List for England'. On the left, there is a sidebar with a 'Map search' button and a list of links including '01. The National Heritage List for England', '02. Listing and Designation Application Form', '03. Appealing an entry on the Heritage List', '04. Consultation process for the Heritage List', '05. Review process for the Heritage List', and '06. Download Geographical Data'. The central part of the page features a map of England with a red rectangular search area. Below the map is a legend with the following items: Listed Buildings (red triangle), World Heritage Sites Property Boundary (orange square), World Heritage Sites Buffer Zone (yellow square), Scheduled Ancient Monuments (red square), World Heritage Sites (blue square), Parks and Gardens (green square), Buildings at Risk (red square), Building Preservation Orders (blue square), and Cadastres of Inequality (grey square). The map also shows geographical features like 'Wales' and 'River Severn'.

Source: <http://list.english-heritage.org.uk/mapsearch.aspx>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>National Heritage Register Netherlands</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Netherland</p> |
| <p>Short description</p> <p>The National Heritage Register Netherlands contains detailed information concerning any monuments in Netherland, which the government appointed as protected monuments of national importance. Almost all national monuments are in private ownership.</p> <p>Monuments of the municipal and regional importance are not included in this register.</p> <p>The monument registered in the National Heritage Register Netherlands has the protected status from the date of registration. The register contains important information about the extent of protection.</p> |
| <p>Main links and/or sources</p> <p>http://monumentenregister.cultureelerfgoed.nl</p> <p>http://www.cultureelerfgoed.nl</p> |

Graphical display

Monumentenregister Actualiteit gegevens: 02-03-2012

[Zoek een monument](#) | [Lijstlijzer](#)

Zoeken

Tips:

- Zoeken op gemeentevrouw geeft een grotere kans op een match dan zoeken op postadres
- Omzet met alle monumenten aan de hand hebben, kan zoeken op gemeentelijke functie of op straat op v.v.1. een goed alternatief zijn.

Provincie:
 Gemeente:
 Woonplaats:
 Straat:
 Huizennumm:
 Postcode:
 Vrijstaand:
 Nummer of bouwnummer:
 Staan:
 Hoofdcategorie:
 Subcategorie:
 Oorsp. functie:

Dit website bevat gegevens van alle monumenten in Friesland die voor het Rijk zijn aangemerkt als beschermd monument. Deze Rijksmonumenten zijn van nationale betekenis. Bijna alle vrijstaande monumenten zijn in particulier bezit.
 Monumenten die door gemeenten en provincies zijn beschermd zijn niet in deze website opgenomen.
 Een monument dat in registers is in het register heeft de beschermde status vanaf de datum van wijziging. In de wijzigingsmededeling van een monument is het algemeen dan heeft het een overhaulende status.
 De Lijstlijzer bevat belangrijke informatie over de omvang van de bescherming.





Monumentsnummer: 15561
Vrijhof 1 9172 MR te Ferwert
 = [adres](#) | [07111](#) | [Vrijstaand](#) =

Algemeen

| | | | |
|---------------------|--------------|-------------|----------------|
| Monumentsnummer | : 15561 | Locatie | |
| Nummersysteem | : | Provincie | : Friesland |
| Status | : Beschermd | Gemeente | : Ferwerdadiel |
| Coördinaten | : | Woonplaats | : Ferwert |
| Zaakwijzigingsdatum | : | Beoordeling | : |
| Overname register | : 16-03-1971 | Stat/vrij | : Overheid |
| Kadaster nummer | : 3465/23 | W.F. nummer | : 34007-004730 |
| Op. datum | : | | |

Omschrijving

Herf.Kerk, grote gotische dorpskerk op door weg ingeweken kerkhof, acht traveeën diep en gevelen door vijfzijdige koepeltop. Aan de westzijde twee toren uit drie geleelagen bestaand in door brede rozen versierd. Aan de zuidzijde 17e eeuwse ingangserbouw. De kerk bezit twee 17e eeuwse preekstoel met schiedhouer en herkbeeld en twee koperen kerkbanken, doophek, overhoofde bank, kerfde spijl banken met gewone kerkbanker boven de orgelen, vierde gevelen kerkerk, kerkhof met gevel...

[Lees verder](#)

Adressen

| Hoofd-adres | Street | Nr | Tussn. | Postcod. | Staat/reg | Locatie | Woonplaats |
|-------------|---------|----|--------|----------|-----------|---------|------------|
| 1 | Vrijhof | 1 | | 9172 MR | | | Ferwert |

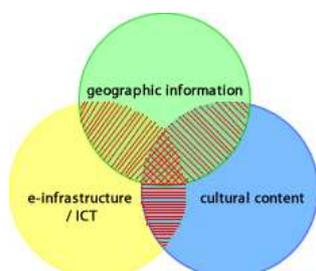
Functies

| Hoofd-functie | Functie-naam | Hoofd-categorie | Sub-categorie | Functie | Verrijg. | Toelichting |
|---------------|-----------------------|--------------------|-------------------------|---------|----------|-------------|
| 1 | Gemeentelijke functie | Religieus gebouwen | Kerk en kerkhofgebouwen | Kerk | | |

Source: <http://monumentenregister.cultureelerfgoed.nl>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|--|
| <p>Name</p> <p>National Register of Sites and Monuments Denmark - Fund og Fortidsminder</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Denmark</p> |
| <p>Short description</p> <p>Fund og Fortidsminder is a national register of historic monuments and archaeological sites. The purpose of register is to provide a national overview of the country's archaeological heritage. The register contains both ancient monuments that are visible in the landscape, and ancient monuments, which are hidden underground and known only from archaeological investigations. The system is based on a number of databases of historical findings on land and seabed within the current Denmark. It contains information on 170,000 finds sites on land and 17,000 on the seabed.</p> <p>The database functions partly as an administrative tool in relation to the physical planning, and it is a goldmine for research in the earliest part of history. The interested public can find exciting destinations such as castle ruins, burial mounds and dolmens. Museums are responsible for the content; the Heritage Agency maintains a database and performs quality control.</p> |
| <p>Main links and/or sources</p> <p>http://www.kulturarv.dk/fundogfortidsminder (Kulturarvsstyrelsen/Systemudvikling, København V)</p> |

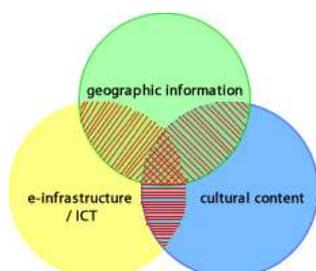
Graphical display



Source: <http://www.kulturarv.dk/fundogfortidsminder/Kort/>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|--|
| <p>Name</p> <p>Novel approach to 3D archeology, 3D semantics, open sources and open standards, experiences of geoparsing CulturalItalia</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research, examples from Italy</p> |
| <p>Short description</p> <p>The archaeological process is an unrepeatable operation documenting in an analytical way the excavation. For this reason we need: SU (Stratigraphical Units Layers/Forms), Photos, Maps, topographical plans, etc. and GIS platform. To share data in a scientific community, the solution adopted so far is represented by the development of standardized data-models. But it is not enough. The best mode to share archaeological data is encoding them through a semantic approach. And for 3D data? Normally, 3D models are encoded using proprietary format like dwg, 3d shape or 3ds, etc. Models developed by means of proprietary format aren't interoperable. Although they are standard de facto it is impossible in general to use them to share the data. The proposal solution consist of using of an integrated system composed by: Blender software to develop the 3D model from the raw data of the total station, Protegè software for the development of the archaeological ontology based on CityGML schema Grass GIS in order to georeference the model in DTM scene and to convert the dataset in GML format.</p> |
| <p>Main links and/or sources</p> <p>Lorenzini, M., 2012. Novel approach to 3D archeology, 3D semantics, open sources and open standards, experiences of geoparsing CulturalItalia. Indicate international workshop in Ljubljana: Geocoded digital cultural content. (http://www.indicate-project.eu/getFile.php?id=344)</p> |

Graphical display



- LOD 0 - Regional model



- LOD 1 - City model



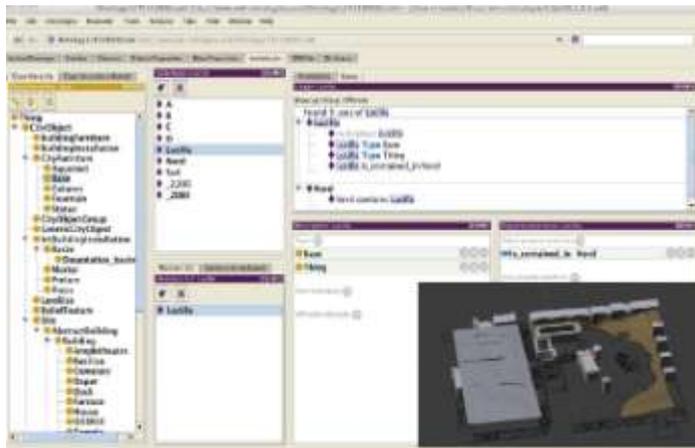
- LOD 2 - City model with explicit roof structure



- LOD 3 - Detailed architectural model



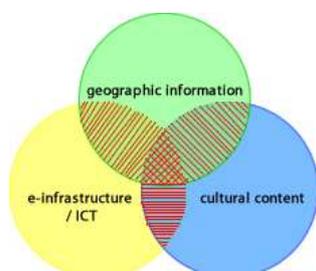
- LOD 4 - Interior Model



Source: www.indicate-project.eu/getFile.php?id=344

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|--|
| <p>Name</p> <p>Picture War Monuments: Creating an Open Source Location Based Mobile Platform</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>According to a recent Gartner study, mobile phones will be the most common way for people to access the Internet by 2013 (Gartner 2010). That's only two years from now. The same study predicts that by 2014, over 3 billion of the world's adult population will be connected via mobile or Internet technology. Needless to say, mobile devices are becoming an omnipresent way to access information, including content from heritage organizations. GLAMs (Galleries, Libraries, Archives, Museums) are currently exploring which roles mobile devices can play in meeting demands by users expecting to play an active rather than passive role as they seek to explore 'their' heritage (Horizon 2010). In the context of museums, Proctor (2011) notes: A Web-based version of museum tours, designed for the small screens of smartphones, increases access to the content not only for on-site visitors, but also for non-visitors, who can virtually tour collections and exhibitions thanks to soundtracks and other content that can be meaningful independently of the physical site.</p> |
| <p>Main links and/or sources</p> <p>Oomen, J., Brinkerink, M., Van Toor, D., 2011. Picture War Monuments: Creating an Open Source Location Based Mobile Platform. Museums and the web 2011 conference. Philadelphia, USA (http://www.museumsandtheweb.com/mw2011/papers/picture_war_monuments_creating_a_n_open_source_)</p> |

Graphical display

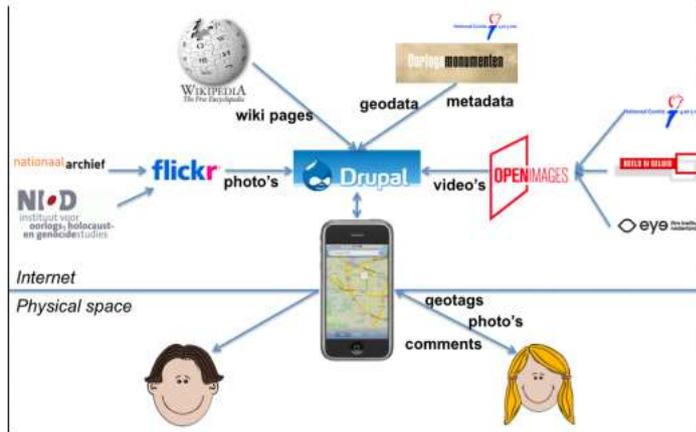


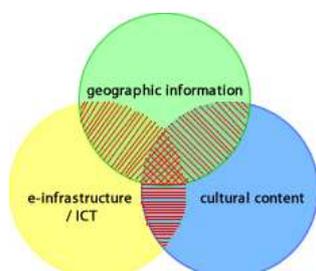
Fig 3: Screenshot of the technical architecture

Source:

http://www.museumsandtheweb.com/mw2011/papers/picture_war_monuments_creating_an_open_source_

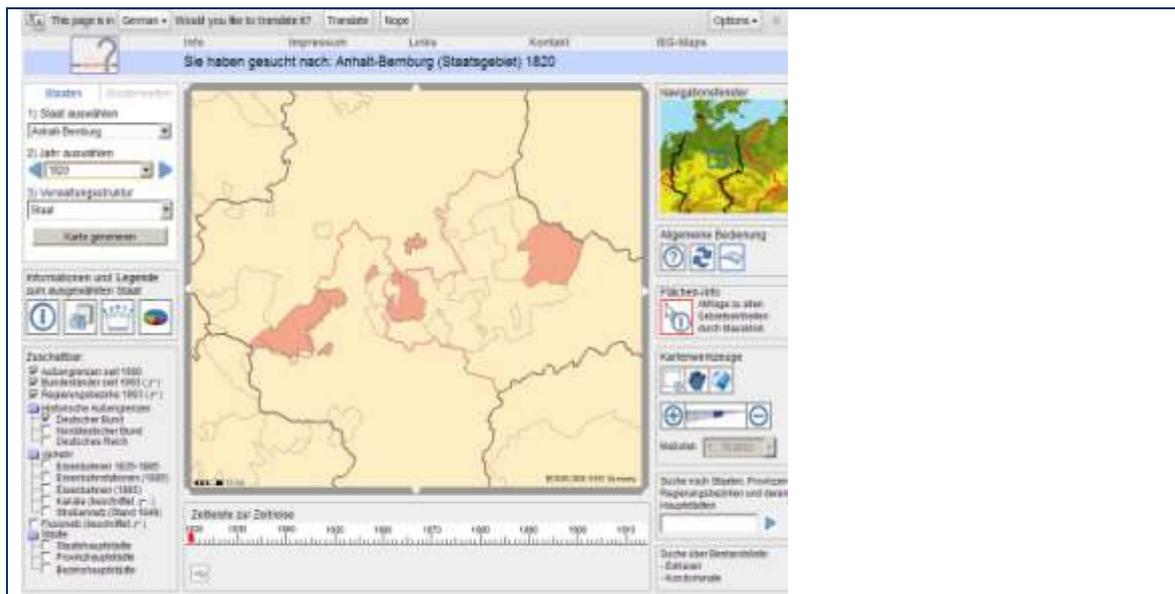
Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

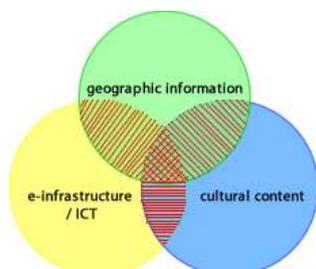
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| <p>Name</p> <p>Past places - place names: www.hgis-germany.de</p> |
| <p>Type and geographical area</p> <p>Past places place-names, Geographic information, ICT, cultural content, regularly operating system, Europe</p> |
| <p>Short description</p> <p>Historical geographic information system focused on the development of states in Germany and Europe since 1820. It has been constructed by a Mainz-based research team headed by Andreas Kunz at the Institute of European History (IEG), and Alexander Zipf at the University of Applied Sciences (i3mainz). Work was done in close cooperation with the German Historical Museum (DHM) in Berlin, where a museum-styled version of the system is on display. 50 states, their territories, societies, economies, dynasties and cultural heritage, 25 provinces in Prussia and in Austria, 70 administrative districts within the larger territorial units, 200 small territorial units (exclaves, areas ruled in condominium), 150 capitals of states, provinces and districts, some 35 ruling synasties and their alliances based on marriage relations, some 200 multimedia descriptions, including representations of some 1500 objects, some 5000 thematic maps, generated by the GIS-engine on demand.</p> |
| <p>Main links and/or sources</p> <p>www.hgis-germany-de</p> |
| <p>Graphical display</p> |



Source: http://hgisg.geoinform.fh-mainz.de/mapbender22/frames/index.php?&gui_id=hgis-gui77

Comments

Identification of use case

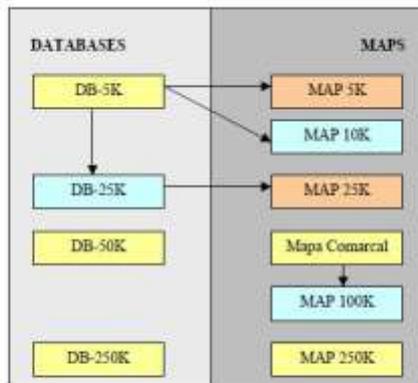


Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>Reorganizing the Topographic Databases of the Institut Cartogràfic de Catalunya applying generalization</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content , research, example from Catalonia, Spain</p> |
| <p>Short description</p> <p>Since their foundation in 1982, the Institut Cartogràfic de Catalunya has been producing and continuously updating three vector topographic databases covering Catalonia at scales 1:5.000, 1:50.000 and 1:250.000. In the year 2003, the ICC started the generation of the 1:25.000 database for new GIS applications and mapping applying generalization to the 1:5.000 database. As elevation data is becoming essential for visualization and analysis applications, the topographic database at 1:25.000 scale maintains the 2.5D character of the original data. After two years producing the 1:25.000 database applying generalization, the results are really good. But the production of the 1:25.000 database has opened a discussion at the ICC about the need to maintain the 1:50.000 database, because both scales are too close. The following paper presents a proposal to maintain only the topographic database at 1:25.000 and to obtain all the products derived now from the topographic database at 1:50.000, applying generalization methods to the 1:25.000 database.</p> |
| <p>Main links and/or sources</p> <p>Baella, B., Pla, M., 2005. Reorganizing the Topographic Databases of the Institut Cartogràfic de Catalunya applying generalization. 8th ICA workshop on Generalization and Multiple Representation, A Coruña (http://ica.ign.fr/Acoruna/Papers/Baella_Pla.pdf)</p> |

Graphical display

The current databases and their derived products at the ICC are illustrated in the following figure.

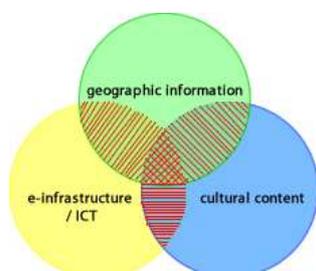


The figure shows in yellow the databases or maps compiled directly using photogrammetric systems (DB-5K) or digitized on top on orthoimages (DB-50K, DB-250K, Mapa Comarcal, MAP 250K). In blue, the derived products applying generalization and manual editing (DB-25K, MAP 10K, MAP 100K). In orange, the products derived automatically with no manual editing at all (MAP 5K, MAP 25K). The arrows show the relationships between the products. There are few relationships between different products and it means high cost in the updating processes and poor consistency between scales.

Source: http://ica.ign.fr/Acoruna/Papers/Baella_Pla.pdf

Comments

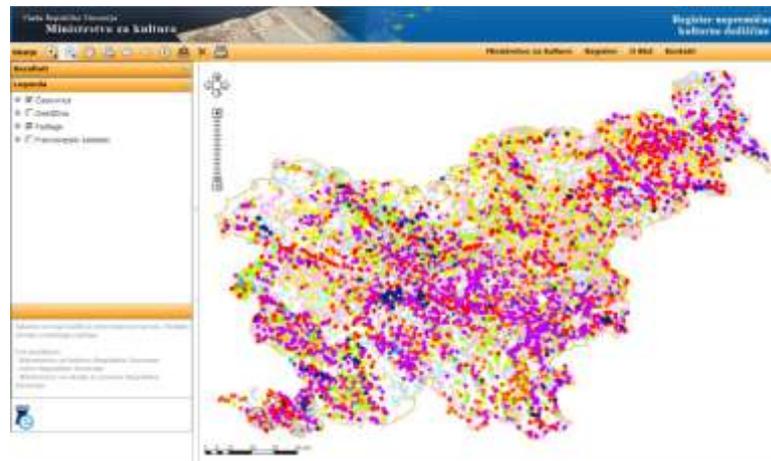
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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| <p>Name</p> <p>Register of cultural heritage of Slovenia (RCHS)</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Slovenia</p> |
| <p>Short description</p> <p>The Register of Slovene Cultural Heritage is an official database which contains more than 30,000 entries. Since 2009 the register consists of three units: the Registry of Immoveable Cultural Heritage, the Registry of Movable Cultural Heritage, and the Registry of Intangible Heritage.</p> <p>The purpose of the register is to provide information support to the implementation of heritage protection. The register also aims to develop public awareness about heritage through presentation, research, education, training and development. Every entry contains basic data: the name of the monument or site, its number (used in all procedures related to heritage conservation), type and sort of heritage (of local or national importance), location (including the relevant branch of the Institute for the Protection of Cultural Heritage of Slovenia) and a short description. The database is in Slovenian language and for the most part is accessible to the public.</p> |
| <p>Main links and/or sources</p> <p>http://rkd.situla.org</p> <p>Kovačec Naglič, K. and Zakrajšek, F., 2012. Register of cultural heritage of Slovenia (RCHS). Indicate international workshop in Ljubljana: Geocoded digital cultural content. (http://www.indicate-project.eu/getFile.php?id=358)</p> |

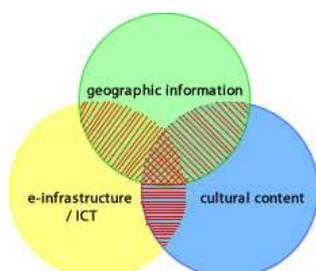
Graphical display



Source: <http://rkd.situla.org>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

| |
|---|
| <p>Name</p> <p>Virtual Museum via Flaminia Antica</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Rome, Italy</p> |
| <p>Short description</p> <p>The "Virtual Museum of the ancient via Flaminia" and particularly the reconstruction of the Villa of Livia is the first archaeological project developed through several media and technologies at the same time.</p> <p>The project aims to create a rich and level differentiated communication system with a cultural, historical and archaeological content for different audiences.</p> |
| <p>Main links and/or sources</p> <p>http://www.vhlab.itabc.cnr.it/flaminia/ (CNR ITABC – VHLAB, Rome)</p> |

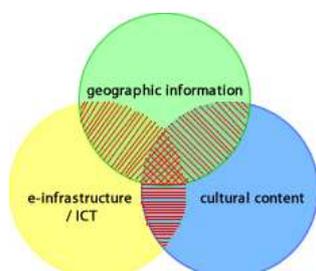
Graphical display



Source: <http://www.vhlab.itabc.cnr.it/flaminia/index02.html>

Comments

Identification of use case

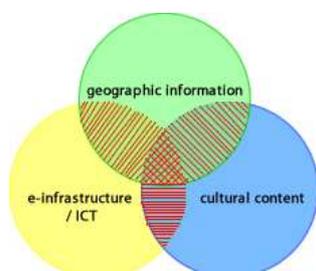


Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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|---|
| <p>Name</p> <p>Putting Museum Collections on the Map: Application of Geographic Information Systems</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>On-line mapping tools are quickly becoming ubiquitous, and have much to offer museums for both collection management and outreach. This paper explores potential applications of Geographic Information Systems (GIS), focusing on how two organizations, the Philadelphia City Archive and Philadelphia’s Mural Arts Program, have used GIS to expand their on-line presence and reach wider audiences with collections of historic photos and information on public art.</p> <p>This paper focuses on how the geographic approach has spurred the growth of these sites into valuable assets for collections management and beloved sites for users. It explores how geographic technologies can be applied to both collections management and outreach for archives and museums to expand their reach and provide patrons with a new lens through which to view exhibits and collections.</p> |
| <p>Main links and/or sources</p> <p>Hackert, M., 2009. Putting Museum Collections on the Map: Application of Geographic Information Systems. Museums and the Web 2009 the international conference for culture and heritage on-line, Indiana, USA (http://www.museumsandtheweb.com/mw2009/papers/heckert/heckert.html)</p> |

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| Graphical display |
| Comments |

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>Embedding GeoCrossWalk</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>The Embedding GeoCrossWalk project sought to provide a deeper understanding of how references to place in structured text can be researched and automatically extracted. The text collection used was the Hansards (proceedings) of the Lower House of the devolved Stormont Assembly between 1921 and 1972, usually known (and referred to hereafter) as ‘The Stormont Papers’. The project’s aims were threefold. Firstly it sought to deploy the GeoParser tool, developed previously by the Language Technology Group of Edinburgh University’s School of Informatics, to georeference the Stormont Papers, using Natural Language Processing (NLP). The project used the Geoparser in conjunction with geonames.org, an open-source global gazetteer, to identify, tag and (where appropriate) disambiguate all references to location. Secondly, the project refined and developed a better understanding of the Geoparser tool’s application to content of this kind, and highlighted. Finally, it laid the foundations for an expanded geospatial browsing capability for the Stormont collections, which will be implemented alongside the existing interface.</p> |
| <p>Main links and/or sources</p> <p>Dunn, S., Grover, C., 2009. Embedding GeoCrossWalk Final Report. JISC IE. Centre for e-Research, King’s College London. London, U.K. http://www.jisc.ac.uk/media/documents/programmes/sharedservices/geoxwalk_embedding_report_final.pdf</p> |

Graphical display

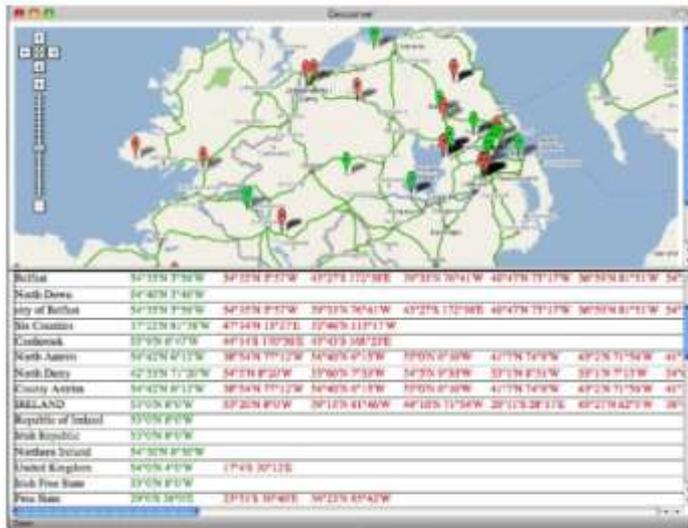


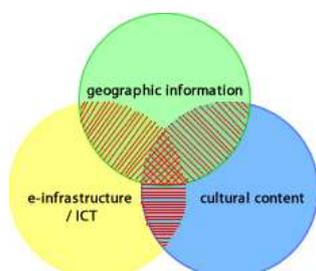
Fig. 1. Spatial locations in the Stormont Papers (from vol 45, 1656) identified with the GeoParser and resolved with GeoNames.

Source:

http://www.jisc.ac.uk/media/documents/programmes/sharedservices/geoxwalk_embedding_report_final.pdf

Comments

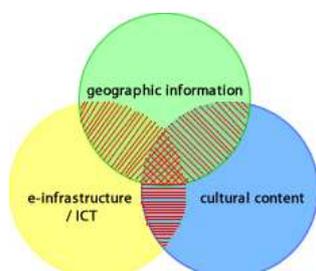
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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| <p>Name</p> <p>Connecting Historical Authorities with Links, Contexts and Entities</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, England (UK)</p> |
| <p>Short description</p> <p>Past places, place-names</p> <p>Text mining volumes of the English Place Name Survey to produce a Linked Data historic gazetteer for areas of England, which can then be used to improve the quality of georeferencing other archives. The gazetteer is linked to other placename sources on the Linked Data web via geonames.org and Ordnance Survey Open Data. Intensive user engagement with archive projects that can benefit from the open data gazetteer and open source text mining tools.</p> |
| <p>Main links and/or sources</p> <p>http://chalice.blogs.edina.ac.uk/2011/06/29/final-product-post-chalice-past-places-and-use-cases/</p> |
| <p>Graphical display</p> |

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>Geographic Information Contribution and Retrieval - An Agenda for the Next Generation Gazetteer</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>Gazetteers are key components of georeferenced information systems, including applications such as Web-based mapping services. Existing gazetteers lack the capabilities to fully integrate user-contributed and vernacular geographic information, as well as to support complex queries. To address these issues, a next generation gazetteer should leverage formal semantics, harvesting of implicit geographic information such as geotagged photos as well as models of trust for contributors. In this paper, we discuss these requirements in detail. We elucidate how existing standards can be integrated to realize a gazetteer infrastructure allowing for bottom-up contribution as well as information exchange between different gazetteers. How to ensure the quality of user-contributed information and demonstration of how to improve querying and navigation using semantics-based information retrieval.</p> |
| <p>Main links and/or sources</p> <p>Kessler, K., Janowicz, K., Bishr, M., 2009. An Agenda for the Next Generation Gazetteer. Proceedings of the 17th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. New York, USA. (http://carsten.io/Kessler-Janowicz-Bishr_An_Agenda_for_the_Next_Generation_Gazetteer_Geographic_Information_Contribution_and_Retrieval.pdf)</p> |
| <p>Graphical display</p> |

Place name

Place type

Restrict search to this area



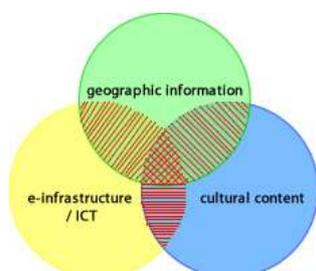
| Place type suggestions | Subtypes | Similar types |
|-------------------------|--|--|
| Canal | Watercourse , ManMade | River , IrrigationCanal , Dam , Island , Lake , Bay |
| Cape | not implemented yet | not implemented yet |
| Capital | not implemented yet | not implemented yet |

Figure 5: Semantic-enabled gazetteer interface with binding to the ADL gazetteer; adapted from [32].

Source: http://carsten.io/Kessler-Janowicz-Bishr_An_Agenda_for_the_Next_Generation_Gazetteer_Geographic_Information_Contribution_and_Retrieval.pdf.

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
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| <p>Name</p> <p>American Memory (The Library of Congress)</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system</p> |
| <p>Short description</p> <p>American Memory provides free and open access through the Internet to written and spoken words, sound recordings, still and moving images, prints, maps, and sheet music that document the American experience. It is a digital record of American history and creativity. These materials, from the collections of the Library of Congress and other institutions, chronicle historical events, people, places, and ideas that continue to shape America, serving the public as a resource for education and lifelong learning.</p> <p>The National Digital Library exceeded its goal of making 5 million items available online by 2000. American Memory will continue to expand online historical content as an integral component of the Library of Congress's commitment to harnessing new technology as it fulfils its mission "to sustain and preserve a universal collection of knowledge and creativity for future generations."</p> |
| <p>Main links and/or sources</p> <p>http://memory.loc.gov/ammem/index.html</p> |

Graphical display

The screenshot displays the Library of Congress website interface. At the top, it features the logo for 'The LIBRARY of CONGRESS' and 'AMERICAN MEMORY'. Navigation links include 'HOME', 'ABOUT', 'HELP', and 'CONTACT'. A search bar is present with the text 'Search all collections' and a 'SEARCH' button.

The main content area is titled 'Browse Collections' and includes a sub-header 'The Library of Congress > American Memory Home > Browse Collections'. Below this, there are several sections:

- Browse by Topic:** A list of categories such as 'African American History', 'Architecture, Landscapes', 'Civics, Poetry', 'Culture, Exhibits', 'Geography, Cartography', 'Government, Law', 'Immigration, American', 'Literature', and 'Maps'. Each category has a 'more' link.
- List all collections:** A section with a sub-header 'Data with browser collections' and a list of specific collections like 'Native American History', 'Pictorial, Prints, Photo', 'Presidents', 'Religion', 'Science, Technology, Industry', 'War, Military', and 'Women's History'. Each collection has a 'more' link.
- Browse Collections by Time Period:** A section with a circular arrow icon and a list of time periods: '1800-1825', '1825-1850', '1850-1875', '1875-1900', and '1900-1925'. Each period has a 'more' link.
- Browse Collections Containing:** A section with a circular arrow icon and a list of terms: 'Name', 'Name(s)', 'Name, District', 'Street Name, Street Address', 'Street, Print', 'Street, Foundation', and 'Street, Other Street Name'. Each term has a 'more' link.
- Browse Collections by Place:** A section with a map icon and a list of locations: 'Northwest U.S.', 'South U.S.', 'Midwest U.S.', and 'East U.S.'. Each location has a 'more' link.

At the bottom of the page, there is a footer with the text 'The Library of Congress | Legal'.

The screenshot displays the 'Map Collections' section of the Library of Congress website. The title 'Map Collections' is prominently displayed at the top. Below the title, there is a central graphic featuring a globe and several map thumbnails. Surrounding the central graphic are several categories of maps, each with a 'more' link:

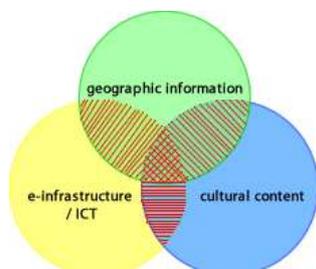
- Cartography and Landscapes
- Historical Maps and Landscapes
- Geographical and Topographical
- Political and Administrative
- Thematic and Specialized
- Travel and Navigation
- Historical and Cultural
- Scientific and Technical

Below the categories, there is a section titled 'Search for Maps' with a list of search criteria: 'Geographic Location', 'Subject', 'Country', 'Title', and 'Date'. Below this, there is a paragraph of text explaining the scope of the Map Collections and a link to 'Browse Map Collections'.

Source: <http://memory.loc.gov/ammem/index.html/>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>ArXiv</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system</p> |
| <p>Short description</p> <p>Open access to 751,977 e-prints in Physics, Mathematics, Computer Science, Quantitative Biology, Quantitative Finance and Statistics.</p> <p>The arXiv is an archive for electronic preprints of scientific papers in the fields of mathematics, physics, astronomy, computer science, quantitative biology, statistics, and quantitative finance which can be accessed online. In many fields of mathematics and physics, almost all scientific papers are self-archived on the arXiv. On 3 October 2008, arXiv.org passed the half-million article milestone. The preprint archive turned 20 years old on 14 August 2011. By 2012 the submission rate has grown to more than 6000 per month.</p> |
| <p>Main links and/or sources</p> <p>http://arxiv.org/</p> |

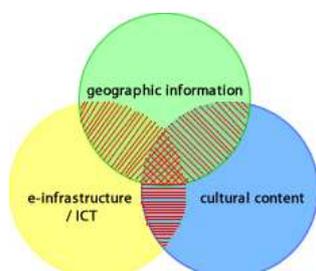
Graphical display

The screenshot shows the arXiv.org website interface. At the top, there is a search bar and navigation links. Below the search bar, there are two main category sections: Physics and Mathematics. The Physics section lists various sub-fields such as Astrophysics, Cosmology and Experimental Astrophysics, and High Energy Physics. The Mathematics section lists sub-fields such as Algebraic Geometry, Algebraic Combinatorics, and Algebraic Topology. The right side of the page features a 'Download' section with options for PDF, Plain Text, and other formats. The bottom of the page shows a 'Source' link and a 'Comments' section.

Source: <http://arxiv.org/>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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|---|
| <p>Name</p> <p>Europeana Culture Globe</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, prototype</p> |
| <p>Short description</p> <p>Joint entry Culture Globe won first prize at the EuropeanaTech Hackathon. EuropeanaTech is the final conference of the EU project EuropeanaConnect and was organised in collaboration with the Europeana Foundation. It explored technical challenges of making digital cultural and scientific information attractive and easily accessible for the public. The Hackathon at EuropeanaTech completed the conference by generating prototypes and code contributions to Europeana services and exploring the potential of open cultural data. Culture Globe allows for the spatio-temporal browsing through the Europeana metadata with 3D globe visualization in a web browser. Culture Globe is open source and builds on open data.</p> |
| <p>Main links and/or sources</p> <p>http://www.europeanaglobe.eu/</p> |

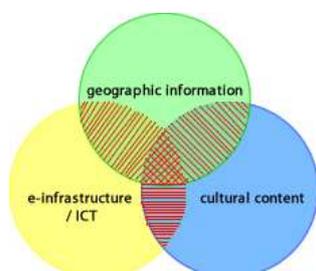
Graphical display



Source: <http://www.europeanaglobe.eu/>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

| |
|---|
| <p>Name</p> <p>Europeana portal</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system</p> |
| <p>Short description</p> <p>Europeana is an internet portal that acts as an interface to millions of books, paintings, films, museum objects and archival records that have been digitised throughout Europe. For users Europeana is a single access point to millions of books, paintings, films, museum objects and archival records that have been digitised throughout Europe. It is an authoritative source of information coming from European cultural and scientific institutions. For heritage institutions Europeana is an opportunity to reach out to more users, increase their web traffic, enhance their users' experience and build new partnerships. For professionals in the heritage sector Europeana is a platform for knowledge exchange between librarians, curators, archivists and the creative industries. For policy-makers and funders Europeana is a prestigious initiative endorsed by the European Commission, and is a means to stimulate creative economy and promote cultural tourism.</p> |
| <p>Main links and/or sources</p> <p>http://www.europeana.eu/portal/</p> |

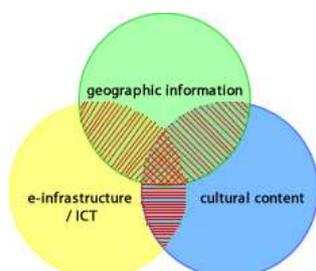
Graphical display



Source: <http://www.europeana.eu/portal/>

Comments

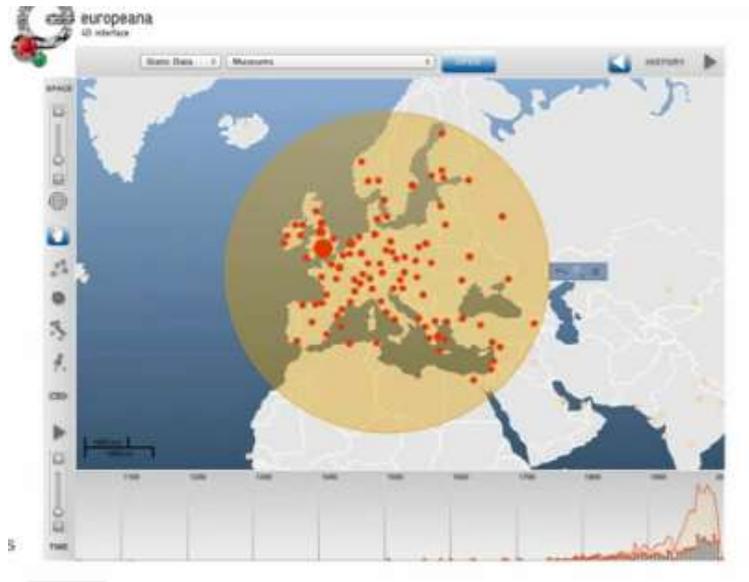
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>Europeana4D</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system</p> |
| <p>Short description</p> <p>The amount of online data that supplies geo-spatial and temporal metadata has grown rapidly in recent years. Social networks like Twitter, Flickr, and YouTube are popular providers of masses of data that are hard to browse.</p> <p>Europeana 4D interface – e4D – enables comparative visualisation of multiple queries and supports data annotated with time span data. We implemented our design in a prototype application in the context of the European project EuropeanaConnect. It is based on a client-server architecture that charges the client with the main functionality of the system.</p> |
| <p>Main links and/or sources</p> <p>http://wp1187670.wp212.webpack.hosteurope.de/e4d/</p> |

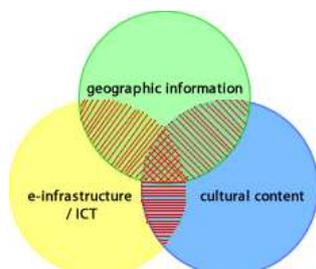
Graphical display



Source: <http://wp1187670.wp212.webpack.hosteurope.de/e4d/>

Comments

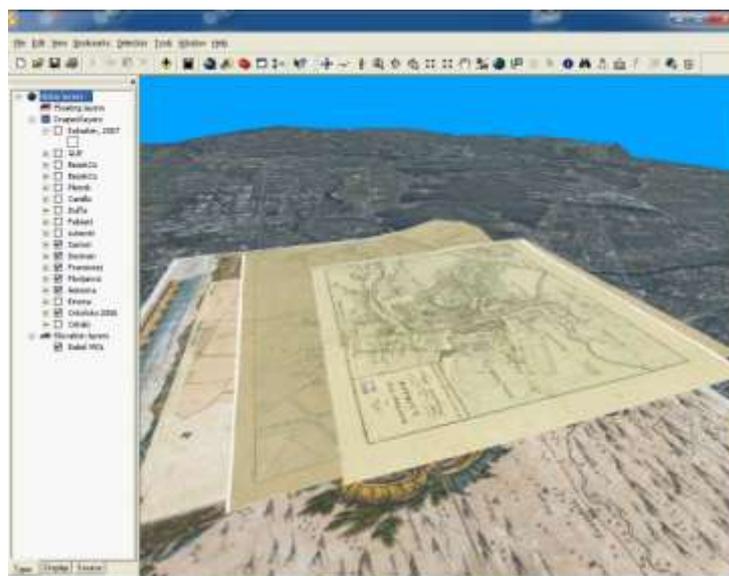
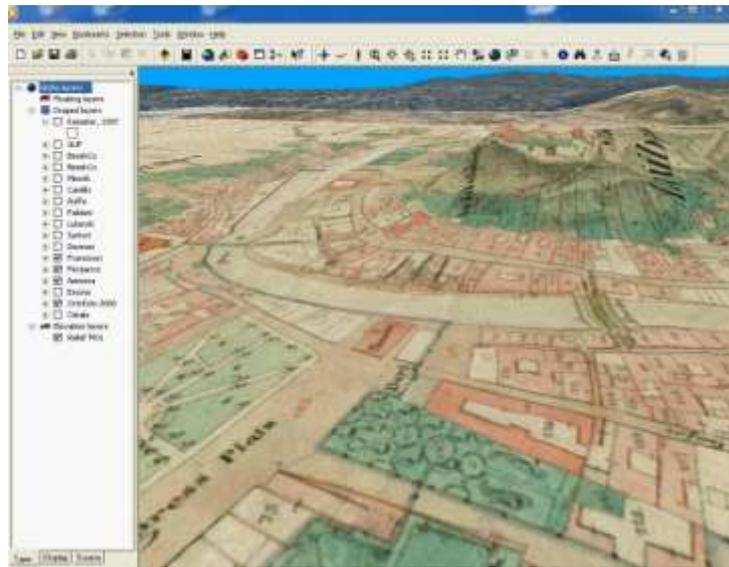
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>3d historical maps</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, prototype, examples from Slovenia</p> |
| <p>Short description</p> |
| <p>Main links and/or sources</p> <p>http://indicate.situla.org/indicate/Ljubljana_M_1.wmv</p> |

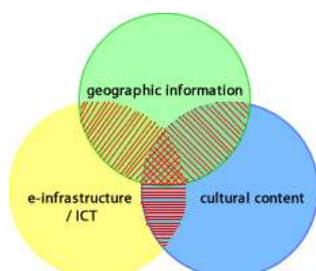
Graphical display



Source: http://indicate.situla.org/indicate/Ljubljana_M_1.wmv

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>Odysseus, www server of the Hellenic Ministry of Culture</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Greece</p> |
| <p>Short description</p> <p>Aim of work is the implementation of infrastructures and the guarantee of conditions for the central systematic and reliable communication of Greek Culture in the Internet globally, via her continuation, the development and the permanent extension of previous informational node of Ministry of Culture in the internet, the node "ODYSSEUS". The new node of ODYSSEUS (ODYSSEUS portal), is mainly one node that has communicational, educational, recreational, tourist and more widely social and cultural character with wider dimension and impression. This node, aims mainly in the world electronic visitor and constitutes the most important means for the diffusion and the designation of our culture in the digital age. ODYSSEUS contributes with a unique way in the exploitation of more important comparative advantage of country worldwide. The further development, extension and guarantee of the operational and functional viability of portal -as for this particular and unique cultural character- constitute the final aim of project.</p> |
| <p>Main links and/or sources</p> <p>http://odysseus.culture.gr/index_en.html</p> |

Graphical display

ΟΔΥΣΣΕΥΣ Hellenic Ministry of Culture and Tourism
Hellenic Culture Organization S.A.

Upgrading and operating the Odyseus Project. The Project is included in the Operational Program of "Information Society" of the 2nd Community Support Framework and is partially funded at 80% from the European Regional Development Fund and at 20% from National Resources of Greece.

Welcome to ODYSEUS, the WWW server of the Hellenic Ministry of Culture. It is not possible to appraise Greek Culture as a whole, through a computer screen. Nevertheless, being aware of the force and the potentials of new technologies, we tried to organize in this program the heritage of artistry, the features of outstanding art, the achievements of the human spirit, the routes of which the western civilization stands in order to reach its current form.

Museums | **Monuments** | **Archaeological Sites**

Interactive culture map of Greece
Navigate through Hellenic map, explore the area of your interest and discover museums, monuments and archaeological sites. The search engine functions let you travel across all the nearby preferences and allow you to select administrative, geographical and cultural information.

Chronological chart
Navigate through the chronological chart of Hellenic history and art, seeking important events in Hellenic prehistory and history from the Stone Age to our day, and clear images of mobile and stationary monuments of every period, grouped by subject.

Special issues
The Ancient Olympic Games
The origin of the Olympic Games is traced with many sports referred to in ancient sources.

Photographic archive
The Photographic archive was created using images preserved in the Odyseus site. It is divided into three basic chronological units, Antiquity, Byzantine and Modern Contemporary times, each of them divided into smaller subject units. The photographic archive will be continuously enriched with new subject units, in order to provide a more complete image of Hellenic civilization through time.

Glossary
In the Glossary you will find historical, archaeological and artistic terms, and you will be given complete information on mythological and historical figures encountered in the Odyseus site. Terms and names are listed in alphabetical order.

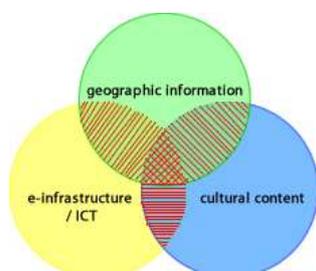
Historic Monuments which have been characterized as World's Heritage Monuments

Information - email - Contact - The Project
© 2007 Hellenic Ministry of Culture and Tourism/All Rights Reserved.

Source: http://odysseus.culture.gr/index_en.html

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be regularly operating system, prototype, and proof of the concept research...

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| <p>Name</p> <p>AskAboutIreland, culture on the interactive map</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, Ireland</p> |
| <p>Short description</p> <p>AskAboutIreland developed a map interface to an existing online cultural resource.</p> <p>This offers a new way for users to search our portal and also a way for users to see how different items in the portal relate to each other in space. It provides a pointer on a Google Map which is linked to a page where a location is mentioned. Some places are linked to several pages. Content is ordered according to significance: by article, page title, page reference... Each content page links to the map, where the user can see the locations mentioned in the content.</p> |
| <p>Main links and/or sources</p> <p>http://www.askaboutireland.ie/</p> <p>Kelly, A., 2012. AskAboutIreland, culture on the interactive map. Indicate international workshop in Ljubljana: Geocoded digital cultural content. (http://www.indicate-project.eu/getFile.php?id=352)</p> |

Graphical display

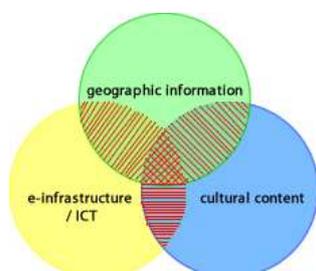


The screenshot shows the 'Ask about Ireland' website interface. At the top, there is a green header with the text 'Ask about Ireland'. Below this is a map of Dublin, Ireland, with several green location pins. A callout box over the map identifies 'Sitraic Compost Community Garden' with a list of links: 'A 2005 National Community Garden' and 'A 2010 National Community Garden'. To the right of the map is a 'Select Topics' menu with a list of categories: 'Shopping Tools', 'Photo & Videos', 'Digital Book Collection', 'Environment & Geography', 'History & Heritage', 'Culture & Society', 'Sports & Recreation', 'Places of Interest', 'News', 'Learning Tools', and 'Library Services'. Below the map, there is a navigation bar with three tabs: 'Reading Room', 'Learning Zone', and 'Libraries'. Below the navigation bar, there is a breadcrumb trail: 'Home / Reading Room / Environment & Geography / Communities Going Green / Growing Your Own / Sitraic Compost Community Garden'. The main content area is titled 'Sitraic Compost Community Garden' and includes the address 'Sitraic Road, Stoneybatter, Dublin 7'. Below the address is a paragraph of text describing the garden: 'Sitraic Community Garden is a small patch of land at the end of a terrace of 80 two up and two down houses in Stoneybatter in Dublin. The land was once derelict, but is transformed into a garden growing vegetables, herbs and fruit. It is also a focal point for community activities. The initiator in the project is Kaelethe Burt-O'Dea. The garden started as an experimental composting centre in 2005, composting household kitchen waste. None of the original participants had gardens. They began to grow vegetables with the compost on a derelict patch of land. A small *companion grant* from Vodafone helped develop the garden. Many things are grown in the garden including: various salad leaves, tomatoes, cucumber, broccoli, strawberries, passion fruit and many herbs.' To the right of the text is a photograph of the garden. Below the photograph is a caption: 'Sitraic Community Garden Street Party Courtesy of Kaelethe Burt O'Dea'. Below the caption is a small icon and the text 'Enlarge image'.

Source: <http://www.askaboutireland.ie/map/?rrUrl=/reading-room/culturenet/>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>3D Artefact Acquisition (3D COFORM Tools & Expertise for 3D Collection Formation)</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, research</p> |
| <p>Short description</p> <p>In the acquisition stage two major strands are followed. First, the web-based 3D-reconstruction techniques for immovable objects as well the 3D-digitisation process of moveable regular objects will be extended. In addition to 3D-shape colour and reflectance properties of the objects will either be digitized as well or the user will get the possibility to map these data from other sources in order to produce high quality representations of the artefacts. Second, we will develop new approaches for image-based reconstruction which will give use the ability to digitise shape, reflectance properties and if necessary spectral colour of artefacts, e.g. gems, jewellery, etc. for which current techniques are not effective. Since the 3D shapes of a lot of 3D objects are already available, 3D-COFORM will also develop techniques for reflectance acquisition for these objects from multiple views of the same known surface. We will deal with all levels of surface reflectance ranging from simple texture maps to full 6D Bidirectional Texture Functions (BTF). This way low cost acquisition of reflectance data will be possible.</p> |
| <p>Main links and/or sources</p> <p>Klein, R., Schwartz, C., 2010. 3D Artefact Acquisition. 3D-COFORM project report: Tools and Expertise for 3D Collection Formation, Germany. (http://www.3dcoform.eu/downloads/Period_2/3DC_D_4_2_WP4_YR2_FINAL.pdf)</p> |

Graphical display



Figure 9: The initial scanning tests were conducted on 144 fragments of a Roman fresco

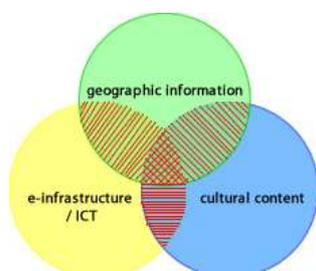


Figure 10: Using the data obtained from the in-hand scanner, a number of matches were found. Of these only the matches between fragments 29-30 and fragments 22-23-75 were previously known.

Source: http://www.3dcoform.eu/downloads/Period_2/3DC_D_4_2_WP4_YR2_FINAL.pdf

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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| <p>Name</p> <p>A guide to the magnificent Awqaf Mosques of Al Darb Al Ahmar Area</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, prototype, Al Darb Al Ahmar and Citedal Area in Historic Cairo, Egypt WH site</p> |
| <p>Short description</p> <p>A bilingual DVD (Arabic and English) using GIS technology to serve as an interactive guide to a suggested itinerary between Bab Zuwayla and the Citedal. The area is an essential part of the World Heritage Site of Historic Cairo. It provides a wealth of information on each of the 18 monuments as well as its urban history and development, including maps, photographs, panoramas, videos, historical information, architectural drawings and a list of historical references and bibliographical sources.</p> |
| <p>Main links and/or sources</p> <p>www.culnat.org (CULTNAT – Centre for Documentation of Cultural & Natural Heritage, Egypt)</p> |

Graphical display

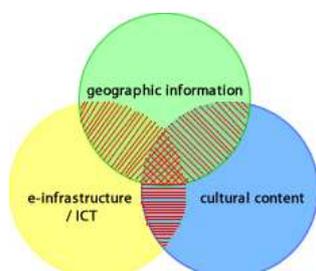


Source: www.cultnat.org

Comments

No reference to the DVD, as it is still under publication.

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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| <p>Name</p> <p>Appia Antica archaeological Park</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, prototype, Rome, Italy</p> |
| <p>Short description</p> <p>The goal of the project is to realise a digital archive of the monuments of the park, employing many different technologies for 3D representation of the landscape and integrating instruments for topographic relief and methodologies of surveying on site (DGPS, laser total station, photogrammetry, 3D laser scanning, photo and video acquisition), according to the level of detail required. All the data are successively elaborated to obtain a correct geometric model of the landscape, implemented in a Real time OpenGL application where the user can interact with many hierarchical levels of contents.</p> |
| <p>Main links and/or sources</p> <p>http://www.appia.itabc.cnr.it/ (Virtual Heritage Lab – CNR ITABC)</p> |

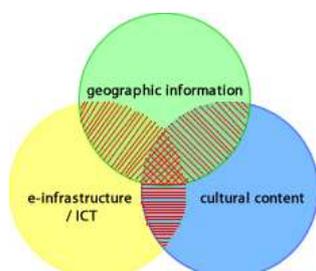
Graphical display



Source: <http://www.vhlab.itabc.cnr.it/appia/>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>EuropeanaConnect</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, prototype, EU</p> |
| <p>Short description</p> <p>EuropeanaConnect (May 2009 - October 2011) is a Best Practice Network funded by the European Commission within the area of Digital Libraries of the eContentplus Programme. Its overall objective is to deliver core components which are essential for the realisation of Europeana, the European Digital Library as a truly interoperable, multilingual and user-oriented service for all European citizens. EuropeanaConnect will also add the music dimension to Europeana by aggregating a critical mass of audio content. Europeana provides integrated access to digital resources from museums, archives, audio-visual archives and libraries of Europe. An intuitive spatio-temporal interface - Europeana 4D - will allow users to browse the vast Europeana database in time and space. The Spatio-Temporal Interface is a web application that enables the synergy of geo-spatial and temporal context exploration of one or more topical queries simultaneously. We aim to enable the user to inspect the results of multiple queries in a geographic and historical context.</p> |
| <p>Main links and/or sources</p> <p>http://www.europeanaconnect.eu/index.php</p> |

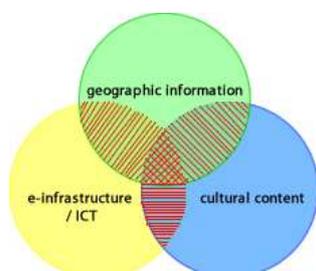
Graphical display



Source: <http://www.europeanaconnect.eu/index.php>

Comments

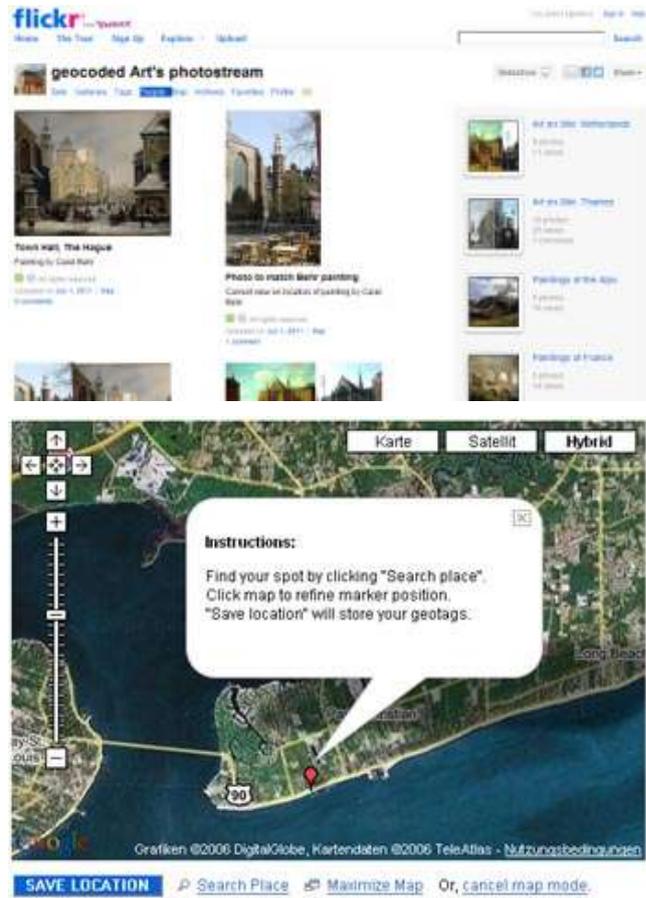
Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research,...

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| <p>Name</p> <p>Flickr geocoded Art's Photostream (Yahoo)</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, regularly operating system, World</p> |
| <p>Short description</p> <p>Flickr is online photo management and sharing application with two main goals: to help people make their photos available to other people and to enable new ways of organizing photos and video. Flickr want to get photos and video into and out of the system in as many ways as possible: from the web, from mobile devices, from the users' home computers and from whatever software they are using. In Flickr, you can give other people permission to organize your stuff - not just to add comments, but also notes and tags. And as all this info accretes as metadata, you can find things so much easier later on, since all this info is also searchable. The goal of geocoded Art is to use digital maps to add context to fine art and to use fine art to illuminate geography. Photos and other content can be imported with location (already georeferenced), or location can be simply added. A slim bookmarklet enables mapping, geocoding and geotagging directly in your Flickr photo page. It works with all common browsers (Firefox, IE, Safari, Opera) without the need for any extension.</p> |
| <p>Main links and/or sources</p> <p>http://www.flickr.com/photos/geocoded-art</p> |

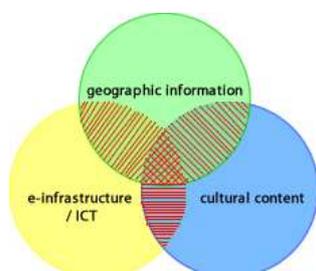
Graphical display



Source: <http://www.flickr.com/photos/geocoded-art>

Comments

Identification of use case



Please identify use case that covers at least two topics of: geographic information, e-infrastructure / ICT, cultural content. Cases may be, regularly operating system, prototype, proof of the concept research...

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| <p>Name</p> <p>Kazakhstan project</p> |
| <p>Type and geographical area</p> <p>Geographic information, ICT, cultural content, prototype, Southern Kazakhstan</p> |
| <p>Short description</p> <p>Land use and irrigation works in Kazakhstan in the present and in historical times. Geo-archaeological investigations.</p> <p>General goal of the project is to reconstruct the present conditions and the historical evolution of the land use and irrigation works in three main areas of settlements today exposed to a sensible process of aridisation: Semirechie, South Kazakhstan, Central Kazakhstan (settlements, fortresses and ancient irrigation works from the Early Middle Ages till the rule of the Kazakh hordes VIII-XV AD).</p> |
| <p>Main links and/or sources</p> <p>http://www.vhlab.itabc.cnr.it/kazakhstan/</p> |

