

Reuse Working Group – Report Back

Chair: Chris A. Mattmann (NASA JPL)

Co-Chair: Bob Downs (SEDAC)

9th Earth Science Data Systems Working Group Meeting

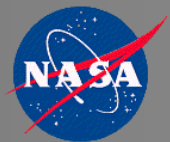
New Orleans, LA

October 20–22, 2010



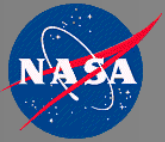
Reuse Agenda and Summary

- Discussion of open source software for NASA ESDS
- Discussion of decadal survey missions and reuse
- Discussion of Reuse Readiness Levels and Calculator(s)
- Discussion of packaging and distributing reusable assets
- **Panel on “Reuse in the Trenches”**
- Planning for 2011



-
- Legal
 - Licensing as it relates to components and software
 - Intellectual Property
 - (Re-)Distribution
 - Communities
 - NASA OS Ecosystems versus Commercially Available or Non-NASA
 - Contributing
 - Responsiveness
 - Help/Guidance
 - Interaction
 - Implementation/Architectural Strategies
 - “War Stories”
 - Desire for a catalog/directory of NASA software projects

-
- SMAP
 - Using the RRLs on flight
 - Evaluating software and components from 4-5 systems
 - GDS piloted the RES to record information about reused science data system components
 - ICESAT-2
 - Evaluating the RRLs for identifying the reuse of the science data management systems
 - Discussing the applicability and usefulness of RRLs
 - Packaged RES for decadal mission installations



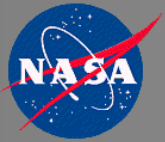
-
- Calculators
 - Discussed existing WG-developed calculator and updates/next steps
 - Discussed contributed RRL calculator and updates/next steps
 - Discussed updates to the RRL document
 - Discussion of software package metadata that is already being captured
 - Making the RRLs more quantifiable
 - Working on version 1.1 (current version sent to the group)
 - How to map the RRLs to existing standards, e.g., ISO
 - HQ feedback
 - How to engage the particular ESDS ecosystem projects
 - What are the plans to solicit feedback from e.g., decadal missions, DAACs, proposal folks (ACCESS, MEASURES)?
 - It would be helpful to ask ESDSWG for excerpts from proposals and final reports about their interactions with the working groups
 - Would be helpful if software and packages used in ESDS had some sort of rating like an RRL

-
- Discussed planning for Software Packaging Document 1.0
 - Editorial updates
 - Taking contributions from WG members and weaving them in
 - Positioning comments
 - Filling out use cases for RES and from new group members
 - Schedule for releasing a 1.0 document
 - Disseminate existing document on monthly Full WG telecon
 - Add in use cases from ASDC and from ASF examples
 - Fill in use case from RES
 - Deliver Packaging 1.0 document to HQ by mid December

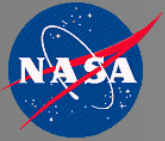


-
- Representatives from ASDC, ASF, ACCESS proposals, and from SMAP
 - Outcomes
 - Discover what other organizations are using in terms of tools and build environments and app servers for open source
 - Capturing good examples and use cases across the agency
 - How to get the information out on what’s being used
 - How to identify reuse across projects
 - Suggestion: for a MEASURES benchmark for multi-center, multi-project open source collaboration and report back to HQ
 - Community-building related activities: online wiki and forum
 - Where is the best place for NASA to work on open source and on sharing “tribal knowledge”
 - Best practices for reuse
 - Barriers to reuse
 - “Not invented here” syndrome

-
- Decadal survey missions
 - Case study document
 - Targeting tier 1 and 2 missions
 - Work with the Data System Planning Group (DSPG)
 - Best practices and guidelines
 - Continue RRL work revisions to RRLs (e.g., quantification)
 - Deliver packaging recommendation and revisit guidelines
 - Open Source
 - Reuse Enablement System (RES)
 - Disseminating the RES as an installable package for missions, DAACs, and proposal-funded tasks
 - General
 - Collaborative efforts (wiki, incubator) between centers and WGs
 - Work to get reuse product(s) into projects (e.g., RRLs into NTRs, liaisons between WG and missions)
 - Surveys



-
- Notion of raising awareness and benefits of reuse
 - How to put something together so that someone coming into the WG will understand what the ESDSWG are all about
 - Can help “build community”
 - People don’t have a great idea of what to do or how to participate as they start right now
 - Help define the language for solicitations
 - Adding some paragraphs to future solicitations
 - Looking at reuse in terms of “software as data”
 - Long term archive
 - Increasing WG participation



-
- Software Reuse Portal Web Site
 - <http://www.esdswg.com/softwarereuse>
 - Collaboration Web Site
 - <http://www.sciencedatasystems.org/reuse/default.aspx>
 - Monthly Telecons
 - Third Wednesday of the month @ 2 pm Eastern time
 - Support Contact (including mailing list)
 - Jim Marshall (James.J.Marshall@nasa.gov)

 - Social Networks
 -  http://twitter.com/esdswg_reuse
 -  <http://www.facebook.com/group.php?gid=117453644936920>
 -  <http://www.linkedin.com/groups?gid=2964349>