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Welcome to The Harlow Report - GIS

Welcome to the 4th issue of 2003! This issue is filled with information that you should know. We take a look at Standardizing the International Cadastre Data Model and some important changes in mobile computing.

Featured Articles

Standardizing the International Cadastre Data Model. The International Federation of Surveyors (FIG) created Cadastre 2014. It was originally proposed in 1994 as a template for the development of a modern cadastre system based GIS technology and presents a vision for cadastral agency operations in the year 2014. Now, ESRI is in the game by announcing a development initiative focused on creating an ArcGIS Cadastre Data Model template based on the Cadastre 2014 concepts.

Natural Area Coding System Extended to Mobile Location Based Services Network The Natural Area Coding System has been developed in order to generate Natural Area Codes for all areas from the size of thousand kilometers to one meter or even smaller derived from longitude/latitude coordinates. The derived eight or ten character Universal Address has a similar length of telephone numbers, can easily fit into the limited space of business cards, yellow page listings, advertisements, etc., and perhaps most important, they can be pinpointed on all maps with Universal Map Grids no matter the scale. Story by Glenn Letham.

Seven Lessons For Your Life and Business from Wimbledon. This article, contributed by Wendy Hearn provides some very useful insight on how we can improve the way we live and how we conduct business. Hearn is a professional business coach, which is a consultant's version of a personal trainer.

More to Know

Out of the Box Our collection of news events that may indirectly effect your GIS project. Events are categorized by State and Local Government, Technology, and Utilities.

GIS Net Surfing Our monthly list of interesting GIS web site links. If you want a description and links for GIS suppliers, click on GIS Vendors in the upper right corner.

News to Use. Short takes on the latest GIS news with links to more information

Just 4 Laffs

Martha Stewart Living? Love her or hate her, here is a tongue in cheek look at a future edition of her magazine

Luck or Talent? This guy is either the luckiest man in the world, or the most talented bike rider I have ever seen.

As always, we thank you for your support, and trust that you and your loved ones remain safe, healthy and prosperous.

Chris Harlow



Standardizing the International Cadastre Data Model

Standards. Good news or bad? Your point of view will dictate that answer. For my part, I like them. Standards are like a railway. They let you go in a certain directions, have a definite set of rules, designated stops, and the occasional train wreck. Like a railway standards limit future creativity and abhor deviation from the norm. Still, without standards I couldn't be writing this on my Mac so that you could read it on your Windows or Unix machine. Finally, for the railway, or standard, to work it must be properly implemented.

Figs, anyone?

The International Federation of Surveyors (FIG) created Cadastre 2014. It was originally proposed in 1994 as a template for the development of a modern cadastre system based GIS technology and presents a vision for cadastral agency operations in the year 2014. Now, ESRI is in the game by announcing a development initiative focused on creating an ArcGIS Cadastre Data Model template based on the Cadastre 2014 concepts.

Just in case you missed it, recently ESRI cohosted an international cadastre data model workshop at the ITC headquarters in Enschede, the Netherlands. There were over 30 cadastre data modeling experts from around the world eagerly assembled to share their expertise and project experience to help define the core data model requirements. According to ESRI's Jim Baumann, "the goal of the workshop was to refine the initial 2014 cadastral data model so it could be used to implement core requirements, which include the management of multiple property rights and restrictions by cadastre agencies." Led by Steve Gris  from ESRI and Christiaan Lemmen from ITC, the workshop was opened by Professeur Paul van der Molen of ITC, who shared his extensive international experience with various land management systems. This was followed by selected presentations from attendees, who outlined the many issues involved in implementing cadastre systems in their organizations. Specialist working group meetings on property rights, survey/topography, and land registry and philosophy were conducted and, after lengthy discussions, reported back to the general meeting to consider specific issues and recommendations.

To get a feel for the true benefit of a cadastre standard I checked with long time GIS expert Dennis Klein. Dennis, you may remember pioneered GIS on a PC with his FMS/AC (Facilities Mapping System on AutoCAD). Currently, he is the president of Boundary Solutions Inc., (www.boundarysolutions.com) a company he founded to provide a single source of data of this nation's parcel maps. Here is his view:

“ESRI long has been a leader in pushing the GIS envelope. I fully appreciate ESRI’s effort to standardize the cadastre data model. At BSI, we spent years collecting the nation’s digital parcel map databases, then and converting each map according to a standard spatial configuration protocol including common format and projection, file / attribute naming convention, annotation and structure, then normalizing the data. One result of this effort is an improved geo-locator for insurance, hazard certification, and real estate information provider companies. flood insurance industry. We welcome all efforts to standardize maps. Hats off to ESRI for leading the way.”

Dennis Klein • Boundary Solutions Inc.

Looking at the model

The preliminary version of ESRI’s ArcGIS Cadastre 2014 Data Model is on the ESRI Data Model Web page (<http://support.esri.com/datamodels>), joining the existing Land Parcel Data Model and others. ESRI says that a key design goal of the data model efforts is that each data model must be open, multipurpose, and standards based. ESRI builds each design on appropriate implementations of the Open GIS Consortium (OGC) Simple Features Specification in which the spatial data is managed in database management system tables.

Conclusion

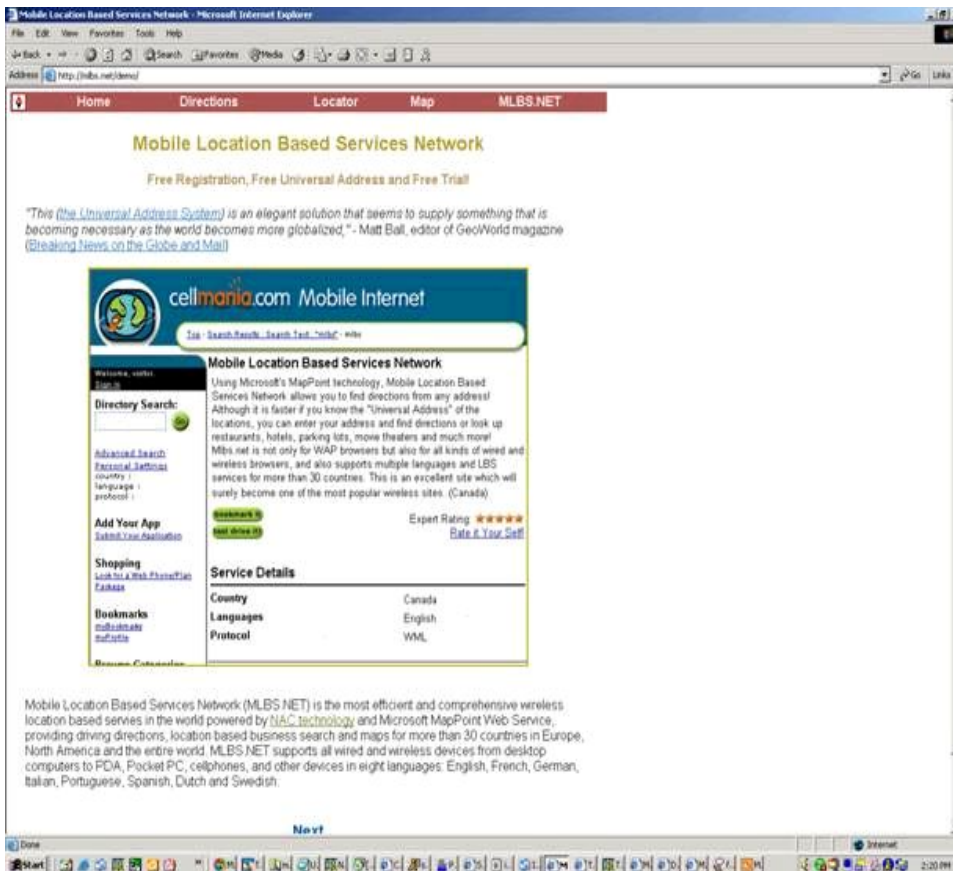
As the King of the GIS Hill, ESRI is, in many ways a defacto standards for key GIS concepts. Adopting and promoting open standards is not what most kings do. ESRI is not only supporting the Cadastre Data Model, but encourages the land records and cadastre community to further enhance the ArcGIS Cadastre 2014 Data Model by leaving feedback on the ESRI Data Model Web page.



Natural Area Coding System Extended to Mobile Location Based Services Network (MLBS.NET)

By
Glenn Letham

You may (or may not) be familiar with the **Natural Area Coding System** (NACS). If not I suspect you will be in the near future. Last year I was fortunate enough to have been contacted by the developer, Xinhang Shen, President, NAC Geographic Products Inc. Recall we featured a story by Dr. Shen which introduced us to NACS (See [Digitize the Entire Earth](#)). The Natural Area Coding System has been developed in order to generate Natural Area Codes for all areas from the size of thousand kilometers to one meter or even smaller derived from longitude/latitude coordinates. The derived eight or ten character Universal Address has a similar length of telephone numbers, can easily fit into the limited space of business cards, yellow page listings, advertisements, etc., and perhaps most important, they can be pinpointed on all maps with Universal Map Grids no matter the scale. They can also be displayed on all GPS receivers without support of databases or maps.

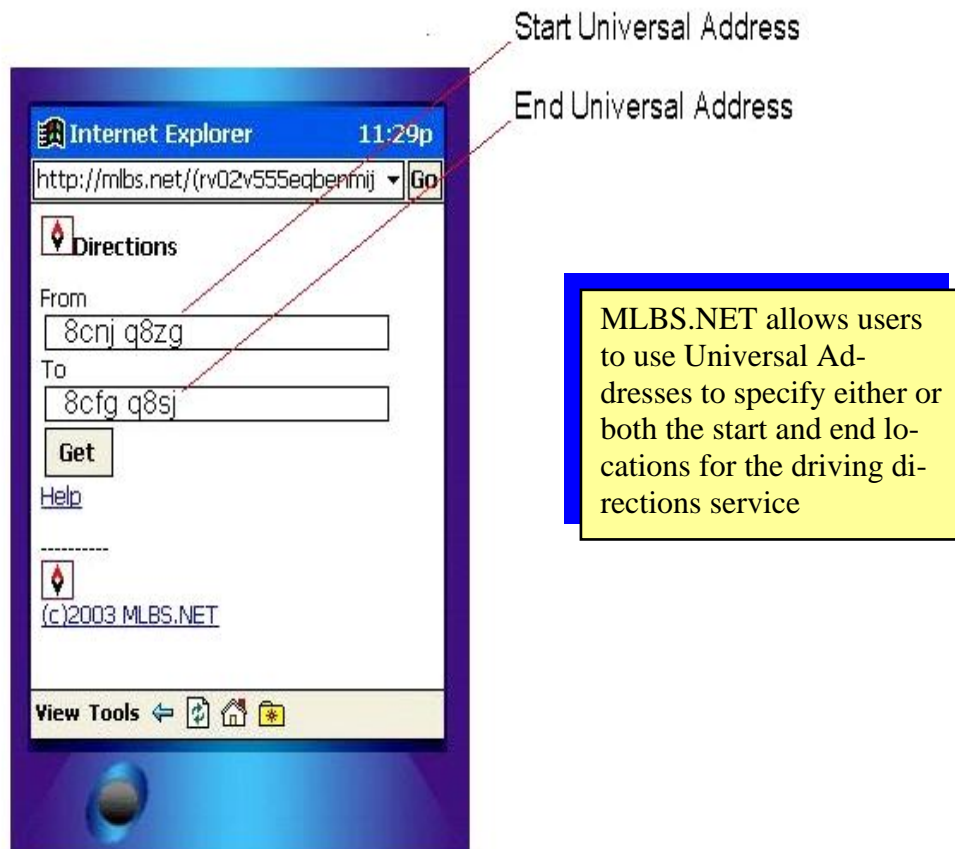


Since publishing that original article, Dr. Shen has taken NACS to the next level... The Universal Address System on MLBS.NET, a wireless location based services application providing driving directions, street maps and location based searches of businesses for entire North America and most of Europe. MLBS.NET provides highly efficient, cross-nation and cross-language location-based services.

MLBS.NET is best described as a comprehensive wireless LBS. The technology is powered by NAC technology and Microsoft MapPoint Web Service. Users of the service have access to driving directions, location based business search and maps for more than 30 countries in Europe and North America. MLBS.NET supports wired and wireless devices including desktop PCs, PDAs, Pocket PC, cellphones, and other devices. Get this... the service is supported in eight languages: English, French, German, Italian, Portuguese, Spanish, Dutch and Swedish.

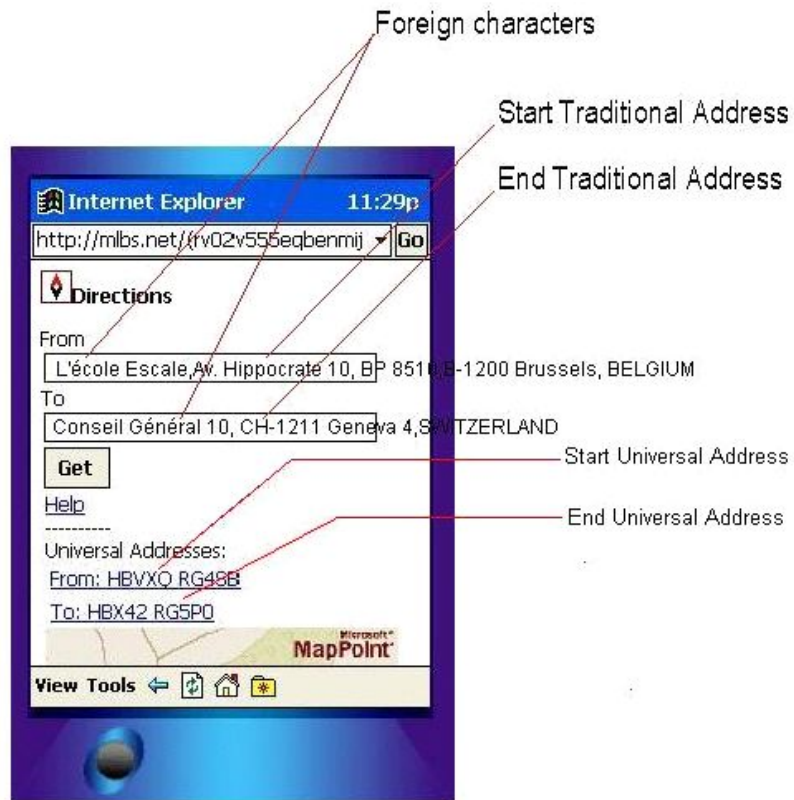
Using MLBS.NET, users can specify street addresses, intersections, Universal Addresses, Natural Area Codes, points of interests, place names or ZIP/postal codes to specify starting and ending locations for driving directions. If a Universal Address or Natural Area Code is specified, the derived driving directions service can be extended to include 25 countries: Andorra, Austria, Belgium, Canada, Denmark, Finland (Helsinki only), France, Germany, Ireland (limited outside of Dublin), Italy,

Figure 1



For coarse resolution searches, ie. from Toronto to New York the NACS codes would be 8c q8 (Toronto) to 8s pr (New York). Don't know the NACS code for a place? Don't worry, this service will always display the Universal Addresses for both start and end locations in the results page (See Fig 2 below).

Figure 2



Example Uses

Lets Produce a simple map. In this example I specify a location (Vancouver, BC, Canada) with a range of 10 km. An attractive MapPoint-generated map appears (see below), along with the resulting NACS centroid, in this case, our NACS code is 4Q5JN R6DH3



Other applications include:

- Routing: limited to Andorra, Austria, Belgium, Canada, Czech, Denmark, Finland (Helsinki only), France, Germany, Ireland (limited outside of Dublin), Italy, Liechtenstein, Luxembourg, Mexico, Monaco, Norway (Oslo only), Portugal, Puerto Rico, San Marino, Spain, Sweden, Switzerland, The Netherlands, United Kingdom, United States, and Vatican City
- Address Search: limited to Austria, Belgium, Canada, Denmark, Finland (Helsinki only), France, Germany, Italy, Luxembourg, Norway (Oslo only), Portugal, Puerto Rico, Spain, Sweden, Switzerland, The Netherlands, United Kingdom, and United States
- Locator: Andorra, Austria, Belgium, Canada, Czech, Denmark, Finland (Helsinki only), France, Germany, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, Norway (Oslo only), Portugal, Puerto Rico, San Marino, Spain, Sweden, Switzerland, The Netherlands, United Kingdom (excluding Northern Ireland, Isle of Man, Cannel Islands, Jersey, and Guernsey), United States, and Vatican City
- Street Maps: All the above countries plus these individual cities: Acapulco Mexico, Athens Greece, Auckland New Zealand, Bangkok Thailand, Beijing China, Bogota Colombia, Brisbane Australia, Budapest Hungary, Buenos Aires Argentina, Cairns Australia, Cairo Egypt, Calcutta India, Charlotte Amalie U.S. Virgin Islands, Christchurch New Zealand, Delhi India, Dublin Ireland, Ho Chi Minh City Vietnam, Hong Kong China, Istanbul Turkey, Jakarta Indonesia, Jerusalem Israel, Johannesburg South Africa, Kingston Jamaica, Kinshasha Congo, Kuala Lumpur Malaysia, Kyoto Japan, Lagos Nigeria, Lima Peru, Lisbon Portugal, Manila Philippines, Mazatlan Mexico, Melbourne Australia, Mexico City Mexico, Moscow Russia, Nairobi Kenya, Nassau Bahamas, Osaka Japan, Perth Australia, Prague Czech, Puerto Vallarta Mexico, Rio de Janeiro Brazil, San Jose Costa Rica, San Juan Puerto Rico, Santiago Chile, Santo Domingo Dominican Republic, Sao Paulo Brazil, Seoul South Korea, Seville Spain, Shanghai China, Singapore Singapore, Sydney Australia, Taipei Taiwan, Tehran Iran, Tel Aviv Israel, Tokyo Japan, Warsaw Poland.

Conclusion

MLBS.NET adds another dimension to the already popular MapPoint.Net web service. The combination of some very innovative technology developed by Dr. Shen and the comprehensive database and routing functionality provided by Microsoft will serve to further simplify the consumers' search for Amusement Places, Car Rentals, Cinemas, Gas Stations, Hotels, Restaurants, and Theaters. Are the people at MapQuest shaking in their boots? Maybe not, but maybe they should be!



Seven Lessons For Your Life and Business From Wimbledon

by
Wendy Hearn

Editor's Note: Wendy Hearn is a business coach. She works with business owners, professionals and executives to discover and unlock their own inspiration, to effortlessly take the actions required to have the success they desire. To receive Wendy's free newsletter, send an email to: newsletter@wendyhearn.par32.com <http://www.Business-Personal-Coaching.com>

There are immense similarities between peak performance in sport, and what it takes to perform well in your life and business. The sports arena offers great opportunities to learn more about playing successfully in life and business. As I watched the recent tennis at Wimbledon it struck me that there were strengths and characteristics in the players that are necessary for us all in order to perform at our absolute best. If you want the best performance, either in your personal life, your career or your business, here are the seven key things you need and which I observed in the tennis players

1. Focus

Tennis players focus intensely and specifically on what they're doing at the moment. Their mind isn't drifting off to other things. They know that being focused is essential to success and you can't take your eye off the ball. Although their focus is more intense than you usually need in an average day, when you take your eye off the ball too often, you could easily find yourself slipping behind and not staying ahead of the game. .

2. They respond fully rather than react.

Responding means that you're ready, you're prepared and not likely to be caught out unexpectedly. Responding comes from being grounded and allows you to choose what to do next, whereas reacting is a knee jerk response. Reacting means you fight fires, you're constantly running behind and battling with the unexpected, rather than making choices that fully contribute to what you truly want.

3. They know what they're aiming for; where they're heading.

You need to be clear about your aims or you could end up all over the place. Tennis players make a conscious choice to place a shot. They don't just hit the ball and hope. You need to make conscious choices about where you want to be and ensure that every action moves you forward in the direction you want to go.

4. They see the connection between the bigger picture and the next step.

You need to know what the bigger picture is like for you and at the same time be willing to focus on the moment and take the next step forward. Tennis players know that every shot and every point counts, even if it's early on in the game. You need to make every action you take count and continue to build on it.

5. They're mentally and emotionally strong.

They don't allow doubt, lack of self-belief, frustration, upsets or negative self-talk to get in their way. They're willing to do what it takes to be strong mentally and emotionally. When you allow your emotions and mental chit-chat to affect you, you're not so likely to perform at your best. As human beings, emotions play a big part in our lives. I'm not suggesting you deny or suppress your emotions, but just discover for yourself what it takes for you to handle your emotions and stay balanced.

6. Flexibility.

Tennis players need to be flexible in their approach to each game. Each opponent is different, has different strengths and weaknesses, so they need to be flexible to change. If they lacked flexibility they wouldn't be able to adapt to different situations and come out winning. When you're flexible, you're willing to consider the best approach for each particular situation.

7. Clarity.

They are clear about all the components that go together to make their game successful. Lack of clarity holds you back, keeps you in fear and doubt and can result in you taking lots of actions but which are all over the place.

Life is a game and your mission, if you choose to accept it, is to play fully.

Seven Lessons For Your Life and Business From Wimbledon
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Out of the Box

Editor's note: In "Out of the Box" we bring you news snippets that are not necessarily related specifically to GIS. These are items that come across my screen that help me understand our industry, by understanding the world around us. For the complete article just click "Details Here." Think of it as thinking **Out of the Box**

In State and Local Government ...

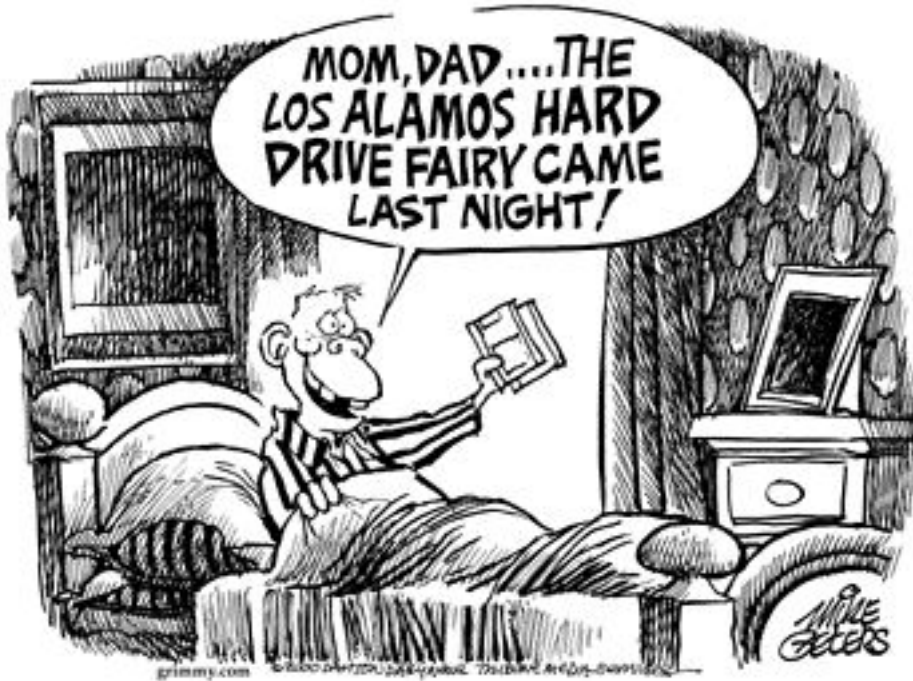
- Assessor of Property Eddie Yokley told the Greene County (Tennessee) Commission's Budget & Finance Committee that he believes the county needs the computer-based Geographic Information System
<http://www.greene.xtn.net/index.php?table=news&template=news.view.subscriber&newsid=101809>
- Vanderburgh (Kentucky) County's Geographic Information Systems program is getting international acclaim. Assistant Building Commissioner Steve Fuchs and GIS Technician Rob Brown were invited to make a presentation on Evanville's system during a conference this past weekend in San Diego.
http://www.myinky.com/ecp/news/article/0,1626,ECP_734_2092455,00.html
- California agency capitalizes on GIS investment with Hummingbird solution, adding seamless access to all business-critical information and resources through a single web-based interface. [Details](#)
<http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=SVBIZINK3.story&STORY=/www/story/07-09-2003/0001978849&EDATE=WED+Jul+09+2003,+09:16+AM>

In Technology ...

- Military Often Enlists Commercial Technology. As the United States invades Iraq, many of the information technologies used by the armed forces would have their origins in commercial rather than military initiatives—a shift from the way the American military traditionally developed the communications used to wage war.
<http://www.nytimes.com/2003/03/10/technology/10GEAR.html?tnmailto>
- Intel announced that it has teamed with Alvarion, a maker of broadband wireless equipment, to develop wireless products based on an emerging standard.
http://news.com.com/2100-1039_3-1024160.html
- In an effort to regain the U.S. lead in supercomputing, the Defense Department has awarded grants totaling more than US\$146 million for three separate supercomputing initiatives. The three winners, Cray, Sun Microsystems and IBM are scheduled to complete their respective projects by the end of the decade.
<http://www.newsfactor.com/perl/story/21876.html>

- A Web services security specification, introduced this week by IBM and Microsoft, could emerge as a rival to the existing Sun Microsystems-backed Liberty Alliance Project.
http://news.com.com/2100-1009_3-1024013.html

In Utilities ...



- The Los Alamos nuclear laboratory said a small amount of low-grade plutonium turned up missing after a transfer of the material that is used to make nuclear bombs, but added the missing plutonium does not pose a threat. "The total amount of nuclear material involved is very small, but due to security requirements the specific quantity cannot be disclosed," Los Alamos National Laboratory said in a statement. A watchdog group called Project on

Government Oversight said the missing material consisted of two grams (0.0755 ounce) of weapons-grade plutonium. A Los Alamos spokesman said the missing material was not weapons grade.
<http://asia.reuters.com/newsArticle.jhtml?type=scienceNewsstoryID=2952653>

- Federal Energy Regulatory Commission staff laid out ways to shore up the accuracy of natural gas and electric deals that energy companies report.
<http://www.pennlive.com/search/index.ssf?/base/business/1056101552138570.xml?pennbiz>
- P&E National Energy Group Inc., a major owner of electric generating plants in New England, filed yesterday for Chapter 11 bankruptcy protection. The move had been expected since May, and officials said it should have no immediate impact on local electric supply reliability or company commitments to reduce emissions from its Salem Harbor plant.
http://www.boston.com/dailyglobe2/190/business/Pg_amp_E_National_Energy_files_for_bankruptcy+.shtml
- Report: Top Greenhouse Gas Emitters in Oil, Utility and Auto Industries Not Disclosing, Acting on Financial Risks of Climate Change.
<http://www.stockworld.de/msg/569110.html>



GIS Net Surfing

Alexandria Digital Library Project

<http://www.alexandria.ucsb.edu/>

The project began in 1995 with the development of the Alexandria Digital Library, a working digital library with collections of geographically referenced materials and services for accessing those collections. The Alexandria Digital Library Project is headquartered on the campus of University of California at Santa Barbara. [<http://www.ucsb.edu/>]

The Center for Advanced Spatial Technologies

<http://www.cast.uark.edu/>

The Center for Advanced Spatial Technologies (CAST) is an organization within the University of Arkansas that has brought together researchers dealing with the fields of GIS, GPS, archeology, geosciences, etc; to develop and maintain information for the scientific community.

SUNY Geosciences Collection

<http://www.sunysb.edu/libmap/geocoll.htm>

The Geosciences Collection is located in the Melville Library. It shares the North Reading Room in that building with the Engineering Collection, the Map Collection, the Biology Collection, and the general science collection. The primary purpose of the Geosciences Collection is to serve the research and teaching needs of the Geosciences Department of the State University of New York at Stony Brook.

The Institute of Earth Sciences Library

<http://earth.es.huji.ac.il/~eslib/main.htm>

The Institute of Earth Sciences Library at The Hebrew University of Jerusalem was created by the merger of the former Geology and the former Atmospheric Sciences libraries. The collection numbers some 60,000 physical volumes. In addition to books and serials, there are small collections of aerial photographs ,geological maps, slides, and reprints

Branner Earth Sciences Library and Map Collections

<http://www-sul.stanford.edu/depts/branner/information/tips.html>

Located at Stamford University, the branner Earth Sciences Library provides a wealth of information on Earth Sciences and mapping. The link above brings you to the main link and search page. Good source of information — check it out.



News to Use

Azteca Systems Introduces Cityworks Version 4.1

<http://www.azteca.com>

Azteca Systems Inc. released Version 4.1 of its Cityworks GIS-based asset and maintenance management software. According to company spokesman Tom [tpalizzi@azteca.com] “Cityworks 4.1 combines the results of user feedback with general market interests. While the core functionality remains, Version 4.1 offers a new user interface and enhanced domain security. With full support of ESRI’s leading ArcGIS software and the GeoDatabase, Cityworks is still the only GIS-based asset and maintenance management solution available. Version 4.1 supports ESRI’s ArcView 3.x environment, as well.”

ESRI Business Information Solutions Releases the 2003 Sourcebook Products

<http://gis.esri.com/esripress/display/index.cfm?CFID=397576&CFTOKEN=57006402>

ESRI Business Information Solutions (ESRI BIS) announced the release of the 17th edition of The Sourcebook of ZIP Code Demographics, the 15th edition of The Sourcebook of County Demographics, and the 2003 edition of Sourcebook-America with ArcReader.

CompassCom Introduces 4.0 Versions of CompassTrac and CompassFDE

<http://www.compasscom.com>

CompassCom Inc. released Version 4.0 of its CompassTrac™ and CompassFDE™ Automatic Vehicle Location products. CompassTrac is the mobile positioning and fleet tracking component of the CompassCom AVL system, and CompassFDE™ is the universal location data server software.

upFront.eZine Publishing, Ltd. Launches Tailoring AutoCAD

[http://. www.upfrontezine.com.](http://.www.upfrontezine.com)

upFront.eZine Publishing, Ltd. launched Tailoring AutoCAD, the e-book for new and experienced AutoCAD users. The 160-page e-book contains step-by-step tutorials for learning how to customize the popular CAD (computer-aided design) software. Tailoring AutoCAD is published exclusively in Adobe Acrobat format. The e-book covers these tutorial subjects:

- * Changing the AutoCAD user interface.
- * Creating aliases and keyboard shortcuts.
- * Modifying the toolbar and writing macros.
- * Customizing menus and writing menu macros.
- * Creating custom linetypes and hatch patterns.
- * Working with .shp files for shapes/fonts.
- * Writing scripts and AutoLISP programs.

Price is \$19.95 with electronic delivery; \$24.95 on CD, shipping included. (All prices in US funds.)

ImageLinks and CAE Forge Long Term Agreement

<http://www.ImageLinks.com>

ImageLinks Inc. entered into a long term business relationship with CAE Inc. of Montreal, Canada, as CAE's preferred provider of imagery databases. CAE selected ImageLinks based on its track record for consistently delivering quality TrueTerrain™ products, superior customer service and a detailed understanding of the Visual Simulation industry. Image Links creates TrueTerrain products by merging and mosaicking multi-source, multi-resolution satellite and aerial imagery on an elevation surface to provide realistic, geospecific terrain features.

Intergraph Funding Research for UCGIS Members

<http://www.ingr.com/>

Intergraph Mapping and Geospatial Solutions, in collaboration with the University Consortium for Geographic Information Science (UCGIS), today announced a GeoMedia® research grant opportunity for UCGIS members. Furthering UCGIS' longstanding commitment to the geographic sciences and education, the grant is open to any member using or intending to use Intergraph's GeoMedia technology as the foundation for geographic information systems (GIS) research. The GeoMedia research grant will award \$5,000 (U.S.) cash funding and a \$50,000 software donation in recognition of an exceptional and innovative applied research proposal submitted by a UCGIS member.

Hydro Ottawa Awards Intergraph Contract for GIS and Outage and Mobile Workforce Management

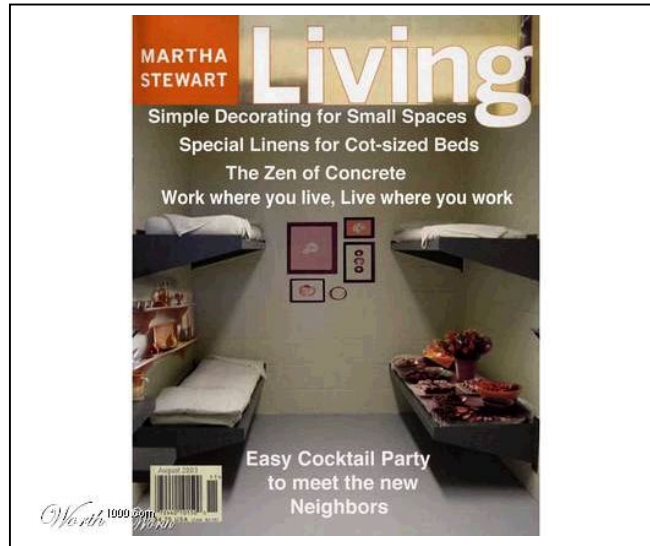
<http://www.hydroottawa.com/holding/index.cfm>

Hydro Ottawa Limited purchased Intergraph Mapping and Geospatial Solutions' G/Electric for geofacilities management and InService™, for outage and mobile workforce management. Hydro Ottawa serves approximately 260,000 customers in the Ottawa region and is the third largest electric utility in Ontario. G/Electric and InService will form the foundation of Hydro Ottawa's integrated Geospatial Resource Management (GRM) environment, which supports seamless workflows among applications that manage and maintain a service-delivery network. G/Electric's open architecture facilitates integration between geospatially related analysis applications. InService's outage management capability will enable Hydro Ottawa to manage day-to-day network operations more efficiently and reduce restoration time during power outages throughout its 1,050-square-kilometer service territory. In addition, it will analyze operating data to help predict and correct probable distribution network failures.



Martha Stewart Living?

Martha Stewart is a woman that America seems to love to hate. Now that she is in trouble with the law, the wolves are gathering around. Is The Harlow Report above that? Of course not! Here is our contribution, sent anonymously from that thing we call the internet.



If you change your
Email address,
tell us!

Charlow@charter.net



**Looking for a domain name, email address or an inexpensive web hosting services?
Go to <http://www.aadomain.net> where domain names are \$8.75 or less!**