LTER IMC VTC water cooler
2017-09-11
Chair: M. Gastil-Buhl
Note take: S. Earl

Topic: UnitDB presented by Margaret O'Brien

Service started by the IMC in approximately 2011. EDI is looking to host this functionality. Documentation is on the IM website, including technical docs, best practices, etc. The technology is getting out of date.

Goal(s) for today: how is the database and registry being used, and how do people want to use it going forward?

A substantial limitation to units currently is that it is very much out of date.

MOB putting it out to the group, how are you using it?

Suzanne: uses it manually (no machine connections), and would like a resource where she can determine if someone else has used a unit and, if so, how to document that unit. A way to know what is the acceptable unit.

Jim: echoing Suzanne's comments, would like to avoid duplicating a unit if one is already documented.

Stevan: echoing previous comments.

Gastil: used it often previously, but now rarely comes across new units.

Corinna: a committee needs to go through the content; units should be pulled into an EML file for easy use; agreeing that cleaning is required

Margaret: name is the only a required field; often the use of a unit requires some knowledge of the scientific domain, so a committee would need to include or liaise with domain experts; units should be consistently formed, which really only requires specific rules.

Suzanne: some units definitely need domain expertise, but there are many units that do not require particular expertise but rather a common sense approach.

Corinna: EDI could take a first pass to weed out units that are indecipherable, clean up where they can, and then seek assistance from IMs and/or domain experts where needed. What alternatives are there for hosting this?

Margaret: this could be made into an ontology; the dimensions of a units are particularly important to its meaning; short answer, though, is that there is not currently a good alternative to units DB.

Margaret: separate the unit from the thing (e.g., number not number of flowers - flower is the the thing measured but not the unit)

Gastil: what about the conversion of units, particularly when it gets complicated?

Margaret: suggests that conversion is advanced use and probably an overly lofty goal in this case.

Susanne: physics, engineering, etc, they revert to the base units

Corinna: that is the idea

Margaret: STMML has been abandoned by its creators; it would be interesting to see what STMML migrated into, and if that has any bearing to how we would advance this?

Suzanne: units should be generic, but having this as an authoritative source for referencing esoteric units would be helpful. Need to be careful in that there is content that we would not want sites to adopt.

Corinna: what organizational configuration should tackle this?

Jim: are units beyond LTER be standardized?

Margaret: are we losing anything by describing units in STMML instead of what scientists might expect to see?

Jim: the scientists to not see or really care about the ultimate fate or description of their units, they just do not want to have to deal with the STMML version

Corinna: again, how do we move forward?

Margaret: reiterating the proposed initial pass by EDI, tackle the straightforward issues

Margaret to the group: do you use the standard list?

Corinna: an advantage of the standard list is that we use a consistent spelling.

Generally, some sites are using all custom units that are specific to their site, which Corinna points out can lead to alternate spellings and spelling mistakes.

Corinna: using the registry would allow for consistent spelling

Corinna: who would like to be involved in this effort?

Suzanne offered to assist with this.

Don: the registry currently is a hodgepodge, including inconsistent case.

Margaret: to the committee, how should we construct compound units?

Susanne: pointing out that many of the units are not in base units

Ken: DEIMS defines all of its units in custom units but presumably uses the unit registry as a source, so important to coordinate the use of DEIMS and any updates to the web service

Corinna suggesting that the DEIMS list is actually preloaded and not using the web service.

Jason: the current list was developed pre-PASTA.

Gastil: all units included in the EDI/LTER repositories could be harvested

Jason: using a preferred list could be added as a PASTA check

Corinna: need a plan for where to house this given that it is running on an old server

Ken suggesting that DEIMS does in fact use the web service, so urging to please be careful if and when upgrading services

Topic: other/misc

logistics

Gastil: most items from summer meeting have been posted to website; IMExec is trying to be as open and visible as possible - please see the website for resources.

Suzanne: the IMExec will meet the 4th Tuesday of every month

vocab

John Porter: do we need to do another data mining exercise?

Ken: what about web services that no longer work since the cut over to EDI/NCO?

John Porter: need to assess whether things are broken enough that we need to do a revamp or do things work well enough for the time being until a revamp is addressed in the future? Let me know if things are not working to the point of being limiting.

Topic: conclude at 13:01