

Summer Intern Mentor Plan

(Version 4.0; 18 Apr 2014)

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1. Purpose

The purpose of this document is to provide guidance to the intern and mentor about project, communication and other expectations during the Summer Internship Program.

2. Project Timeline

The project will run for 9 weeks. For most projects, this will be from May 26th to July 25th, but some projects may shift the start or end date based on intern and mentor availability. Interns and primary mentors will conduct a face-to-face meeting prior to, or within the first two weeks, of the internship start date. Midterm evaluations will occur during week five (June 23rd) via online surveys of both interns and mentors.

3. Project Communication

Responsibilities of interns:

- Interns will provide weekly (Friday) updates to the DataONE blog at <https://notebooks.dataone.org/>. A project specific page and login permissions will be provided. Information from these updates will be included dataone.org site.
- Interns will email the blog update (or link) to the whole intern / mentor community using the following addresses: interns@dataone.org, mentors@dataone.org.
- Interns should communicate with their mentors by voice at least weekly, and are encouraged to communicate more frequently, as needed. It can be decided for each project on what basis secondary mentors participate.
- Interns should aim to respond to mentors' emails within one business day.
- Interns are encouraged to participate in cross-project videoconferences at the beginning, middle and end of the program. These are to be scheduled by DataONE staff.

Responsibilities of mentors:

- Mentors will provide short biweekly updates to the internship committee (internship@dataone.org), or more frequently if desired.
- Mentors will respond to the weekly intern blog post via the comments section (or with an additional blog post).
- Mentors will speak with their interns at least weekly, and aim to be available for more frequent communication when requested or needed.
- Mentors will aim to schedule talks within three business days if requested by the intern.
- Mentors are required to respond to intern emails within one business day unless travelling. In this situation, either an auto-response or a quick email reply should be received by the intern.
- Mentors will be encouraged to participate in cross-project videoconferences call at the beginning, middle and end of the internship program, to be scheduled by DataONE staff.
- Mentors will solicit the participation of secondary mentors and external collaborators where needed.
- Mentors will alert the program organizers if the project is delayed or off-track, and will inform DataONE staff about any publication, presentations, or other noteworthy outcomes from the project either during or after the project end date.

4. Ombudsperson and contacts

Should the intern require the opportunity to talk to an ombudsperson in confidence they can contact Amber Budden (abudden@dataone.unm.edu, 505-205-7675). In the instance that Amber Budden is a project mentor, they may contact Rebecca Koskela (rkoskela@unm.edu, 505-382-0890). Logistical questions should be directed to Rebecca Koskela (rkoskela@unm.edu, 505-382-0890).

May 29, 2014 Date

James Michaelis

Intern

Amber Budden

Mentor

5. Project Plan:

This section is to be completed during the face-to-face meeting as a signed agreement between the intern and mentor. Depending on the project, listing outcomes / activities on a weekly basis may be too frequent. However, biweekly field MUST be completed. Please edit as appropriate and change the dates as necessary.

Week 1 (May 26th – May 30th)

Project Activities:

Determine the various tasks required to complete the project, learning what has already been done for the IPAW (International Provenance and Annotation Workshop) conference paper related to provenance capture in data access software, learning the various components required to complete the project (structural provenance vs. behavioral provenance, OPeNDAP server vs. client work)

Development opportunities for the intern:

Learn about the OpenDAP framework, as well as how it is currently being applied for data access management. Additionally, learn how Prizms framework can be applied towards provenance tracking.

Expected Outcomes:

Become familiar with the current systems, current ontologies, current work related to OPeNDAP and provenance

Complete?:

Yes? No? In progress?

Week 2 (Jun 2nd – Jun 6th)

Project Activities:

Work on structural provenance for OPeNDAP, it's software, software modules, other software components, contributors to OPeNDAP, organizational representation.

Development opportunities for the intern:

Acquire knowledge of OPeNDAP code base, which will enable future contributions to be made for the project.

Expected Outcomes:

Completed structural provenance

Complete?:

Yes? No? In progress?

Week 3 (Jun 9th – Jun 13th)

Project Activities:

Work on ontology, ontology annotations, linked data for the structural provenance, making structural provenance available for OPeNDAP, automatically

Expected Outcomes: Visualization of sample behavioral provenance documents and sample entity splash pages within data portals.

Complete?: *Yes? No? In progress?*

Week 7 (Jul 7th – Jul 11th)

Project Activities: Continue provenance trace visualization and begin work on prov pingback functionality

Development opportunities for the intern: Opportunity to apply current dissertation work on provenance visualization technologies toward a case study system.

Expected Outcomes: Cleaned up provenance visualization, working pingback functionality

Complete?: *Yes? No? In progress?*

Week 8 (Jul 14th – Jul 18th)

Project Activities: OPeNDAP BES Coding refactor work and pingback information visualization

Development opportunities for the intern: Acquire additional experience in coding of server-side software.

Expected Outcomes: Basic abstractions created for provenance capture within the OPeNDAP BES, pingback visualizations

Complete?: *Yes? No? In progress?*

Week 9 (Jul 21st – Jul 25th)

Project Activities: Putting it all together, future work, future research

Development opportunities for the intern: Opportunity to apply dissertation research on usability of provenance querying and visualization systems to case study system.

Expected Outcomes: Working end-to-end system of provenance trace of both structural and behavioral provenance

Complete?: *Yes? No? In progress?*

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Development opportunities for the intern: generate web pages based on this information.
Opportunity to apply current dissertation work on provenance visualization technologies toward a case study system.

Expected Outcomes: Visualization of structural provenance

Complete?: *Yes? No? In progress?*

Week 4 (Jun 16th - Jun 20th)

Project Activities: Design OPeNDAP coding work required to refactor the OPeNDAP Back-end Server (BES), design OPeNDAP client software, determine requirements, determine plan of action for the coding work, develop additional use cases for client and server software.

Development opportunities for the intern: Acquire experience with modifying OPeNDAP code base, which will enable future contributions to be made for the project.

Expected Outcomes: OPeNDAP BES design document, OPeNDAP client design document, additional use case documents

Complete?: *Yes? No? In progress?*

Week 5 (Jun 23rd - Jun 27th) - Midterm evaluations.

Project Activities: Coding of modifications required for OPeNDAP BES module support (versioning, versioning requirements, embedding module URI). Develop sample provenance documents to be generated by the OPeNDAP BES.

Development opportunities for the intern: Acquire additional experience in coding of server-side software.

Expected Outcomes: Incorporated coding changes for the OPeNDAP modules, tested, documented

Complete?: *Yes? No? In progress?*

Week 6 (Jun 30th - Jul 4th)

Project Activities: Sample Prov Entity splash pages that interact with the OPeNDAP client and server software. How do we visualize the provenance?

Development opportunities for the intern: Opportunity to apply current dissertation work on provenance visualization technologies toward a case study system.

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