ILLINOIS GIS NOTES
THE NEWSLETTER OF THE ILLINOIS GIS ASSOCIATION
September 2012

ERROR LOGGING: A SIMPLE APPROACH TO SNAKE CHARMING

By Rian Crowley

Python is a simple, yet powerful programming language useful for automating anything from small routine tasks to large complex work-flows. The initial investment in development time is a small price to pay for the return that investment yields, which amounts to a significant increase in efficiency and productivity. The benefits are even greater if the code is written in such a way as to be reliable and trustworthy.

A good script possesses many of the same characteristics as a good employee. A reliable employee who can work independently to successfully complete a task is a valuable asset to an organization. More so if that employee can also be trusted to speak up when they don't know how to do a particular task or if they realize they've performed an assigned task incorrectly. As script writers, we should strive to write code possessing these qualities of reliability and trustworthiness.

A simple way to boost the reliability and trustworthiness of a script is to include code for error logging. There are many different approaches to error logging with Python. The easiest and perhaps most common approach is to use print statements to display an error message whenever errors occur, but print statements are lacking in the sense that they do not notify the rest of the script when an error has been encountered. And this approach generally means someone has to either check a log file after each execution or actually monitor the script as it's running, which doesn't do much for efficiency and productivity.

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IN THIS ISSUE...

MY SPATIAL CORNER

from your President

By Shelley Silch

A big "Thank You" to all that attended and presented at the Southern Illinois Training Event that was held August 24 in Centralia, IL at Kaskaskia College. A big note of thanks also to our sponsors: Seiler, Cloudpoint and VerticalGeo. The theme for the day was "Power of Locating Things Together." Our attendance almost doubled from the first year!

The Board has had a busy year (they were warned!) The Board has been working on a Strategic Plan. Committees have been busy: Bylaw committee has been busy with a lawyer bringing the bylaws up-to-date, Webinars are well attended, Membership Committee has been busy gathering information, Education Committee has been working on a service project and student activities, Nominations Committee had a busy time looking for your new Board members, Finance Committee has been busy keeping an eye on your funds, Awards Committee stays active year round looking to recognize those outstanding students and members, and the list goes on and on. Try serving on a committee...you'll be surprised (and hopefully pleased) about how ILGISA functions.

Do you have fun at the ILGISA Conferences? Lots of hard work goes into putting these conferences on each and every time. Hopefully, all the volunteers who work on these conferences enjoy themselves. Please let the committees know if you have any ideas about what would make the conference more enjoyable/educational/meaningful for YOU. Personally, I hate to fill out the end of conference surveys...but believe it or not...we do read those and try to incorporate your ideas. I personally love theconferences being held on campuses. What about you?

I look forward to seeing everyone at the Fall Conference on the Naperville Campus that's coming up on October 16-17.

Shelley Silch is the President of ILGISA and the USGS Geospatial Liaison for Illinois - ssilch@usgs.gov or 217-328-9732

GIS NOTES FROM THE EDITOR

Hello GIS Notes readers. The Publications committee would like to announce some exciting news. GIS Notes will soon be forever archived. Last year (2011) EBSCO approached ILGISA about archiving the GIS Notes newsletter and respectfully submitted a contract for consideration. Here is a sample from the EBSCO website: "Established in 1944, EBSCO is the world's leading information agent providing consultative services and cutting-edge technology for managing and accessing quality content, including print and e-journals, e-packages, research databases, e-books and more. Now more than ever libraries and research organizations are looking for new ways to manage their collections more efficiently." They provide an online database of world-wide publications for research at schools, libraries and other institutions. This archiving service does not cost ILGISA and helps us gain greater exposure. In October of last year the ILGISA Board of Directors voted to move forward to consider the contract and on August 8th of this year gave the final approval. This is a wonderful opportunity to have our newsletter archived and allow our name to stand alongside of some great professional journals.

As always, we appreciate your feedback on GIS Notes, and welcome your thoughts on additional ways that we might improve ILGISA publications.

Micah is the ILGISA Publications Committee Chair and GIS Manager for Peoria County.

GIS EDUCATOR'S CORNER

ILGISA Members:

I can scarcely believe that my term has ended as a member of the ILGISA Board of Directors. I have served two terms and will now cycle off and ride into the spatial sunset…it has been quite a ride.

Having said that, I want to update everyone on the goings-on of the education portion of our organization…

One of the primary aspects of the organizational mission of ILGISA is to educate others, either outside the community or those entirely new to the geospatial profession, about geospatial technologies. We strive to create a solid pathway in order to pave the way for a successful transition into the geospatial workforce. The Education Committee is doing everything possible to make that happen including a job opportunities and internship page on the ILGISA website, and holding discussion sessions concerning careers at both the Fall and Spring ILGISA Conferences. These have been moderately well attended, but we need your help, as an ILGISA member and member of the geospatial community, to recruit those who may have an interest in a career in geospatial technologies.

Recent estimates indicate that geospatial jobs are slowly on the rise and to keep up with the expected demand, the industry will need the number of future geospatial workers to increase dramatically. To that end, the ILGISA Education Committee has set our highest priority for 2012 to encourage both two- and four-year educational institutions to establish ILGISA Student Chapters. The ILGISA Board of Directors has set forth seed monies in 2012 in order to assist with this. A goal has been established of encouraging ten (10) institutions to begin new student chapters in 2012 with each receiving the startup funding upon successful establishment of the student chapter. A concerted effort is planned for this fall, when students return to campuses, in order to make that a reality. This not only provides additional revenue for ILGISA, but promotes the next generation of the geospatial workforce and potentially provides a pool of interns for employers who may be interested in hiring interns on a periodic basis. A subcommittee of six ILGISA Education Committee members has been working diligently to make this happen.

Additionally, a number of you have attended ILGISA Webinars over the past few months, which will continue in 2012. The demand is great for ILGISA to offer these free webinars to its members and outside interested parties. The Education Committee will continue to work collaboratively with the Ad Hoc Webinar Committee to continue to provide educational webinar experiences to the ILGISA membership. Watch for an upcoming announcement as to how you can participate as a webinar leader in the upcoming months and share your spatial experiences.

Lastly, the Education Committee has undertaken a new venture this year in expanding our outreach to offer a service project to the community, related to geospatial education. If you have ideas or would like to be involved with the service project, please contact me at richs@elmhurst.edu and I will connect you with the service project organizers.

I hope all of you, as ILGISA members, will join me in our efforts to carry out the mission of ILGISA and educate the community on the importance of geospatial issues and answers as well as provide for the next generation of the geospatial workforce. It has been my honor and pleasure serving as an ILGISA Board member and chair of the Education Committee for these past four years.

See you at the Fall Conference in Naperville at the Northern Illinois University satellite campus on October 16 and 17.

Rich Schultz, Ph.D.
Chair, Education Committee

Dr. Schultz is also Assistant Professor of Geoscience and GIS and Coordinator of the GIS Certificate Program in the Department of Geography and Geosciences at Elmhurst College.

(Error Logging continued from Page 1)

On the other end of the spectrum is the logging module packaged with Python. Used properly, this module provides excellent fine-grained control over error handling and logging, but unless the developer is really committed to the subject and has some serious free time on their hands, it may not serve as the best option.

The approach I take is to employ a simple LogFile class that can easily be utilized by any script. The LogFile class I've written satisfies these five requirements:

1. Record the name of the script being executed.
2. Record the time and date the script started and finished.
3. Log messages provided by the script.
4. Provide a fatal error status for the script, indicating when a fatal error has been encountered.
5. Send an email including name, date/time, and logged messages if a fatal error is encountered.

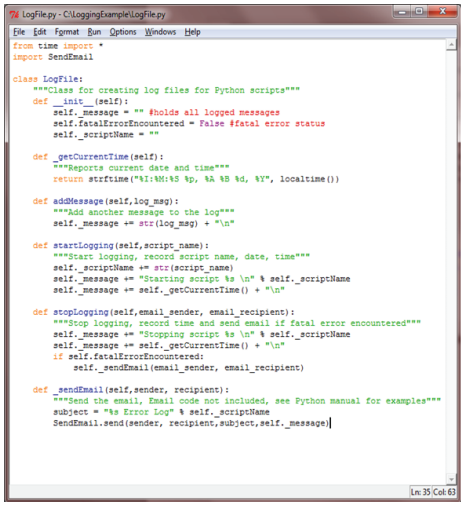


Figure 1: The Log File Class

Obviously, a major component of the LogFile class are the log messages themselves. Log messages serve to reveal what what went wrong and provide clues, or even an explanation, as to why. The verboseness of a log message is a matter of personal preference, but I prefer to only be given the pertinent facts. In my opinion, log messages shouldn't report every action that a script takes, especially if warnings or errors have not occurred. Think of how overwhelming, not to mention senseless, it would be if a vehicle reported everything it was doing at a given moment in time. Would drivers really benefit from being alerted for each crankshaft rotation or spark plug firing? Coders might benefit by taking a cue from their vehicles' error-handling technique and only reporting items of interest.

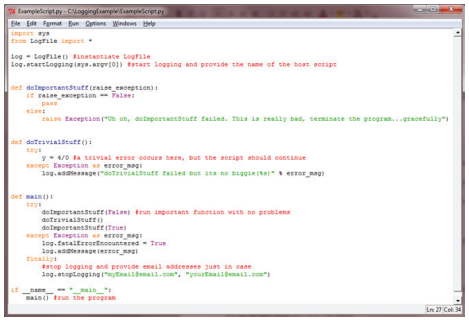


Figure 2: Sample Script to Demonstrate Implementing the LogFile

Another important feature of the LogFile class is the property it has for storing the fatal error status of the script. This boolean property is set to true when something catastrophic happens that significantly compromises the script's goals. Other functions in the script can monitor this property and behave accordingly. When the script reaches its end, the LogFile object is told to stop logging, and if the fatal error property is true, it will send an email containing the name of the script, execution time, and log messages to the specified recipients. Otherwise, if a fatal error has not been encountered, the recipients are never contacted, and they can rest assured, trusting that their script ran successfully.

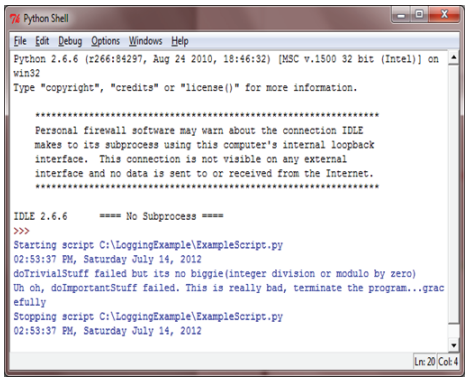


Figure 3: Caption?

For me personally, the LogFile class has proven to be a great asset and is a tool I frequently use when crafting code. I no longer have to write custom error logging functions for each script. I no longer need to monitor log files or watch for print statements with each execution. I can be more confident of my code's execution and output, and I can trust my code to either accomplish its tasks or notify me if it cannot. Perhaps most importantly, I'm free to spend time working on other things. And after all, isn't that why we deploy scripts in the first place?

Rian Crowley is a GIS Analyst at Lake County GIS/Mapping Division.

WORKING WITH ARCGIS VIEWER FOR FLEX

By Keisuke Nozaki

Introduction

The Western Illinois University (WIU) GIS Center has been providing maps to our partners including the City of Macomb, McDonough County, and Western Illinois University. In addition to printed maps, we shared digital maps with our clients using ArcReader. However, this method requires us to install software on clients' computers and update data frequently. To resolve this issue, we developed web maps with ArcGIS Server. Clients only need web browser such as Internet Explorer or Mozilla Firefox to view our maps which are updated automatically. For example, the McDonough County Map is available to the public (http://www.wiu.edu/GISCenter/). There are also password protected maps available to our clients such as the utility database in Macomb and WIU. We have developed web applications using ArcGIS Server Manager (out of the box Web ADF). However, there are pros and cons of Web ADF. Even though developers may not need to spend lots of time learning about this application, maps created from out of the box Web ADF may not be light or user-friendly for non-GIS clients. In addition, customizing Web ADF requires programming experience with Microsoft Visual Studio.

Fortunately, there are other options to create web applications besides Web ADF. There are Web API s (Application Programing Interfaces) provided by esri (Fig.1). Developers may choose JavaScript, Flex, or Silverlight to customize web applications. Esri also offers Web Apps for those who do not have a programing background. While ArcGIS.com Viewer and ArcGIS Explorer Online are ready to use Web Apps, ArcGIS Viewer for Flex, ArcGIS Viewer for Silverlight, and ArcGIS for SharePoint are configurable applications (Fig.2). While larger companies and municipalities could afford hiring Web API programmers, Web Apps such as

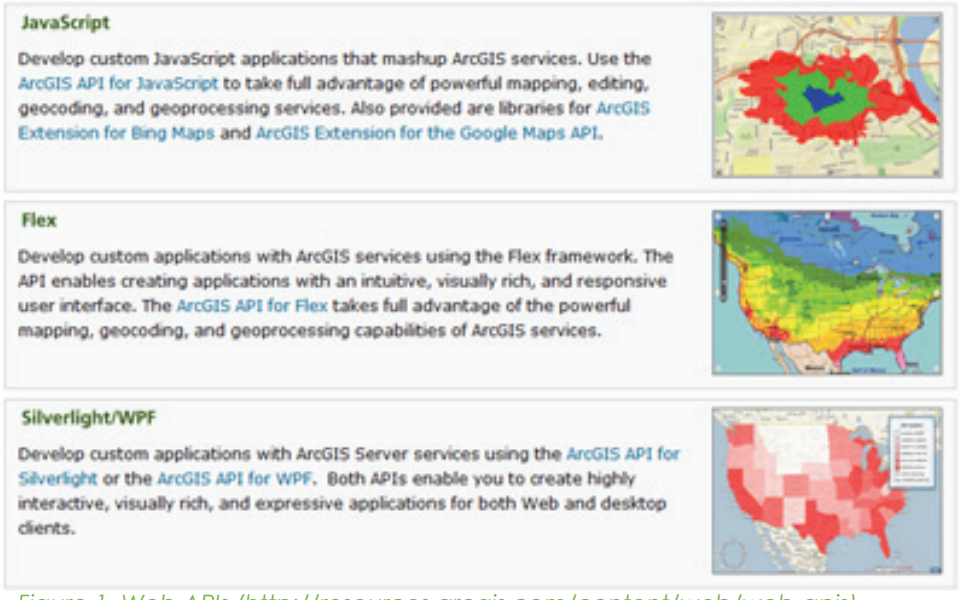


Figure 1. Web APIs (http://resources.arcgis.com/content/web/web-apis)

ILGISA CALENDAR

OCTOBER

October 1 - 2013 Membership renewal period starts

October 16-17 - Fall Conference at NIU Naperville

NOVEMBER

TBD - Webinar Series Resumes

November 14 - GIS Day

DECEMBER

December 31 - 2012 Membership year ends. *(2013 dues to be received by January 1, 2013 to avoid having to pay lapsed member rate.)*

APRIL

April 17-18 - ***Spring Conference*** at the I-Hotel & Conference Center in Champaign, Illinois

2012 ILGISA SPRING CONFERENCE

The 2012 ILGISA Spring Conference was held April 18-19 at the I Hotel in Champaign. The theme of the conference was 'Visualize Your Geography'. As was the case with the 2011 Spring Conference, the conference format consisted of workshops and sessions interspersed on both days. A new feature of the conference was a plenary session occurring each day. Also new to this conference was a town hall meeting that gave attendees the chance to ask questions of ILGISA Board members, as well as voice issues of concern.

Standards and coordination were the overarching theme for the plenary sessions. We were pleased to feature two of our own, Gail Krmenec, Geographic Coordinator for the US Census Bureau Chicago Regional Office, and Bill Faedtke, retired DuPage County GIS Manager, as the Day One plenary speakers. Gail spoke about initiatives the Census Bureau is undertaking, while Bill spoke about ILGISA's efforts to coordinate statewide GIS data sharing.

Day Two's plenary speaker, Hilary Perkins, Planner for the City of Maryland Heights, Missouri, shared her experiences in helping develop the United States Throughfare, Landmark, and Postal Address Data Standard through her extensive involvement with URISA.

We would like to thank our Executive Director, Kelley Chrisse, and her colleagues at NIU for their hard work to make the conference successful. Thanks also go to the members of the Spring Conference Planning Committee for their efforts and ideas to craft the conference.

Greg Johnson - Co-Chair
Roger Diercks - Co-Chair
Steve DiNaso - Eastern Illinois University
Ryan Meekma - Illinois State Water Survey
Tom Rogers - Seiler Instrument

2012 OUTSTANDING STUDENT AWARDS

The Outstanding Student Award is presented to an undergraduate student of any major who has included GIS in their course of study, and has demonstrated exemplary proficiency and understanding of GIS, potential contribution to the GIS Community, and general success in school. No more than five such awards are presented each year.

This year, the award was presented to four students at the Spring Conference:

- Rohail Dean, DePaul University
- Joseph Lehnert, Illinois State University
- Caleb Mackey, Western Illinois University
- Trisha Rentschler, Eastern Illinois University

Congratulations to all the 2012 Outstanding Student Award winners!

QUICK TIPS FOR GEOREFERENCING A BACKGROUND IMAGE

By Kelsey Caldwell

As handheld GPS field technology advances in hardware and software, many users are finding great ways to include these new additions into their work. Some are as simple as a built-in camera and others are complex coding behind the scenes.

A common practice that is being taken out into the field is the use of a background map incorporated with the field software. This comes in handy in all lines of work, especially if the user is unfamiliar with the area.

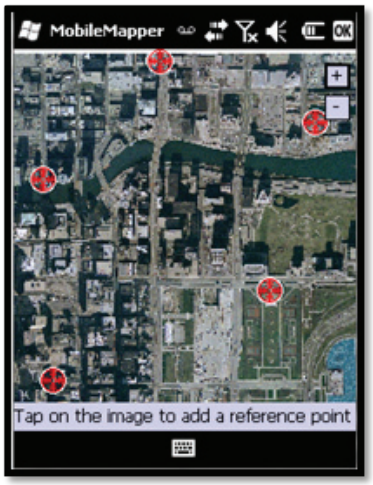
Some users have the resources to stream a background map via WIFI, others have georeferenced images available at request, and many have the task to georeference the images themselves.

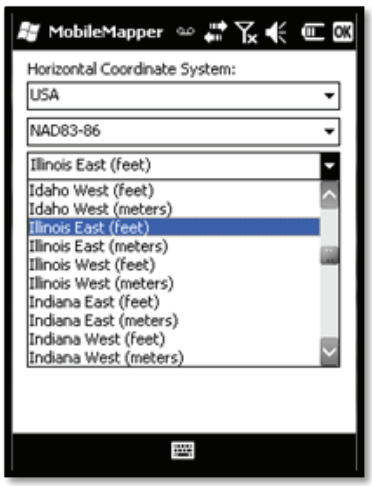
There are many ways to georeference an image, those who are familiar with the format create the world file from scratch, and others use software to do it for them. A couple programs that provide a georeferencing tool are ESRI's ArcMap and Spectra Precision's Ashtech MobileMapper Field/Office. Regardless of the software being used, it is important to keep these following tips in mind when georeferencing an image to export into field software:

1. When georeferencing with software, the program will prompt the user to select points on the image and give them a location, for example, latitude/longitude coordinates. It is important to select a minimum of three points. This will ensure that there is an adequate amount of information for the software to reference the image.
2. When choosing points, make sure to spread them throughout the entire image, this will decrease the amount of distortion put on the image.
3. It is good practice to select points clockwise given that many georeferencing programs convert the image in the order the points are chosen. This will allow the image to be referenced in an organized pattern resulting in a neater finish.
4. Make sure the image's coordinate system matches that of the layers being used on the map. This is something to double check before the unit is taken out in the field since some programs do not provide a warning, they simply do not display the background image. Others will show the image nowhere near its correct location.
5. It is not recommended to use a background image to test a unit's accuracy. One main reason is because imagery is taken with different equipment by different operators resulting in some error with every aerial photograph.

For any questions regarding this article or similar topics, please feel free to contact Kelsey Caldwell at Precision Midwest (630) 836-1000

Kelsey Caldwell is a GIS Specialist with Precision Midwest.





PRECISION MIDWEST

(Working with ArcGIS Viewer for Flex, continued from Page 5)

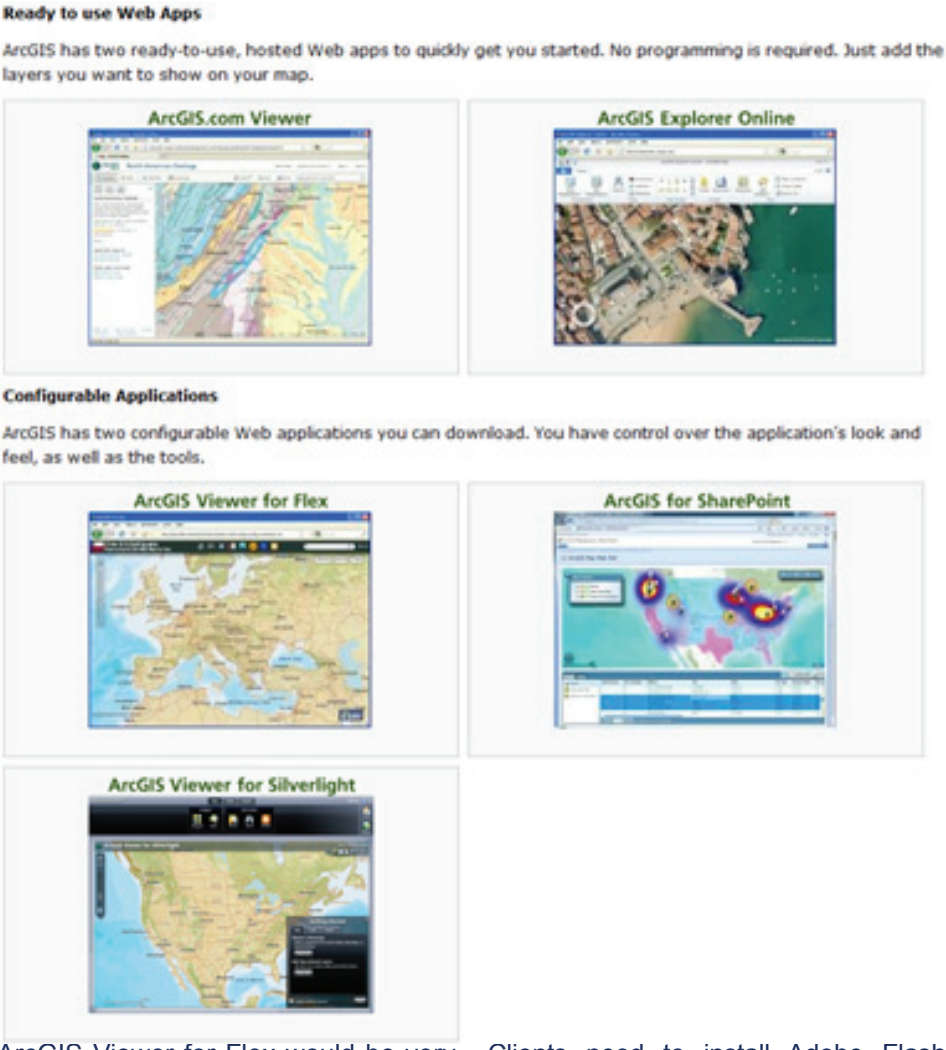


Figure 2. Web Apps (http://resources.arcgis.com/content/web/web-apps)

ArcGIS Viewer for Flex would be very useful for smaller communities.

Developing ArcGIS Viewer for Flex

In this section, ArcGIS Viewer for Flex was selected among others for a number of reasons. The author has a limited programing background but hopes to configure web applications without purchasing additional software. ArcGIS Resource Center provides many widgets (tools) and active discussion forums as well as Concepts and Samples. Clients need to install Adobe Flash Player to view web applications, but with appropriate configurations ArcGIS Viewer for Flex tends to get lighter than Web ADF. A challenge is that the author needs to learn how ArcGIS View for Flex is structured although programming is not required.

The author would like to discuss quick steps developing web applications using ArcGIS Viewer for Flex. Keep in mind the following steps are only the basic concepts, and not all configurations have been included.

The first step would be visiting ArcGIS Resource Center (http://resources.arcgis.com/en/communities/flex-viewer/) and download Viewer. A free esri global account is required to access the files. Then locate the unzipped files under the server's web directory (default location for Microsoft IIS is C:\Inetpub\wwwroot\flexviewers). Please read Concepts thoroughly and check Samples in ArcGIS Resource Center. Notepad is all the developers need while some people may prefer a more advanced text editor such as Notepad++ or NotePad 2. The next Step is publishing map services using ArcGIS Server. In case the software is not available, there is an option to use other's map services such as ArcGIS Online. To find the appropriate URL, please visit ArcGIS Services Directory at http://<host>/<instance>/services/. For example, ArcGIS Services Directory for ArcGIS Online is http://server.arcgisonline.com/arcgis/rest/services/ (Fig.3).

Please read ArcGIS Server REST API for more information (http://resources.arcgis.com/en/help/rest/apiref/index.html). It is now time to edit the config.xml in the downloaded files from ArcGIS Resource Center. The most important thing is adding a map to an operational or basemap layer as the following.

```
<layer label="Boundaries
and Places" type="tiled"
visible="true"
url="http://server.
arcgisonline.com/ArcGIS/
rest/services/Reference/
World_Boundaries_and_
Places_Alternate/
MapServer"/>
```

Figure 3. ArcGIS Services Directory for ArcGIS Online

Developers are required to specify URL for map services, referring to ArcGIS Service Directory and select type (dynamic or tiled if cached). There is an option to define the initial map extent, change titles, log, and style colors. In the config.xml, developers may add or remove widgets as follows:

```
<widget
label="Traffic Camera" icon="assets/
images/i_camera.png" config="widgets/
Query/QueryWidget_Louisville_TrafficCams.
xml" url="widgets/Query/QueryWidget.
swf"/>
```

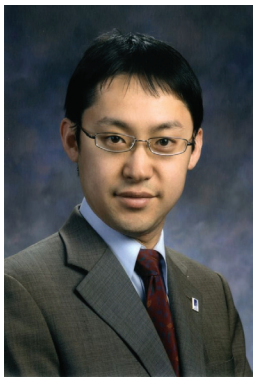
If widgets are added, it may be necessary to configure the xml file in each widget. Configurations for each widget are different, and it is important to carefully read Help in ArcGIS Resource Center or readme.txt, which is included in the widget. These are all the basic steps required to configure web applications using ArcGIS Viewer for Flex.

Conclusions

There are several limitations in ArcGIS Viewer for Flex. First, esri provides limited samples in ArcGIS Resource Center. Advanced widgets are voluntarily distributed by developers. Esri only supports sample widgets, and any questions to other widgets need to be asked to the individual. Secondly, widgets are version dependent. For example, widgets designed for version 2.5 may not run in 3.0 Viewer. It would be the developers' burden to upgrade widgets every time the new Viewer is released. Finally, widgets configurable to some extent. If further customization is required, developers may want to learn programming with Adobe Flash Builder.

Dev Meet Ups by esri is a great meeting to exchange ideas between developers. The schedule is listed at http://www.esri.com/events/dev-meetup/index.html, and hopefully a meeting will be held in the Midwest more frequently. The author requests esri to provide more samples which reduces a burden of the volunteers. Any new idea should be submitted to ArcGIS Idea (http://ideas.arcgis.com/) which definitely helped the development of the new Viewer 3.0.

In conclusions, ArcGIS Viewer for Flex is a great customizable application for non-programmers. Even though it requires developers to configure xml files, there is a handful of widgets available at ArcGIS Resource Center. While larger companies and municipalities could afford hiring Web API programmers, Web Apps such as ArcGIS Viewer for Flex would be very useful for smaller communities. The more participants who are involved with ArcGIS Resource Center, the greater the benefit to the future of GIS. ■



Keisuke Nozaki is a GIS Specialist at the GIS Center, Western Illinois University.

CONGRATULATIONS TO THE NEW GISP'S!

Congratulations to the following members who have obtained or renewed their GISP Certification since August 2012:

- **Josh Thompson** - *GIS Specialist*, Mc Lean County
- **Milan Cukvas** - *Land Survey, Terrestrial LiDAR and GIS Services*, EXP US Services Inc
- **Howard Veregin** - *State Cartographer*, Dept of Geography UW-Madison
- **Wendy Sheppard** - *Administrative Specialist/GIS Support Specialist*, State of Illinois
- **Michael Wallace** - *GIS Specialist*, American Surveying & Engineering, PC
- **Charles Barton** - *Project Manager*, Maurer-Stutz, Inc.
- **Heena Lee**- *GIS Coordinator*, Village of Algonquin
- **Ryan Meekma** - *GIS Specialist*, Illinois State Water Survey

USGS CORNER

The 3D Elevation Program – Summary of Program Direction

By Shelley Silch

Introduction

The 3D Elevation Program (3DEP) initiative responds to a growing need for high-quality topographic data and a wide range of other three-dimensional representations of the Nation's natural and constructed features. The National Enhanced Elevation Assessment (NEEA), which was completed in 2011, clearly documented this need within government and industry sectors. The results of the NEEA indicated that enhanced elevation data have the potential to generate $13 billion in new benefits annually. The benefits apply to flood risk management, agriculture, water supply, homeland security, renewable energy, aviation safety, and other areas. The 3DEP initiative was recommended by the National Digital Elevation Program and its 12 Federal member agencies and was endorsed by the National States Geographic Information Council (NSGIC) and the National Geospatial Advisory Committee (NGAC).

Goals and Benefits

The primary goal of 3DEP is to systematically collect enhanced elevation data in the form of high-quality light detection and ranging (lidar) data over the conterminous United States, Hawaii, and the territories on an 8-year schedule. Interferometric synthetic aperture radar (ifsar) data will be collected over Alaska, where both the cloud cover and the remote location preclude the use of lidar over much of the State. It is expected that private-sector data-acquisition companies will mobilize to respond to these lidar and ifsar data needs and that the products and services will be accessible to all levels of government and the public. 3DEP will provide easy access to these authoritative data and derived products by using a cloud-based infrastructure. 3DEP products and services will be provided nationally at significantly higher resolution and accuracy than are available today.

The enhanced elevation data support flood-risk management, natural resources conservation, infrastructure management, agriculture and precision farming, aviation safety, renewable energy development, and many other identified business applications. The potential benefits to precision agriculture and intelligent vehicle navigation alone are estimated at over $9 billion annually . It is expected that new, unimagined information services will be created, thus spawning job growth and transformation in the geospatial community. The following examples demonstrate the value of enhanced elevation data to both Federal and State programs. These examples are among the 602 applications documented in the NEEA report:

1. The Federal Emergency Management Agency (FEMA) expects that a national enhanced elevation program could reduce the amount of time needed to update its flood maps. These data could provide significant benefits to the communities and citizens that are customers of the National Flood Insurance Program by providing updated information to affected communities and homeowners more quickly. In addition, the national availability of enhanced elevation data (not just for areas where FEMA identifies a need) could lead to innovative tools that build on FEMA's flood-risk data and make them more powerful, effective, and easier to use; for example, users may be able to easily visualize a variety of flood levels in three dimensions.
2. Using lidar data, U.S. Geological Survey (USGS) scientists discovered a surface rupture along the Tacoma fault in the State of Washington. This discovery led to a redesign of the structural elements of a $735-million suspension bridge across the Tacoma Narrows. When lidar data enable the identification of active faults near planned nuclear-waste-treatment facilities or a major suspension bridge, proactive mitigation steps may be taken to avoid potential catastrophes in the future.

3. The U.S. Environmental Protection Agency's (EPA's) environmental impact assessments (EIAs) depend upon accurate elevation data for vulnerability mapping and for estimating the threat of sea-level rise to human populations, infrastructure, the fish and shellfish industries, and the coastal environment. Credible EIAs cannot be performed without accurate lidar data. The EPA estimates that billions of dollars would be saved by States, local communities, and citizens because they may have accurate elevation data on which to base their sea-level-rise mitigation activities.
4. The Centers for Disease Control indicate that lidar data provide significant benefits for occupational safety and health by enabling many tasks to be performed in an office environment that were previously performed in the field under dangerous or unhealthful conditions. For example, conducting land surveys during highway construction results in traffic deaths among surveyors each year. This hazard may be largely eliminated by the use of lidar-based surveys.
5. In the State of Alaska, poor-quality elevation data pose an ongoing threat to aviation safety. Improved elevation data for cockpit navigation and flight simulators may save a significant number of lives each year by reducing the number of accidents that result from the inability to safely fly over obstacles in the air space. The elevation data in Alaska have large demonstrated errors and are not reliable for safe navigation. Poor weather conditions, extremes in terrain, and reliance on air travel underscore Alaska's requirement for improved elevation data for aviation safety.
6. Enhanced elevation data for the State of Illinois would dramatically improve precision farming. A more accurate depiction of variations in local relief helps determine a more accurate rate for applying agricultural chemicals, thereby yielding a significant cost savings and reducing agricultural pollution. Approximately two-thirds of the land area of Illinois is devoted to agricultural uses.

Governance

3DEP will be a cooperatively funded national elevation program led by the USGS, which is the Federal Geographic Data Committee's designated lead Federal agency for the collection and management of terrestrial elevation data. A governance model is being developed to solidify 3DEP partner agency roles and data acquisition strategies, program expectations, and constraints. The program will be designed to meet the mission-critical data needs of the 3DEP partners and other communities of use. The Federal agencies poised to realize the highest benefits to their mission from enhanced elevation data include the Natural Resources Conservation Service, the U.S. Army Corps of Engineers, the Defense Installation Spatial Data Infrastructure, the USGS, the National Oceanic and Atmospheric Administration, the Federal Emergency Management Agency, the EPA, the U.S. Forest Service, the Federal Aviation Administration, and the National Geospatial-Intelligence Agency. States and other partners will be able to participate in 3DEP and could fund higher quality data where needed. Efforts to reach out to current and future partners are underway.

Implementation

The program is expected to continue to function as an activity that is coordinated by the National Digital Elevation Program. Several key changes are expected as the current elevation program transitions to 3DEP. These changes include an expansion of the partnership base, larger and thus more cost-effective projects, a directed approach for national coverage, improved data quality, and expanded application services.

NEWS FROM YOUR MID-AMERICA GIS CONSORTIUM (MAGIC) LIAISON:

By Shelley Silch

The 2012 MAGIC Symposium was held this past April in Kansas City, Missouri. As usual, it was a great conference and it was wonderful to see so many attendees from Illinois! For those who missed the conference, you can check out the presentations online at: www.magicgis.org/magic/symposiums/2012/programschedule.cfm

Numerous awards are presented at each biennial Symposium and this year's winners were:

- **Tony Spicci**, Missouri Department of Conservation (MO) - MAGIC Lifetime Achievement Award
- **Liz Cook**, USDA-NRCS (MO) & Ray Fox, USGS (MO) - GIS Coordination
- **Don Heiman**, State of Kansas CIO (retired) (KS) - GIS Innovation
- **Larry Zink**, State of Nebraska GIS Coordinator (retired) (NE) - GIS Service
- **John Ellis**, The Chickasaw Nation, Map of The Chickasaw Nation - Best Project Showcase
- **Andrew Fergueson**, University of Missouri, Forest Fire Modeling within the Mark Twain National Forest - Best Student Project Showcase

For more information about these award winners: www.magicgis.org/magic/symposiums/2012/awardees.cfm

Are you interested in participating in MAGIC activities between the symposiums?
Contact me at: ssilch@usgs.gov or 217-328-9732. Illinois (along with each member state) gets to vote for the Award winners.

Mark your calendars for the 2014 Symposium:
April 27 - May 1, 2014 at the Westin Crown Center in Kansas City, MO.

WELCOME TO ILGISA'S NEW STUDENT MEMBERS!

Students are an important part of our membership, especially because they represent the future of GIS within the State of Illinois. We encourage students to join and benefit from our training, networking and mentoring opportunities. Look for them at our conferences and welcome them to ILGISA *(as of August 31, 2012)*:

- **Nicholas DiStasio**
- **Matthew Dondenville**
- **Jerrad Dringman**
- **Hanan Farhan |** DePaul University
- **Alex Flores**
- **Stephanie Garrison**
- **Nathan Grider**
- **Hira Aamir |** Parkland College
- **Brian Howard |** Eastern Illinois University
- **Mohammadreza Jelokhani-Niarak**i | Western University
- **Jerrod Sifford**
- **Robert Liekis**
- **Muriel Marseille |** Chicago State University
- **Joseph McNamara**
- **Laurette Nessa |** University of Illinois Springfield
- **Mary Paschen**
- **Marcus Ricci |** University of Illinois at Urbana-Champaign
- **Colin Smalley |** University of Illinois at Chicago
- **Scott Stealey**
- **Ryan Trullinger**
- **David Vaci**
- **Tyra Woodruff |** Western Illinois University
- **Grant Woods |** Eastern Illinois University

COMMITTEES

ILGISA functions as a result of member participation. Thank you to the following committee members for their hard work and participation. With the election of new Board Members, the committees are re-established. If you are interested in joining or continuing to serve on a committee, feel free to contact the Executive Director or the existing Chair(s) to ask questions and express your interest. We are always looking for new ideas!

Honors Committee

The Honors Committee is responsible for selecting persons worthy of special recognition. Award recipients to be recognized will be chosen from among those persons working with GIS in any field in Illinois who have made significant contributions to the adoption of GIS among Illinois Government entities, promoted knowledge of and information about GIS to interested users, or have provided outstanding service to ILGISA or the GIS community in general. The Honors Committee is chaired by a director and at least two active members.

Mission Statement: To honor those worthy of special recognition within the Illinois GIS community.

Members:

Amanda Ault (Chair)
Mazher Ahmed
Jason Sheldon
Kevin Whitney

Bylaws Committee

The Bylaws Committee reviews requests from any member for changes in the Bylaws, and shall report their recommendations to the Board of Directors. The Bylaws Committee shall have at least two members, appointed from among the active membership, in addition to the Chair.

Mission Statement: To maintain and update the bylaws to reflect the purpose, structure, and function of ILGISA.

Members:

Ryan Meekma (Chair)
Sam Chakravorty
Bill Faedtke
Sarah C. Milton
Sherrie Taylor

Publications Committee

The Publications Committee is responsible for preparing and publishing the ILGISA newsletter, Illinois GIS Notes. This committee is chaired by a director and has at least two members from the active membership.

Mission Statement: To produce ILGISA publications, principally Illinois GIS Notes, in promotion of ILGISA's mission to advance the understanding, growth and effectiveness of geographic information systems in the State of Illinois.

Members:

Micah Williamson (Chair)
Rian Crowley
Keisuke Nozaki
Brian Valleskey

Website Committee

The Website Committee is responsible for specifying material content, design, and changes to the ILGISA website. This committee shall designate and coordinate website design and content which will serve to promote ILGISA and its mission; suggest and approve appropriate links; and monitor policies on resources available on the website. The Website Committee shall have at least two members, appointed from among the membership, in addition to the Chair, who will be selected from the Board.

Members:

Roger Diercks (Chair)
Roger Bannister
Keith Nightlinger
Micah Williamson

Nominating Committee

The Nominating Committee shall propose candidates for nomination as directors and as President-Elect to the Board of Directors. This committee is chaired by the Past-President and has at least two additional members from the active membership.

Members:

Mark Toalson (Chair)
Mazher Ahmed
Eric Creighton
Peter Schoenfield

Conference Committees

The two Conference Committees were formed to assist in the planning and execution of the educational conferences presented by ILGISA during each calendar year. Committees are responsible for determining the focus and content of each conference via the solicitation of workshops and paper presentations from the extended GIS community.

Spring 2012 Planning Committee

Roger Diercks (Co-chair)
Greg Johnson (Co-chair)
Ryan Meekma
Steven DiNaso
Tom Rogers
Vasu Pinnamaraju
Fall 2012 Planning Committee
Keith Nightlinger (Co-chair)
Mark Toalson (Co-chair)
Sherif Abdou
Steven DiNaso
Molly Mangan
Keisuke Nozaki
Sherrie Taylor
Andrew Vitale
Mercedes Wurm

Education Committee

Mission Statement: To create a sustainable professional connection for the purpose of establishing relationships between students, educators and the professional GIS community to foster educational and professional opportunities.

Members:

Southern Region:
Kevin Brewer, Olivet Nazarene University
John Kostelnick, Illinois State University
Kei Nozaki, Western Illinois University
Mike Rudibaugh, Lake Land College
Chad Sperry, Western Illinois University
Northern Region:
Rich Schultz, Elmhurst College (Chair)
Danny Block, Chicago State University
Judy Bock, Elmhurst College
Mike Kamin, City of Batavia
Gebeyehu Mulugeta, Chicago State University

Membership Committee

The Membership Committee was created to research how to bring added value to the ILGISA membership and track our membership trends. Additionally, they are tasked with the marketing of the ILGISA.

Mission Statement: To promote the benefits of membership, enhance the visibility of ILGISA and connect the GIS communities in Illinois.

Members:

Bill Faedtke (Chair)
Art Borum
William Jackson
Greg Johnson
Mike Kamin
Diane Redwitz
DeShawn Robins
Shelley Silch
Mike Tasker
Joe Tauer
Sherrie Taylor

Ad Hoc Committees

The ILGISA Board of Directors may form committees as needed. Recently formed committees include:

Ad Hoc Webinar Committee

Members:

Greg Johnson (Chair)
Dennis Gilbertson
Mike Rudibaugh
Rich Schultz

Ad Hoc Standards Committee

Members:

Bill Faedtke (Chair)
Gary Kolba
Paul Marchese
Russell Olsen
Jeff Palmer
Wendy Sheppard
Jason Verachtert

WELCOME TO ILGISA'S NEW MEMBERS!

Each year during our renewal period we gain new members, lose a few, and have a few that rejoin… help me welcome those that have enrolled to be part of ILGISA in 2012!

Matt Badger
Bernardin Lochmueller & Associates, Inc.

Jim Barganier
Kuhlmann Design Group

Charles Barton
Maurer-Stutz, Inc.

Clint Beccue
Illinois State Geological Survey-Envi-ronm

Daniel Begert
Springfield Sangamon County

Casey Biernacki
Village of Western Springs

Barbara Brown

Charles Buchholz
Fountian Water District

Vernon Buchholz
Fountain Water District

Giovanni Caceres
Village of River Forest

Ian Cates

Jason Close
Latitude Geographics Group Ltd.

Jared Collier
Juneau Associates

Tim Connet
City of Carbondale

Dan Coombes
Integrys Business Support

Nicole Darby
Regional Planning Commission

Steven Di Naso
Eastern Illinois University

Bob Doan
Arthur Area Economic Development Corp.

Seth Elliot
Heneghan and Associates

John Engstrom
DeKalb Sanitary District

Christina Fiore

Deborah Fuoss

Lisa Graff

David Grzeslo

Andrew Hendon
Tri-County Regional Planning Commission

William Holden

Scott Hurley
Nokia

Adam Jentleson
University of Illinois at Chicago

Mike Joines
Illinois Department of Transportation

Nicole Jones
Assessment Office/GIS Department

Brian Joyce
City of Lake Forest

Kevin Ryan
U.S. Department of Defense/US Navy

Chris Kindelspire
Grundy County ETSB

Deb Kreider
City of Naperville

Troy Krimmenger
Fountain Water District

Mark Lattner
City of Rockford, Illinois

Yi-Sz Lin
University of Illinois at Springfield

Marcela Lopez

Mukila Maitha
William Rainey Harper College

Angela Maranville

Marilyn O'Hara Ruiz
University of Illinois

Robert Marros
Quandel Consultants LLC

Joe McHugh
Integrys Energy Group

Michael Mullins
Kane County GIS-Technologies

Christopher Molidor
Lakes Region Sanitary

Michael Montana
City of Rockford, Illinois

Dan Newcomb
City of Pekin

Nathan Newingham
City of Roodhouse

Larry Newton
Forest Preserve District of Will County

Caitlin O'Connor
Indiana University

Justin Pence
Argonne National Laboratory

David Peters
City of Rockford

David Peters

Noel Peterson
Chicago Metropolitan Agency for Planning

Jim Phillips
Cook County Clerk

T.J. Podgorski
Cuba Township Road District

Chad Quinn

Cameron Rex
RMI Midwest

Evan Rosendahl
Integrys Business Support

Kyle Saunders
City of Rockford, Illinois

Robert Scardino
Village of Huntley

Alicia Schatteman
NIU

William Sedore
SDI

Sharon Kolweier
Washington County

Davina Simaitis

Scott Sorrell

Ron Stuckel
Kuhlmann Design Group, Inc

Lauren Sturm
Greene

Sean Suttles
Bernardin Lochmueller & Associates

Suzanne Boring
Illinois EPA

Scott Taylor

Josh Thompson
McLean County

Lisa Tranel
Illinois State University

Matthew Willman
City of Greenville

Todd Burciaga
Integrys Business Support, LLC

Travis Taylor
Greater Egypt Regional
Planning & Development

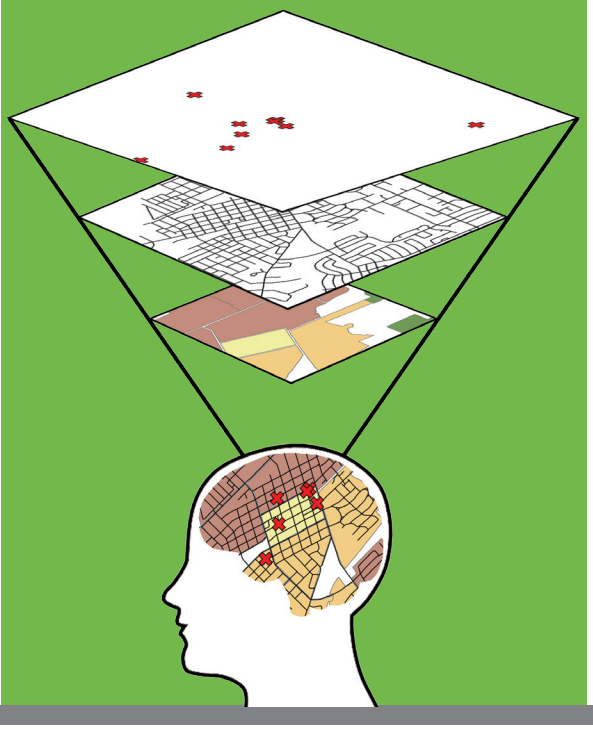
The Illinois GIS Association
is pleased to announce the
2012 Fall Conference

TRANSFORMING GIS INTO KNOWLEDGE

Please join us
October 16-17, 2012
at NIU Naperville
1120 E Diehl Road
Naperville, Illinois 60653
for the 18th annual Fall ILGISA Conference

REGISTER TODAY!

Details and online registration is available:
www.ilgisa.org/Events/upcomingconference.aspx



ILLINOIS GIS ASSOCIATION

2012 Fall Conference: **TRANSFORMING GIS INTO KNOWLEDGE**