







gvSIG Educa/Batoví: an educational tool for teaching GIS in schools

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- 1. What is gvSIG Batoví?
- 2. Why gvSIG Batoví?
- 3. Previous experiences and its analysis
- 4. Justification
- 5. gvSIG Batoví
- 6. Sustainability
- 7.Actual and future developments





It's a GIS (Geographic Information System) applied to educational environments with destination to the Plan Ceibal (OLPC initiative for Uruguay), based on gvSIG











1. What is gvSIG Batoví?

Plan Ceibal

- First adoption in the world of the OLPC initiative at a National level

 Every primary school student in Uruguay has an XO, and more than 98% of all students have Internet connectivity at home, provided through Plan Ceibal
 It also includes secondary schools now









2.Why gvSIG Batoví?

- Particular concern of Government towards Education
- Contribution: initiative of the Minister (MTOP)
- Reformulation of the initiative from the GIS
 Section (National Directorate of Topography MTOP)







Plan Ceibal

3.Previous experiences and its analysis

Where is the best place to site a new bench?

Lesson 1 Step 1

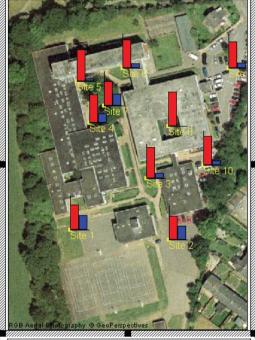
Decide which data is needed to make a decision on siting the bench. Temperature? Wind Speed? Step 2 Decide where to take recordings of the temperature and wind speed. Mark the places on the map. Step 3

Record the data.

Lesson 2

Load the prepared AEGIS file. Add the data to the table and explore the map using the Help Sheet. How can you find the best place for a bench using your data?

	Location	Temperature	Wind Speed
1	Site 1	10.6	6
2	Site 2	10.1	6
3	Site 3	13.1	2
4	Site 4	12.0	4
5	Site 5	13.5	1
6	Site 6	12.0	2
7	Site 7	10.5	5
8	Site 8	14.5	0
9	Site 9	11.0	2
0	Site 10	12.3	2
11			



This de tailed aerial photography was ob tained from Bluesky.

I think the best place for a bench is Site ___, because the temperature is ____ and the wind speed is ____.

AEGIS

£100 each license

Decide how you would find the best place to sit. Would you want it warm or cool? Sheltered or windy?

Use the AEGIS 3 Help Sheet

http://www.advisory-unit.org.uk/pdf/help/get_started_aegis.pdf

1. Display a bar chart of temperature on the map. 2. Search for the warmest places - where are they?

Type your answer here:

3. Display the wind speed on the map.

4. Search for the most sheltered places - where are they? Type your answer here:

5. Are there any places that are warm and sheltered?

Add your answer to the sentence opposite.



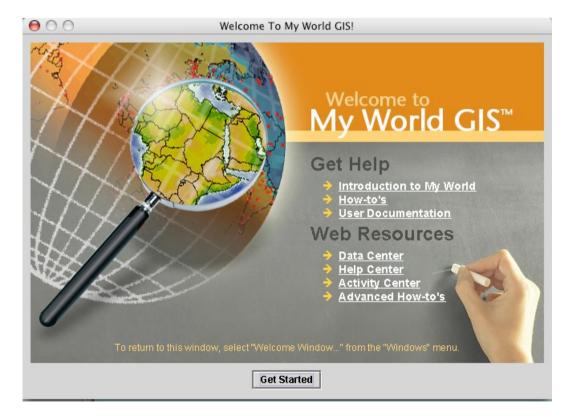




3.Previous experiences and its analysis

My World GIS

from U\$S 99 each license





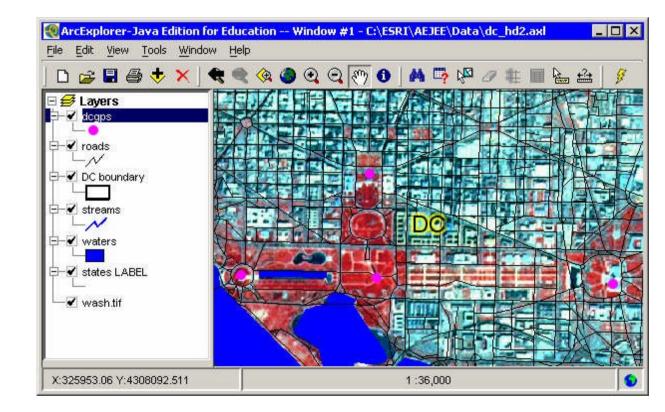




3.Previous experiences and its analysis

AEJEE: ArcExplorer™ Java™ Edition for Education

free/gratis light GIS, but it doesn't allow data edition; only exploration





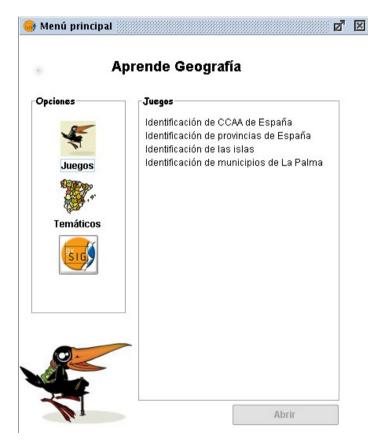




3.Previous experiences and its analysis

EduSIG

 a configurable gvSIG designed for education, with the possibility of adding new
 games/contents/exercises
 prototype with a pending development









4.Justification (I)

Because of being open, gvSIG allows customization to meet the objectives of this GIS project for educational environments. It also allows to be **configurable**, being easy to add new content / games / exercises

Because of being **open**, the resulting product using gvSIG allows the **improvement** and **further development** by the **Community**

Using gvSIG ensures that the resulting tool is useful not only for Uruguay but also allows its spreading worldwide free, open and without charge







4.Justification (II)

Because of being <u>free</u>, gvSIG allows **access** to the application **to anyone** without any restrictions and free of contractual constraints

Because of being <u>free/gratis</u>, gvSIG ensures **zero installation cost or licensing** no matter you use it in one or in 400,000 computers

Because of having a very active **international gvSIG community** of both users and developers gvSIG Educa/Batoví end users will always benefit from **solid and consistent support**

There is also a strong and growing **local gvSIG community** which serves as an **additional support** for the project







GIS + Geodata = tools + information



Accesible!!! Free of charge!!! Done by cooperation!!! For teachers and students Can be adapted to any educational level











http://www.gvsig.org/plone/projects/gvsig-educa /descripcion-en/view?set_language=en







Educational uses

"if i can't picture it i can't understand it" (A.Einstein)

- Analysis and understanding of the territory
 - In a <u>simple</u> way
 - Or with the level of <u>complexity</u> we need
- Applied not only for geographical subjects...
 - History
 - Natural sciences
 - Social Sciences
 - ...80% of all information can be represented on a map
 - ...and a picture is worth a thousand words







Inherited characteristics

- Access to local and remote data
- OGC / ISO **Standards**
- Easily **extensible**, allowing continuous improvement of the application and its **adaptation** in order to develop <u>customized versions for each</u> <u>educational level, country, culture</u> ...
- GNU / GPL license: allows free use, distribution, research and improvement
- Available in multiple languages and easy to translate
- **Multiplatform**: Linux, Windows and Mac OS X.
- Tools for interacting with GI: navigation, query information ...



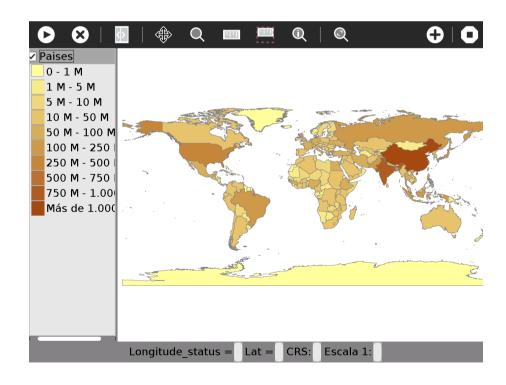






Primary School Version

- Simple operation
- Visualization of geographic information
- Basic interaction with the cartography
- Allows inquiries:
 - Information associated with map elements
 - Measure distances and areas
- Interpretation of thematic map (legend)
- Cartographic concepts: coordinates and scale









Secondary/High School Version

- More data handling capacity (more powerful hardware)
- A real GIS with endless possibilities for land analysis
- Keeps easy handling and basic interaction with cartography
- Allows querying and interpretation of thematic map (legend)
- Wider cartographic concepts: reference systems
- ALLOWS TO CREATE OUR OWN
 THEMATIC MAPS!











But also ...

... can be used from any gvSIG

adding the possibility of creating thematic maps and share them in such a simple way ... as if used by a child.

Broadens the way in which all users of geographic information can share data and makes this easier







Thematic Maps tool

- Useful for:
 - creating thematic maps ...
 - ... and for consulting them
- Generator
 - - different types of legends (single values, by ranges of values, ...)
 - - possibility of selecting different types of symbology
 - save and load legends
 - label elements in reference to associated data
 - edition of data
 - ... and finally the creation of a thematic map for sharing both data and the way we made it look like

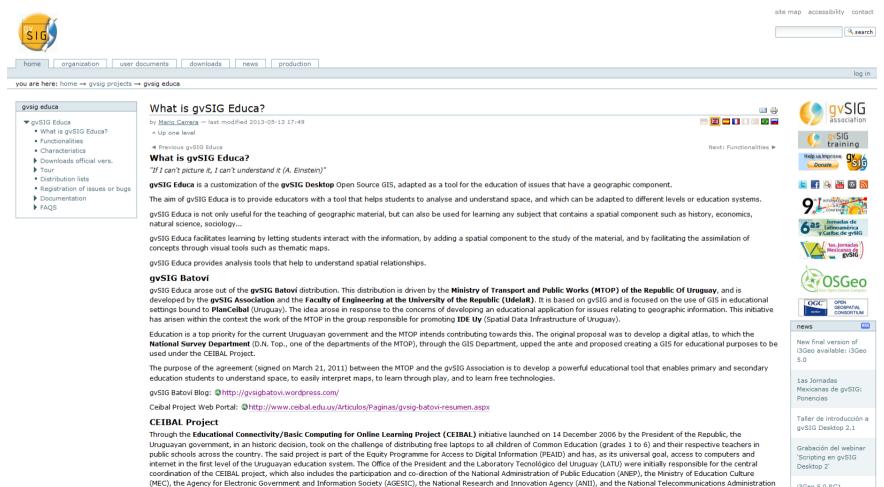






A quick tour through the web:

http://www.gvsig.org/plone/projects/gvsig-educa/descripcion-en/view?set_language=en



(ANTEL). From October 6th 2010, students and teachers of public secondary education (Secondary and Technical Schools) also began receiving their laptops, signifying the progress of

i3Geo 5.0 RC1 available









gvsig educa
▼ gvSIG Educa
What is gvSIG Educa?
 Functionalities
 Characteristics
 Downloads official vers.
▼ gvSIG Batoví
▼ gvSIG Batoví 1.0.0
 Downloads
 Install Instructions
Tour
 Distribution lists
 Registration of issues or bugs
Documentation
FAQS

Cached time 05/23/14 09:34:54 ()

Downloads

by Mario Carrera - last modified 2013-09-04 14:20

Version	Binaries	Notes	Code	Documentation
		Versions in develop	ment	
gvSIG Batoví 1.0.0 RC3 (developed on gvSIG 2.0) (28-08-2012)	Map viewer (Green Ceibalita - 6-12 years old):		Source code repository	© Install manual © gvSIG Batovi user manual © Map viewer manual © Cartography and GIS concepts How to generate a gvSIG Educi distribution (© © 0.3 MB, 157 © 0.2 MB)
gvSIG Batoví 1.0.0 RC2 (16-05-2012)	Map viewer (Green Ceibalita - 6-12 years old): State - 6-12 years old): State - 12-16 years old): S	NOTE: The plugins of the thematic maps can be installed on gvSIG 2.0 too. Consult install instructions.	Source code repository	Install manual ØgvSIG Batoví user manual ØMØap viewer manual Ø⊆Øartography and GIS concepts
gvSIG Batoví 1.0.0 RC1 (developed on gvSIG 2.0) (16-05-2012)	Map viewer (Green Ceibalita - 6-12 years old): \$\therefore X.XO (22.0 MB) gvSIG Batoví (Blue Ceibalita - 12-16 years old): \$\therefore X.XO (78.0 MB) \$\therefore X.XO (78.0 MB)	NOTE: The plugins of the thematic maps can be installed on gvSIG 2.0 too. Consult install instructions.	© Source code repository	© Install manual © gvSIG Batoví user manual @ Map viewer manual @ Cartography and GIS concepts







Plan Ceibal

5.gvSIG Batoví

Advantages

- use of technology as an educational tool
- concepts easier to absorb (thematic maps, graphics, ...)
- dynamic spatial relationships
- creativity and interactivity with the information
- strong analytical ability
- applicable to multiple subjects
- easy to use
- adaptability

- free data accessibility
- free software availability
- software being used in higher education
- values of collaboration and solidarity
- educational community
- sharing is easy
- to share is to add







Plan Ceibal

6.Sustainability

Web page inside Ceibal:

http://www.ceibal.edu.uy/art%C3%ADculo/noticias/docentes/gvsigbatoviresumen





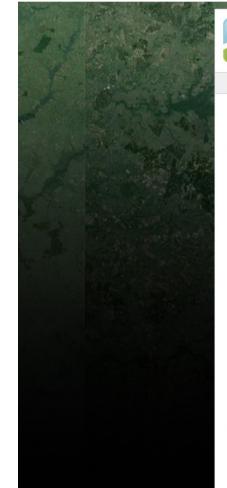






Batoví blog:

http://gvsigbatovi.wordpress.com/



gvSIG

Sistema de Información Geográfica aplicado a entornos educativos con destino al Plan Ceibal en base a ovSIG

INICIO SOBRE GVSIG TUTORIALES Y VIDEOS

Consultora Calixto premiada en DAL 2013

La Consultora Calixto ha obtenido el 3er. puesto en la Apps Challange 2013 de DAL (http://2013.desarrollandoamerica.org/). La propuesta (http://2013.desarrollandoamerica.org /portfolio/2347/) se apoya en el uso de gvSIG Batoví como herramienta para la educación ambiental a través del uso de los Sistemas de Información Geográfica. Una vez más felicitamos a Genoveva y Gabriel por este nuevo logro, destacando ... Sigue leyendo →

Deia un comentario

gvSIG Batoví en las 5as Jornadas de Latinoamérica y Caribe de gvSIG

Genoveva Laurente y Gabriel Calixto (de la Consultora Calixto) realizaron el pasado miércoles 23 de octubre una presentación sobre "Sistemas de Información Geográfica aplicados como Tecnologías Educativas en procesos de Formación y Actualización Docente para la Conservación de la Naturaleza" durante las 5as Jornadas de Latinoamérica y Caribe de gvSIG. En la misma destacaron el uso ... Sigue leyendo →

Deja un comentario

Trabajo a presentar en las 5as Jornadas de Latinoamérica y Caribe de gvSIG: "El saber otorga libertad"

Sistemas de Información Geográfica aplicados como tecnologías educativas en procesos de formación y actualización docentes para la conservación de la naturaleza

1 Comentario



Enlaces de interés

gvSIG Batoví gvSIG Educa lista de correc Plan Ceibal twitter

Últimas entradas

Consultora Calixto premiada en DAL 2013

gvSIG Batoví en las 5as Jornadas de Latinoamérica y Caribe de gvSIG Trabajo a presentar en las 5as Jornadas de Latinoamérica y Caribe de gvSIG: "El saber otorga libertad" Taller Ceibal-Paepu sobre gvSIG Batoví para formadores

ICA-OSGeo Lab Network y gvSIG Batoví







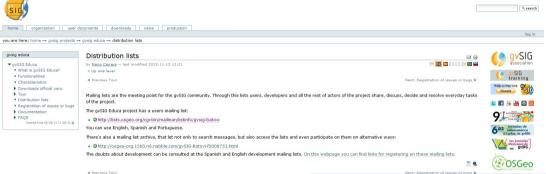






Mailing list:

http://lists.osgeo.org/cgi-bin/mailman/listinfo/gvsig-batovi



gvSIG-Batovi -- Lista de correo para el proyecto gvSIG Educa



To unsubsories from mSIC Datasi ant a assumed comindar or above subsoriation antions onter some subsoriation amail address







English translation and international dissemination:

http://www.geoforall.org/



and Open Source Software for Geospatial applications (FOSS4G)

promote and enhance education, research and service activities

carried out by these stakeholders in the area of Open

movement are attracting increasing attention from end users, developers, businesses, governments, educators and researchers around the world. The goal of the initiative is to

Mission - "Making geospatial education and opportunities accessible to all"



ACI

ICA-OSGeo MoU

Past events

Training resources

Training

ebinar:

Geospatial Science & Applications all over the world. By combining the potential of free and open GI software, open data, open standards, open access to research publications, open education resources in Geospatial education and research will enable creation of sustainable innovation ecosystem to advance the discipline. This is key for widening geospatial education opportunities, accelerating new discoveries and helping solving global cross disciplinary societal challenges from Climate change mitigation to sustainable cities.

Free and Open Source Geospatial technologies are critical for both developed and developing countries as it lowers the access cost to geospatial software for education, government and industry applications: enhancement of research and teaching in geospatial science and technology; research and development of Spatial Data Infrastructures and need for more transparency, accessibility and long term sustainability. It also creates healthy competition for proprietary software. This has been the key reason why government organisations. universities and private companies, are turning to FOSS4G to carry out their missions. For universities, educational institutions, Open Geospatial Science & Applications is especially

The motto of ICA-OSGeo Labs initiative is "Geo For All." The creativity, dynamism and high-profile success stories of the Free

78 labs worldwide as of 26th May, 2014

Welcome to our 50th lab

We are pleased to welcome GIS and Remote Sensing Unit at Fondazione Edmund Mach (EEM), Italy as out 50th lab. FEM have strong GIS research and development capabilities and are co-developer of the Open Source Geographical Information System software...

Open Geospatial Science & Applications" webinar series launched

We are pleased to inform that 255 participants from all around the world attended our first webinar The webinar was on the topic of "OSGeo Live for Education" and delivered by Jeremy Morley (University of Nottingham), Thanks to MundoGeo for providing..

Building a Global Network

Home 🖻	OGCC Making location count. www.opegeospatial.or OSGeo Php	
Advisory board	Be part of "Geo for All"	
How to join		
Locations	Home » Training	
News	Training	
Past events	GIS for Schools initiative	
Training	 Full details 	
Training resources	EduGIS Academy guidebook	
Webinars	 Contact Elźbieta Wołoszyńska-Wiśniewska 	78 labs worldwide
	 gvSIG Batoví (contact Sergio Acosta y Lara) The video link (with English translation) — is useful to get basic information on the wider CEIBAL initiative. 	as of 26th May, 2014
ICA-OSGeo MoU		







Road map towards the implementation of Educa gvSIG:

GVSIG EDUCA

Technical implementation

report



Asociación gvSIG www.gvsig.com





Planning specific activities for its promotion courses for educators

CURSO CONSERVACION Y

S istemas I nformacion G eografica



CHARLA INTRODUCTORIA: LUNES 22

WWW.DFPD.EDU.UY/IFD/SAN RAMON/

DE JULIO 10:00 HS IFD SAN RAMON

módulo 27 de agosto final del 2do módulo domingo 22 de setiembre - entrega de trabajo final domingo 20 de octubre

nicio 1er módulo 29

de iulio - inicio 2do

Destinado a estudiantes avanzados de IFD docentes de primaria socundaria y UTU EURSO GRATUITO 40 EUPOS

EDMODO Biblioteca pdf FOROS Trabajos en grupo Apoyo on-line

Genoveva Laurente SIG Gabriel CaliXto Areas Protogidas y Conservación Bettina Delgado SOPORTE INFORMATICO



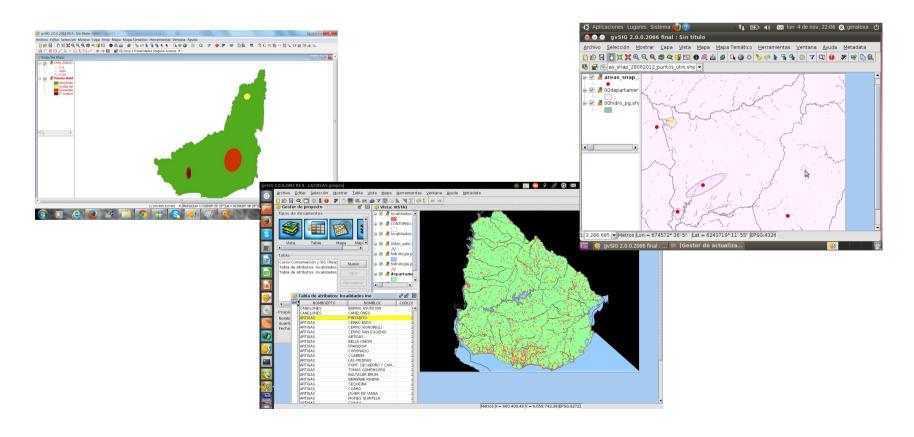
GVSIG BATOVÍ Taller 4as Jornadas LAC







Planning specific activities for its promotion courses for educators







Planning specific activities for its promotion courses for trainers













Planning specific activities for its promotion activities with students





DIRECCIÓN NACIONAL DE TOPOGRAFÍA





Facultad de Ingeniería Universidad de la República





Solve some persistent problems

- Actual versions were developed for first models of laptops for Plan Ceibal
- They work under a special type of Linux, not the usual one
- New version under gvSIG 2.1 for Linux/Windows
- This new one will add interesting features (for instance the possibility of adding OSM layers)
- Search for funding to improve and expand functionality









- Training
- Dissemination
- New Tools, new versions

Spread and promote the use of gvSIG Batoví

Ensure that educators take ownership of it

iCREATE COMMUNITY!









¿Questions?

(thanks to everybody al gvSIG Association, Plan Ceibal and MTOP for making this project possible, and special thanks to Genoveva Laurente, Álvaro Anguix and Mario Carrera for their help in this presentation)

Sergio Acosta y Lara sergio.acostaylara@mtop.gub.uy ICA-OSGeo Lab Network Geo4all http://www.geoforall.org/