Architecture & Technology Working Group (ATWG)
Thursday, May 19, 2016
9:30 a.m. – 10:30 a.m. Eastern

Location: Main Interior (MIB)
North Penthouse
1849 C Street NW
Washington, DC 20240

To join the Webinar via WebEx:
Navigate to the following:
https://usgs.webex.com/usgs/j.php?MTID=md5fb53eaa0e220880323a82074013d6

Audio Conference Instructions:
Dial Toll free: (855) 547-8255
Dial Local: (703) 648-4848
Code: 94942701

AGENDA

9:30 – 9:35  Welcome  William Mullen, DOI
9:35 – 9:40  Charter Status  William Mullen, DOI
9:40 – 10:10 GeoPlatform Developments  William Mullen, DOI
   ▪ Map Knowledge Graphs  Tod Dabolt, DOI
   ▪ GeoPlatform Release 5 Overview
10:10 – 10:25 ATWG Way Forward & Discussion  William Mullen, DOI
10:25 – 10:30 Action Item Review  Tom Myers, FGDC Support
10:30  Adjourn

Please note that times indicated on the agenda are approximate and may vary based on discussion.
ARCHITECTURE & TECHNOLOGY WORKING GROUP
MEETING MINUTES FROM THURSDAY, MAY 19

MEETING MANAGER: Bill Mullen, DOI*
MEETING HOST: DOI
RECORER: Tom Myers, FGDC Support
GUESTS:
Jerry Johnston, FGDC, Phone
Tod Dabolt, DOI, In-Person
Ken Shaffer, FGDC, Phone
John Mahoney, FGDC, Phone
Gary Latzke, USGS, Phone
Jay Spurlin, Census, Phone*
Joel Schlagel, USACE, Phone*
Randy Warren, NOAA, Phone*
Rob Dolison, FGDC, Phone*
Rich Frazier, FGDC, Phone
Jen Carlino, FGDC, Phone
Jim Irvine, FGDC Support, Phone
Ted Payne, USDA, Phone
Thomas Myers, FGDC Support, In-Person

* indicates ATWG member

Status of Actions or in-work items directly impacting the ATWG

Action Items

- Bill Mullen and Tom Myers to provide a draft of the Request Tracking Wiki to the group.

UPCOMING EVENTS

NEXT WG MEETING:
Thursday, June 23
USGS National Center
## REQUEST LIST
### CURRENT REQUESTS

<table>
<thead>
<tr>
<th>REQUEST</th>
<th>DESCRIPTION/SUMMARY</th>
<th>GEOSPATIAL PLATFORM FOCUS AREA</th>
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### PREVIOUS REQUESTS

<table>
<thead>
<tr>
<th>REQUEST</th>
<th>DESCRIPTION/SUMMARY</th>
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<tbody>
<tr>
<td>Data Availability Reporting</td>
<td>Provide recommendations on data availability reporting. Can we set up notifications for services, data, and information within a particular geofence or topic area? From a marketplace perspective, users should have an awareness of data offerings without having to check back.</td>
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<tr>
<td>Mobile Observation Standard</td>
<td>Provide requirements for a mobile observation standard. Technical Team has created a mockup for a Mobile Observation Service application. A formal standard for observations about a place doesn’t exist.</td>
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<tr>
<td>Service Utilization</td>
<td>Provide recommendations on measuring service utilization for web services, especially those that are hosted on external websites. This may ultimately be a “report card” distributed to data providers and incorporated into the Performance Dashboard on GeoPlatform.gov</td>
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## DISCUSSION NOTES

<table>
<thead>
<tr>
<th>Item:</th>
<th>Charter Status</th>
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<tbody>
<tr>
<td>Lead:</td>
<td>Bill Mullen, DOI</td>
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<tr>
<td>Desired Outcome:</td>
<td>Provide update on charter status.</td>
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<tr>
<td>Discussion:</td>
<td>• Bill Mullen, DOI: The charter was submitted to FGDC last month. We are waiting for comments, which will be provided to ATWG members.</td>
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<tr>
<th>Item:</th>
<th>Map Knowledge Graphs</th>
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<tr>
<td>Lead:</td>
<td>Tod Dabolt, DOI</td>
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<tr>
<td>Desired Outcome:</td>
<td>Provide an overview of the Map Knowledge Graph (MKG) concept as it relates to GeoPlatform development.</td>
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<tr>
<td>Additional Participants:</td>
<td>Jerry Johnston, Bill Mullen, Rob Dolison, Jay Spurlin</td>
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| Discussion: | • Tod Dabolt, DOI: Map Knowledge Graphs are a way of thinking about maps as a series of objects with unique properties. The underlying objective is to improve search and discovery so that end-users can locate relevant maps.  
• Tod Dabolt, DOI: A richer taxonomy of attributes allows end-users to locate relevant maps based on context which may not necessarily be recorded in the metadata. There are five levels: Levels 1-3 provide general information about the dataset and may be sufficient to improve discovery. Level 5 begins to address the purpose and context in which a map or layer was created.  
• Bill Mullen, DOI: The value is that an end-user can identify existing maps and layers that are connected in their minds. A logical extension of the MKG concept may be to improve locality awareness (e.g. in the region where I work, who else is working there? Who has done work in the past that I can leverage?). The proof-of-concept is view only, but there is huge potential for how we use context in map production.  
• Jerry Johnston, DOI: The current search functionality is keyword driven. This is an opportunity to supplement the existing search to help users navigate the catalog and find interrelated concepts, layers, and maps. Which maps are semantically related? The intent is to include other elements (e.g. how many times has a map/layer been viewed? When was the map/layer last updated?). Future iterations may also consider the appropriateness of a layer at a given scale (e.g. the layer doesn’t make sense at the current scale – try these alternatives). |
- Rob Dolison, USGS: What is the relationship between the formal metadata and what exists in the MKG?
  - Jerry Johnston, DOI: Future releases of the GeoPlatform will be able to harvest content from Data.gov to inform MKGs, not use it directly for search like we do now. The plan is to ingest Data.gov metadata into the registry and build what we need around it. The goal is to be able to make assumptions (e.g. this layer appears to be about the following subject, based on the metadata, context, and other inferred information).
- Jay Spurlin, Census: Will this be an extension of the GeoPlatform?
  - Jerry Johnston, DOI: The intent is that MKGs will supplement, not replace, the existing Map Viewer and Map Manager capabilities.
- Jerry Johnston, DOI: Semantic similarity is calculated using an algorithm. We can provide design documents.
  - Tod Dabolt, DOI: We have an ability to tune the similarity algorithm. Right now, variables may be weighted equally. But with testing and user feedback, it may be that certain variable need to be weighted more.

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<th>Item: GeoPlatform Release 5 Overview</th>
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<td>Lead: Bill Mullen</td>
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<td>Desired Outcome: Provide an update on R-5 development.</td>
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Discussion:
- Bill Mullen, DOI: R-4 was recently made public. There are a number of opportunities for the ATWG to be more involved in the technical development of the GeoPlatform for R-5. The items planned for R-5 have cross-cutting impact on GeoPlatform capabilities and performance.
- Bill Mullen, DOI: Release 5 is focused on three main areas:
  - Community Engagement
  - Portfolio Management
  - Measurement, Monitoring, & Reporting
- Bill Mullen, DOI: R-5 goals include simplifying GeoPlatform Community stand-up of new communities; enhancing existing communities; developing a sustainable long-term O&M solution; improving metadata tools to include harvesting, editing, and updating content; and improving user analytics and service quality measurements.

<table>
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<th>Item: ATWG Way Forward</th>
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<tr>
<td>Lead: Bill Mullen, DOI</td>
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<td>Desired Outcome:</td>
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<tr>
<td>Additional Participants:</td>
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| Discussion: | **Bill Mullen, DOI:** GeoPlatform R-4 was launched without significant ATWG input. There is a need for greater coordination to ensure ATWG input is captured and delivered to the Managing Partners.  
**Bill Mullen, DOI:** The initial focus of the ATWG was to get up to speed with current GeoPlatform development efforts in order to contribute to the GeoPlatform development cycle. The GeoPlatform is not static – with development ongoing, functionality has been significantly enhanced since the first ATWG meeting on December 15.  
**Bill Mullen, DOI:** There are five open Input Requests:  
  - Service Utilization – 8 February  
  - Data Availability Reporting – 10 March  
  - Mobile Observation Standard – 10 March  
  - Agency Infrastructure/Software – 10 March Requirements  
  - Release 4 Beta review/comments – 10 March  
**Bill Mullen, DOI:** There is a need to implement a viable request response methodology is ATWG is to provide value to the GeoPlatform. The FGDC Business Tools Project should address the issue in the longer term (next CY), but an interim solution is needed.  
**Tom Myers, FGDC Support:** ATWG may be able to leverage the existing wiki functionality within GeoPlatform to serve as an interim tracking solution. The interim approach is intended to allow ATWG members visibility into each ‘request’ and comments from team members. It would allow ATWG staff to track input and consolidate perspectives.  
**Tom Myers, FGDC Support:** As new requests come in, a notification would go out to the ATWG indicating that the ‘request’ page has been created and is open for comment. ATWG members would have two weeks to provide comments, which would then be compiled for discussion at the next meeting. ‘Requests’ would be aggregated on a summary page, which indicates the status of all current ‘requests’ (e.g. open for comment, closed, etc.).  
**Bill Mullen, DOI:** There is a need to increase coordination to keep issues ‘alive’ between meetings. The interim tracking solution will help, but it may be necessary to schedule a brief weekly conference call to discuss outstanding requirements and requests. |
# LOOK AHEAD

<table>
<thead>
<tr>
<th><strong>Next Meeting:</strong></th>
<th>Thursday, June 23</th>
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<tr>
<td><strong>Meeting Focus:</strong></td>
<td>TBD</td>
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<tr>
<td><strong>Location:</strong></td>
<td>USGS National Center 2A316</td>
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