

SENECA RESOURCES

Adventures in Portal for ArcGIS

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PORTAL HAS BEEN AN NATURAL PROGRESSION AT SENECA

- Wide use of GIS started at Seneca in the form of various map documents and ArcReader.
- In addition, we had the more traditional usage; ArcMap and Geographix.
- We were using ArcSDE and had an instance of ArcGIS Server, but it was very under utilized.



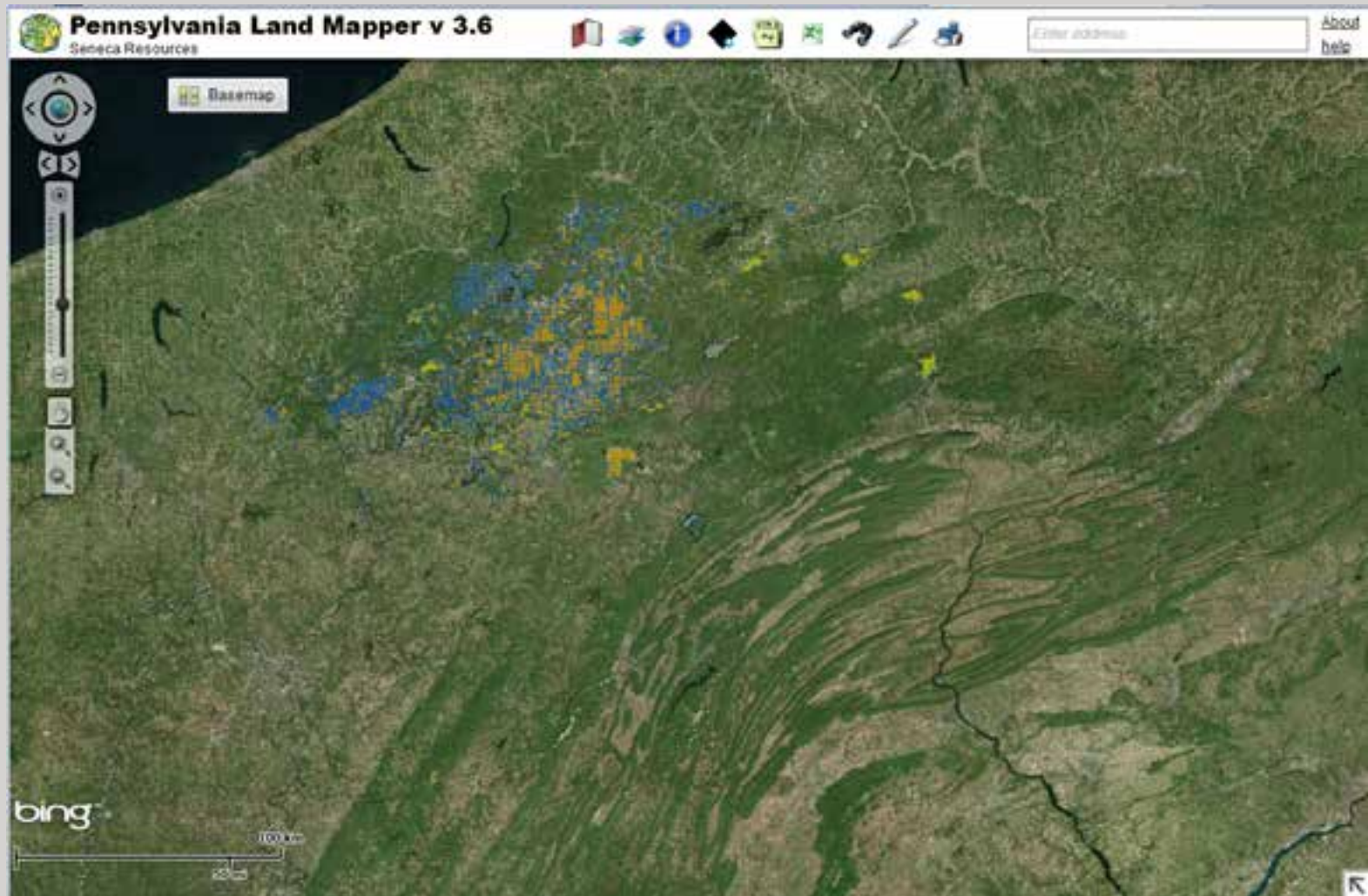
THINGS STARTED CHANGING

- | A little over 2 years ago, the decision was made by several VP's that GIS was underutilized.
 - § The biggest concern was that every department was doing their own thing for spatial data
- | The last of the department based GIS staff was migrated to the Geomatics department.
- | We also had the full support of the IT director and he handed over server administration to me so we were not totally reliant on IT
- | We rebuilt our SDE environment from scratch.
- | We rebuilt legacy datasets from scratch.
 - § Updating schemas, adding domains, general cleanup from legacy applications.
- | We purchased the Esri Data Appliance
- | We launched a Flex-based Web Application

INFRASTRUCTURE

- | At this point, we were up to a 4 server environment for GIS.
 - § In Pittsburgh
 - § 1 SDE Server
 - § 1 ArcGIS Server serving imagery services and other REST services
 - § 1 Data Appliance
 - § In Brookville
 - § 1 replicated set of SDE Databases from Pittsburgh
 - § Some data syncs daily, some as needed, utilizing python scripts run as scheduled tasks.
 - § This also serves as a secondary offsite recovery.
- | We also introduced the first iteration of daily syncs of Geographix data from the software to the SDE environment.
 - § This sync goes into the various file locations in Geographix and grabs the shapefiles for bottomhole and wellbores and imports them into an SDE Feature Class.
 - § Runs as scheduled task.

LAND MAPPER



LAND MAPPER

- | Land Mapper brought about many changes in day to day operations
 - § Every department was soon using Land Mapper.
 - § The number of datasets added to Land Mapper kept growing.
- | Land Mapper / ArcGIS Server had it's own set of limitations and problems
 - § Unable to use on a tablet / mobile devices(Flash)
 - § Only worked on the Seneca intranet

OTHER ISSUES

- | It quickly became apparent that users wanted to be able to access our data offsite.
- | We started getting requests for different or simpler “Land Mappers”
- | We also needed a way to let field workers sync data from Trimble GPS units and Trimble Positions.
- | We held a stakeholders meeting in the Spring of 2013 and identified that ArcGIS Online for Organizations would address most if not all our needs.
 - § We had buy in at the VP level from several departments
 - § IT was also on board

ARCGIS ONLINE

- | We started exploring ArcGIS Online for Organizations.
 - § The plan was to leverage the new Web Adapter technology and create a direct connection to AGOL from our ArcGIS Server, limiting the connection to the addresses that Esri uses.
 - § IT had reservations about having employees have 2 user names and passwords (this was before AD integration was possible with AGOL) but they were ultimately OK with it.
- | Until the Plenary of the UC 2013, this was our plan.
 - § At the Plenary, Esri announced that Portal for ArcGIS would be part of ArcGIS Server.
 - § This alleviated many concerns IT had about security. It also let us set up our own AGOL in essence on our servers.

SIMILARITIES BETWEEN PORTAL AND AGOL FOR ORGANIZATIONS

- | Manage your organization's geospatial content
- | Access a set of common basemaps, tools, and web services
- | Create maps and apps
- | Share maps and apps with others inside or outside the organization
- | Register your existing ArcGIS services
- | Form groups to collaborate on projects or common activities
- | Extend the reach of your geospatial information products in your organization
- | Promote collaboration of graphic data content in your organization

PORTAL VS. AGOL THE DIFFERENCES

Portal

- | Onsite
- | You maintain
- | Can be restricted to Internal access only
- | Portal is usually one version behind ArcGIS Online
- | Unlimited usage based on licensing

ArcGIS Online for Orgs

- | Cloud (SaaS)
- | Esri Maintains
- | External access
- | Most up to date, newest toys from Esri.
- | Has service credits based on users publishing data.

TIPS AND TRICKS WHEN DEPLOYING PORTAL

- | Thoroughly read the documentation prior to attempting to setup Portal.
- | Be ready to make mistakes...
 - § VM is your friend, we rolled server images back on several occasions.
- | **Thoroughly read the documentation prior to attempting to setup Portal.**
- | SSL – this was our biggest stumbling block.
 - § Read up on SSL guidelines, if you're using AD/LDAP authorization, SSL between machines is required!
- | **Thoroughly read the documentation prior to attempting to setup Portal.**
- | Do not be afraid to call Esri for help!

SECURITY

- | Our portal is setup to only allow Seneca Employees connect.
 - § We hook into our Active Directory Authentication
 - § If you do not provide valid credentials you can not connect. (401 Error)
- | The same rules are enforced for internal and external access.
- | All traffic is restricted to HTTPS / SSL and port 443 to our Web Adapter server.
- | Between the Internet and Web Adapter server, we have a firewall blocking all ports except those used by Web Adapter.
 - § We use one server with 2 web adapters, one for ArcGIS Server and one for Portal.
- | The web adapter acts as a Reverse Proxy

SO WHAT'S NEXT?

- | Integrating additional company data sources
 - § RigView , WellView
 - § Internal systems
- | Provide technical guidance to other departments as needed
- | Development of task specific tools
 - § Web Application Builder
 - § Leverage internal Javascript developers
- | Filling users needs
 - § We develop new tools and apps in response to our users, instead of trying to guess what they want

SENECA GIS PORTAL

The screenshot displays the Seneca GIS Portal website. At the top, a navigation menu includes links for HOME, GALLERY, MAP, GROUPS, MY CONTENT, and MY ORGANIZATION. A user profile for 'Jacob' and a search bar are located in the top right corner. The main header features a logo with a globe and a compass rose, followed by the text 'SENECA RESOURCES GEOMATICS DEPARTMENT'. Below the header, there are two blue buttons: 'Pennsylvania Land Mapper' and 'Mid-continent Land Mapper'. A central carousel contains four map thumbnails: 'Web Map Pennsylvania' (PA Land Mapper), 'Web Map Land' (Land Base Map), 'Service Esri' (Airport locations from Esri), and 'Service Esri' (City Area Locations from Esri). A welcome message at the bottom reads: 'Welcome to the Seneca GIS Portal. If you have any questions or concerns, please e-mail boylej@srcx.com'.

SENECA ARCGIS ONLINE ACCOUNT

The screenshot displays the ArcGIS Online interface for a user named Jacob. The top navigation bar includes links for HOME, GALLERY, MAP, GROUPS, MY CONTENT, and MY ORGANIZATION. A search bar is located in the top right corner. The main content area features a large banner image of a drilling rig against a blue sky, with the Seneca Resources logo overlaid on the left. Below the banner is a 'Gallery' section with four items:

- NY_Package_Outlines**: A map showing red dashed outlines of land parcels.
- NY_Package_Outlines**: A second map showing red dashed outlines of land parcels.
- SRC NY Acreage and Wells**: A world map with a red dot indicating a location in North America.
- SRC_NY_Leases_2013_Sale**: A map showing black dots representing well locations.

Navigation arrows are visible on the left and right sides of the gallery. At the bottom of the page, a footer contains the following links: [Eon.com](#), [ArcGIS Marketplace](#), [Help](#), [Terms of Use](#), [Privacy](#), [Contact Eon](#), and [Report Abuse](#).