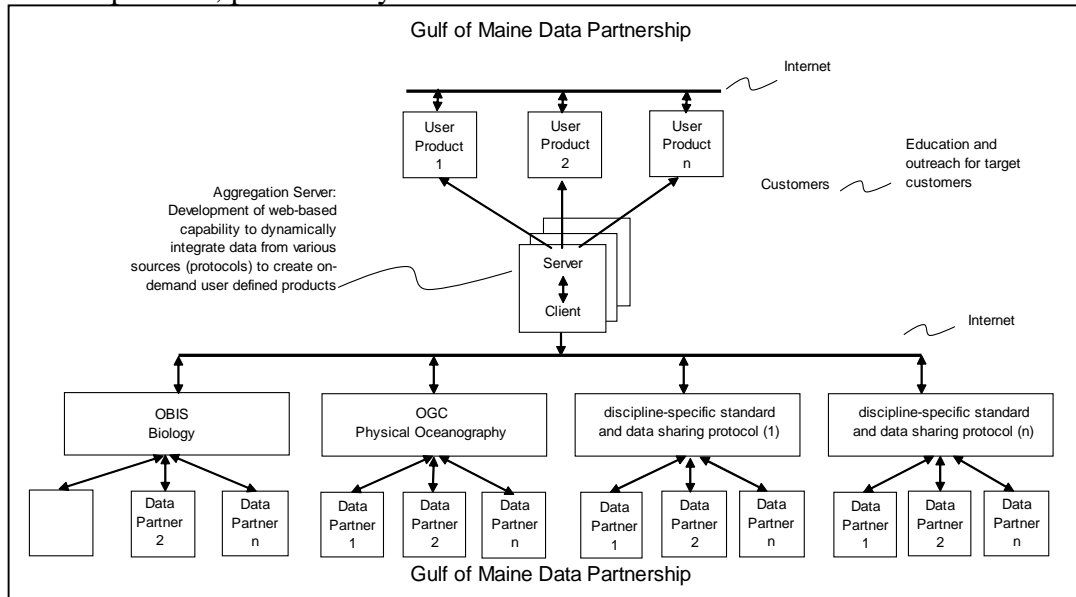


First Data Partnership Meeting  
04-23-04

1. Introduction (Richert)
  - a. 12 agencies have signed - 6 others are in the process, total of 18
  - b. Personal introductions, 19 people in attendance from various agencies
2. History of partnership effort (Richert)
  - a. Overview of MOU
  - b. Signatories (signed, pending, approached)
  - c. MOU details – see E. Richert introductory remarks
    - i. Serves as by-laws until amended
    - ii. Will need one representative from each signatory (one organization, one vote) plus one alternate, to be named in writing
    - iii. Any qualifying organization invited
      1. monitors, observes or makes measurements related to the GoM
      2. supplies that data or disseminates this data
      3. represents the above
  - d. The MOU was adapted from the MOU that governs GBIF, which, however, involves nations rather than agencies and organizations.
3. Current Efforts - (Branton), see ppt on “Emergence of OBIS Regional Nodes”
  - a. Darwin Core 2 – OBIS – Taxonomic serial number: intended to be interoperable
  - b. OBIS is not intended to be “just fish”
  - c. Evolution of project, 1999-present
  - d. Centre for Marine Biodiversity Website – [www.marinebiodiversity.ca](http://www.marinebiodiversity.ca) – collaboration, Canadian equivalent to CoML
  - e. OBIS schema is more convenient to work with from a metadata standpoint, minimum amount of overhead
  - f. Regional nodes provide data and products, data is cached at the IOBIS Global Node – helps to speed things up, deal with providers that are not online, refreshed (weekly)
  - g. Quality control standards incumbent on the provider, issue remains with the problem of duplicated data – needs to be resolved at the OBIS level
  - h. Benefits/risks –
    - i. All institutional biological data required for environmental assessment processes would be publicly accessible in a single standard international format.
    - ii. Effects of not focusing public access through a portal and continued reliance on ad-hoc arrangements:
      1. data availability would vary considerably between consultants,
      2. data given in raw form with limited instructions for their use could contain business confidential information,
      3. unpredictable turn around time on requests for institutional data,
      4. some consultants could be using out-of-date personal copies of institutional data.
4. Current Efforts - (Bogden) – see ppt file “Standards Enable Innovation”
  - a. Standards enable innovation (model:  $www = http \& \text{html}$ ) and then more standardization (it’s a loop)
  - b. Examples of protocols and data models for comparison:
    - i.  $http$  – hypertext **transfer protocol** enables (agreement) between computers on how to communicate and transfer information (putting/getting commands)

- ii. html – hypertext markup language – **data model** enables data to be standardized – (content transferred by put/get commands)
- iii. browsers are clients (applications) – a website is the publishing of data with these standards (text and figures)
- iv. Climate modeling = OPeNDAP + CF
  - v. OBIS = DiGIR + Darwin Core II
  - vi. EPA = HTTP + (Data Schema + XML)
    - 1. creating a dynamic cache for the nation
- vii. IOOS = OPeNDAP + ?? – no analog of CF for this community
- viii. GIS community: OGC = Web Services + XML – enables user to configure the data in a customized fashion
- c. Grid services – the Grid – sharing of data and computational resources – the vision is to create a virtual organization. Where the www is a linked data system, the Grid is an actual organization – sharing of systems, security, storage, etc.
- d. In short, need to adopt existing standards in a “B2B” format, such that data sharing in a standard format enables innovation and interoperability – transport protocol, data model and list of arguments.
- e. This group is not going to set standards, we need to look to the existing standards and establish which are most applicable and best to adopt for our purposes (there are many “standards”).
  - i. Each discipline is gravitating toward a set of standards, need to adopt these and encourage participants to conform.
  - ii. Integrate at the standards level rather than the individual dataset level.
  - iii. avoid proprietary protocols or single points of access.
- f. Example: sea surface temp, individual OGC-compliant data contributors publishing to internet, data aggregator (DM Solutions, Canada) listens and updates and then publishes back to the internet. Anyone with a browser can access data.
- g. Not a huge burden on data provider – don’t have to change data systems, just have to learn how to publish to standard. System can be arranged so that the user gets only an image of the data (WMS (web mapping service) protocol), not the actual data, therefore provider maintains control of data and its use. System can also be arranged to access to the data itself.
- h. WFS – web feature service, WCS - web coverage service. Each of these are protocols under OGC. OGC is not just about creating maps.
- i. Northern Shrimp application on GoMOOS website demonstrates this

5. Data Partnership model, presented by Richert



- a.
  - b. Not only is there the need for external users to be able to access data, but data providers may want to have “internal” agreements for data sharing between providers
  - c. Regional nodes may be serving aggregation functions – central location to get wide range of providers’ data
  - d. Integration of disciplines will happen in the “blank box” – need to push as much functionality as possible to the discipline – specific aggregators, as the “blank box” can quickly become too complicated.
  - e. “Blank box” is actually several boxes
    - i. It should provide OGC index into datasets available
    - ii. It should be a simplified mapping interface to a variety of datasets
  - f. Our ocean data partnership should have as many data collectors in the region as possible – not all have the wherewithal to carry out some of these tech details. Some other provider needs to be available to help facilitate. Scouting out datasets that exist is a key function – data rescue of this sort is going on in DMF and UNH through an interview process.
6. Committee formation
- a. Issues to tackle: Technical, Institutional, Fiscal, Partnership
  - b. The following committees were formed for the duration of the meeting and development of the Data Partnership Work Plan:

<u>Executive</u>	<u>Technical</u>	<u>Governance and Finance</u>	<u>Outreach</u>
1. Chair of Governing Board, Chair	P. Bogden, Chair	L. Mercer, Chair	E. Richert
2. Chairs of each committee	S. Hale	J. Shipman	J. Campbell
3. Rep of Host	L. Van Guelpen	J. Pesch	L. Mercer
4. Others needed to round out expertise, geographic and discipline representation	N. Vine	J. Campbell	
	R. Taylor	F. Lightsom	
	C. Polloni	L. Mercer	
	B. Groman	D. Mountain	
	D. Carle	E. Richert	
	A. Ball	R. Branton	
	R. Branton		

7. Governing Board – It was agreed that a formal governing board would be appointed, with alternate voting members also appointed.

<u>Name of Organization (as of April 23, 2004)</u>	<u>Governing Board Member</u>	<u>Alternate Voting Member (to be named in writing)</u>
Bedford Institute of Oceanography	Bob Branton	
Centre for Marine Biodiversity	Ellen Kenchington	
Coastal Ocean Observation and Analysis – UNH	Janet Campbell	
EPA/ORD/NHEERL/Atlantic Ecology Division (pending)	Stephen Hale	
Gulf of Maine Area Census of Marine Life	Evan Richert	
Gulf of Maine Council on the Marine Environment (pending)	Paul Boudreau	
Gulf of Maine Ocean Observing System	Philip Bogden	
Huntsman Marine Science Centre	Lou Van Guelpen	
Maine Department of Marine Resources	Linda Mercer	
Massachusetts Coastal Zone Management	Tom Skinner? Susan Snow-Cotter? Diane Carle?	
NOAA – Coastal Services Center	Anne Ball	
NOAA – Northeast Fisheries Science Center	David Mountain	
St. Andrews Biological Station	Tom Sephton?	
Stellwagen Bank National Marine Sanctuary	Craig MacDonald	
USGS – Woods Hole Science Center	Brad Buttman? Fran Lightsom?	
Geological Survey of Canada (pending)		
Wells National Estuarine Research Reserve (pending)		

8. David Mountain was elected Chair of the Gulf of Maine Data Partnership by a vote of the members of the governing board. (Nominated by P. Bogden, Second by L. Mercer)
9. Based on actions taken to date, the Executive Committee will be:
- a. David Mountain, chair
  - b. Linda Mercer
  - c. Philip Bogden
  - d. Bob Branton
  - e. Chair of Outreach Committee, to be named
  - f. One or two others to be determined to round out geographic and discipline representation
10. Committee meetings: (not problem solving) – identify issues, elect chair, set up topics for Work Plan
- a. Technical Committee - outcomes

- i. Philip Bogden elected chair
- ii. Priorities:
  - 1. analysis of ODP partners data and needs as users
    - a. inventory data and standards used
  - 2. Establish standards to adopt – and extensions if required
  - 3. Create data partnership guide
    - a. Standards
    - b. QA/QC
    - c. Maintenance
  - 4. Establish relationship with other organizations, i.e. IOOS, GBIF
  - 5. Design specifics
    - a. Infrastructure
    - b. Who hosts what
    - c. Look and feel
    - d. Evolution (Outreach, input, standards)
  - 6. Create user manual
- b. Governance and Finance Committee
  - i. Linda Mercer elected chair
  - ii. Priorities
    - 1. Determine relationship to the evolving Regional Association for the Gulf of Maine under IOOS
    - 2. Clarify what constitutes a “partner”:
      - a. In a large organization with multiple departments, each with a data collection function, should the organization be a single partner, or should each department constitute a partner?
      - b. How do data providers who choose not to be a partner nevertheless become involved, short of joining?
    - 3. Assess costs of participation as partners, and determine sources of funds to support the Partnership. Examine question of fees for value-added products.
    - 4. Investigate question of liability related to use of data that flows to the public as a result of participation in Partnership. Related to this, what structure or criteria should be in place to assure quality control on the part of each data provider?
    - 5. Consider whether and how to provide a “Help Desk” function to Partners.
    - 6. Determine whether there should be different levels of access to data: e.g., an internal level involving exchange between Partners, and an external level involving sharing of data with public at-large. The former might come into play, for example, for data that are preliminary.
    - 7. Address several other data access questions:
      - a. Information security
      - b. Confidentiality
      - c. Cookies
      - d. Attribution (partially addressed in MOU)
      - e. Version numbers on data sets
      - f. Release of “high risk” data and policies that require consultation by users with Partners generating or expert in this data
      - g. Proprietary data from the private sector

8. Within the organizations of each Partner, prepare an outreach effort that informs the Partner's staff and creates loyalties to the idea of dynamic data sharing, so that there will be long-term and ultimately routine cooperation and execution.
9. Establish an identity for the Partnership, starting with a web site—if the web site is via the host, it should have its own identity.
10. Create a system for feedback on use of data and data products. Keep in mind different levels of audience (scientist/managers and regulators/commercial users/educators and students/public at-large).

11. Next steps

- a. Set up a WIKI at GoMOOS to post notes/bulletin board
- b. Timeline – adoption of workplan by end of November
  - i. Looking for funding end of 2004
  - ii. Implementation 2005
- c. Committee meetings – set up by email or wiki?
- d. Sept meeting if needed; November meeting – Portland, November 16th