IM VTC_2009-08-31

- unit working group
  a. threads
     i. forum
     ii. mailing list
2. unit web service and prototype
   a. info on IM forum
      i. http://intranet.lternet.edu/im/forum/7
   b. advantages of centralized units
   c. scope allows specification for groups of sites
   d. facilitate cross site data integration
   e. decisions last year
      i. site can enter any unit you want to -regardless of best practices
         1. subject to periodic review
         2. given special scope if they fit best practices
   f. questions & discussion
      i. release with LOTS of content - or minimal content
         1. Maximum
            a. slows down release
            b. more functional
         2. minimum
            a. fast, but not as functional
         3. how soon would we be able to accept units?
            a. at ASM will have sample query interface, but not yet add
            b. will have web service interface
         4. suggestion - set deadline and go with what is in at that point...
         5. can look at harvesting uints from Metacat Todd started to do that
            a. old list is available for startup
            b. have script to parse XML, but could also get from database
         6. could vet units via best practices at ASM - then go into pre-release phase vetting - independent of interface
         7. use lessons learned to create formalized vetting process...
         8. many existing EML units need vetting themselves
         9. coupling to EML
         10. want to get away from standard/custom unit
         11. instead - all custom but with some vetted
         12. like decoupling, but there are implications
         13. work with Morpho?
             a. Probably OK with Kepler... but it doesn't now do much with units
             b. lots of hard to encode characters (e.g., super, sub) in previous versions - e.g., abbreviations - what end-users want
             c. database uses UTF8

        d. XML - encoded UTF8
        e. could go to UTF16 if we need more characters
        f. would be good to have limited characters to what can be done cross platform
        g. for HTML not to big a problem - but with ANSI-based systems, the could be a problem
        h. prototype system lets you query units (demo at ASM)
        i. another layer does document-level aggregation - STML unit list suitable for document
            i. works with anything that does STML
        j. unit registry service -> unit transform service
            i. could handle some conversions there

14. like to have some test cases with other sites implementing service? - any ideas on how to use it locally as test cases?
15. at AND we test units against EML units in the database- we could use web service for QA
        a. in STML in database? - no our own relational structure
        b. web service provides STML
        c. unit verification would be a good test case
        d. at SGS, similar situation - now use lookup table - but as functions move more to front end, this would be really nice
16. custom unit lists not in STML in custom unit section? would they break EML tools
17. STML original schema is invalid
18. largely abandoned in favor of CML
19. emlDev group may help with testing
20. STML is used as a model for some, but internally we use custom XML schema (a valid one!)
        a. we can then use conversion services for any unit representation
        b. trying to stay format agnositc up to the first service level
21. good to pick up on Todds work....
22. custom units and standard units is artificial - just units - either compliant or not
        a. would be good to decouple.... the EML folks would like that!
        b. focus on what scientists use - abbreviations, not camel-case
        c. generally agree - but what is output comes out as unit..... if you convert to custom unit, comes out STML
        d. but allow subject predicate object notation
        e. want to deal with automatic conversion of units
        f. could suggest some conversions
23. OBOE ontology does include units
24. Margaret will post to forum
25. before ASM working on input output for web service

3. best practices (emailed to working group last week)

a. IMC/ASM thoughts
    i. point of convergence between registry and content
    ii. will have more technical VTCs, have ASM more best practice, experience base
    iii. want closure on best practices
    iv. then do some prototype demos and get volunteers for testing
    v. want to move on to getting units properly formatted and moved into registry
    vi. want volunteers for technical and content sides
b. early 2010 - want registry release with content
c. abbreviations
    i. many best practices came out of EML...
    ii. tried to remove some EML specifics, but it still may not have been best way to go
    iii. focus in mainly on the unit name - well defined, unequivocal
        1. abbreviations are more variable
        2. good unit name is stepping stone
4. for ASM - check out docs
    a. http://intranet.lternet.edu/im/node/483