In Search of GeoBlacklight: Reporting on a Community-Driven Geospatial Data Portal in the Library

R. Shane Coleman
University Libraries, Virginia Tech
560 Drillfield Drive
Blacksburg, VA 24061
+1 540-231-8665
shanecoleman@vt.edu

Andrea L. Ogier
University Libraries, Virginia Tech
560 Drillfield Drive
Blacksburg, VA 24061
+1 540-231-9255
alop@vt.edu

Mohamed M.G. Farag
Computer Science Department
Virginia Tech
Blacksburg, VA 24060
+1 540-449-9019
mmagdy@vt.edu

ABSTRACT

Geospatial data are widely used by many institutions, governments, and corporations; given the diversity of organizations concerned with geospatial data, preserving and curating these important digital files presents unique challenges to the preservation community. In the University Libraries at Virginia Tech a small project team is working to use a local implementation of GeoBlacklight to build a flexible geospatial data portal that addresses the needs of diverse stakeholders on campus, including those outside the context of academic research. This poster will present the results of an initial geospatial data assessment, the issues and concerns of each stakeholder on campus, and how the GeoBlacklight implementation addresses both the challenges posed by the stakeholders and by the complexity of geospatial data itself.

The Data Curation Unit in Newman Library at Virginia Tech is creating opportunities for geospatial discovery and preservation through collaboration with University Facilities and University IT. Libraries have long been known for institutional repositories that lack storage capacity and have outdated features. Through collaborative efforts with University Facilities and University IT the library has started implementation of an instance of GeoBlacklight to resolve these issues for our geospatial data users. The Facilities group has provided a variety of dataset use cases along with metadata schema input. IT has been responsible for setting up server space which allows for deposits of more than two gigabytes. The library has been responsible for the development of the interface. With this team we aim to provide a secure environment that incorporates the needs of non-academic patrons alongside a more traditional data repository, making it easier for campus users to deposit and extract data, and store larger sets of data than has previously been possible. This poster will present the results of our initial geospatial data assessment, the obstacles posed by working with numerous university stakeholders, and what we believe to be a sound solution for geospatial data discovery and preservation of both academic and non-academic geospatial data at Virginia Tech.

Geospatial data generated for practical use (not specifically for research) became of interest once we began partnering with our University Facilities and University IT groups. We found that these campus departments frequently produce geospatial data that is often of interest to research groups across campus. In addition, there are several groups on campus that collect historical state government data containing geospatial components. Beginning with the acknowledgement that all data should be discoverable, we developed workflows that enable our GeoBlacklight instance to treat research and non-research data the same. Essentially we are creating a single discovery platform for all geospatial information acquired and created by Virginia Tech.

We also found significant benefit in the collaboration with University IT, including access to greater storage space and stricter backup protocols. This partnership was developed on the premise that the library would help curate and make discoverable all geospatial data in use at Virginia Tech, as long as they University IT was responsible for maintaining server space and managing the backup processes for the datasets in their care. This allowed us to have experts focus on the storage and management of geospatial data allowing library staff to focus on collection and curation of the data.

In essence, the GeoBlacklight project has become a means for better aligning the library as the central location for finding and accessing geospatial data at Virginia Tech, and has also allowed us to leverage campus partners to better optimize our ability to serve the discovery and preservation needs of the Virginia Tech community.

General Terms
Institutional opportunities and challenges; Infrastructure opportunities and challenges;

Keywords
Geospatial data, GIS, GeoBlacklight, Hydra.

1. REFERENCES

1. Hardy, D., and Durante, K. 2014. A Metadata Schema for Geospatial Resource Discovery Use Systems. *Code{4}Lib Journal* 25 (July 2014). http://journal.code4lib.org/articles/9710

2. McGarva, G., Morris, S., and Janee, G. 2009. Preserving Geospatial Data. *Technology Watch Report 09-01*. Digital

Preservation Coalition. http://www.dpconline.org/ component/docman/doc_download/363-preserving-geospatial-data-by-guy-mcgarva-steve-morris-and-gred-greg-janee