DIGGS Final Report to GMS

GMS Conference Call
June 18, 2012
Review Progress of Work

- Early project history and initiation through to delivery of DIGGS v1.0. (Hoit)
- Work beginning around March 2009 thru development of DIGGS v2.0a (Turner)
- Status of development as of today (Turner)
  - Accomplishments, gaps, needs, etc.
  - What types of things will need to be done in a next phase of work
- Final Report & Deliverables
  - Overview of report (Hoit)
  - Overview of technical document by Galdos (Turner)
DIGGS Research Objective

- Develop a standard XML schema and data dictionary for geotechnical data
  - Survey of GMS stakeholders to identify specific geotechnical data needs (at dictionary level).
  - Survey based on previous standards by AGS, COSMOS, UF-FDOT, and EPA
  - Results were used to develop a consensus to define the international standard XML (GML compliant) data interchange format schema.
  - Majority of the effort was in agreement on definitions and XML structure.
<table>
<thead>
<tr>
<th>Meeting</th>
<th>Purpose</th>
<th>Date</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>Pre-planning</td>
<td>Develop consensus on basic structure of schema</td>
<td>May 16-17, 2005, Atlanta, GA</td>
<td>Draft schema structure and plans for proposal</td>
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<td>First Workshop</td>
<td>Schema outline &amp; Data dictionary for data in existing systems. Dates, Deadlines and Deliverables</td>
<td>August 10-13, 2005, San Francisco, CA</td>
<td>Schema team and dictionary team, refined schema structure, data dictionary,</td>
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<td>Second Workshop</td>
<td>Continue development of schema and dictionary</td>
<td>November 18, 2006, Orlando, FL</td>
<td>Draft schema, dictionary and users guide for presentation to GMS</td>
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<td>GMS Meeting</td>
<td>Update governing body on progress and get approval for directions</td>
<td>January 18-19, 2006, Atlanta, GA</td>
<td>Approved</td>
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<td>AGS Meeting</td>
<td>Develop plan to improve progress</td>
<td>March 2007, UK</td>
<td>Move to UML version with new tool to automate schema creation for consistency</td>
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<td>Workshop V1.0 review</td>
<td>Review release candidate for V1.0 and plan final corrections – using new UML tool system</td>
<td>September, 2007, Boston, MA</td>
<td>Set actions, assignments and tasks to finalize V1.0 – set release for spring 2008</td>
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<td>Invitational Workshop</td>
<td>Present and approve new directions for DIGGS</td>
<td>Orlando Florida, March 25-26, 2009</td>
<td>Approved new timeline, consultant for final stages, plan for permanent governance/ownership</td>
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<td>Consultant hired</td>
<td>Send RFP and hire consultant</td>
<td>August 2009</td>
<td>Galdos Hired to complete Schema</td>
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<td>Update Schema to v1.1</td>
<td>Consultant completes v1.1 – working with GDC members and Loren Turner – weekly calls</td>
<td>May 19, 2010</td>
<td>V1.1 released</td>
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<tr>
<td>Completion of v2.0a</td>
<td>Consultant delivers v2.0a schema, dictionary and report</td>
<td>June 30, 2012</td>
<td>V2.0a released</td>
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<tr>
<td>Final Transfer Workshop</td>
<td>Transfer DIGGS to ASCE-GeoInstitute, develop implantation proposal to ODOT</td>
<td>June 22-23, 2012, SF, CA</td>
<td>Developed proposal to ODOT for new funding to transfer schema to ASCE-GeoInstitute and make available to community.</td>
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Research Scope and Phasing

• Original Proposal:
  • Phase I – Develop survey (draft dictionary and XML schema based on AGS, COSMOS & UF-FDOT)
  • Phase II – Complete dictionary and schema using workshops and volunteer effort
  • Phase III – Add special interest groups for missing areas

• Final Structure:
  • Stage 1 – Include Phase I, most of Phase II and small part of Phase III
    • Deliverable: v1.0a
  • Stage 2 – Hire consultant to correct GML issues and finish schema
    • Deliverable v2.0a – GML Compliant
Recommendation

• Next Steps:
  • Migrate the DIGGs deliverables to the Geo-Institute (Hoit)
    • Investigated multiple options
    • Geo-Institute (ASCE) met all criteria
      • Good fit with mission
      • Good fit with Codes & Standards role
      • Flexible committee structure
  • Final vote
Implementation Plan

• Workshop June 25&26 to transfer to Geo-Institute
  • Bring potential committee up to speed
  • Develop proposal to ODOT
• Suggestions on future needs (Info for workshop)
  • What we need from software dev community for DIGGS to be successful. (Turner)
  • Next phase of work under ODOT research(?) (Beach)
• Anticipated implementation work by the ASCE GI. (Hoit)