Rolling Deck to Repository (R2R)

Pilot Project

NSF MG&G Advisory
January 13-14, 2009
R2R: Collaborative 1-year pilot funded by NSF OITS Sept. ‘08

Partners: LDEO, SIO, WHOI

Goal: Prototype system to routinely deliver standard underway data and documentation from research vessels to a central shoreside facility
History

Sept. ‘05 – LOE project starts MG&G cruise catalog
Aug. ‘06 – R/V Thompson starts daily data feed
July ‘07 – UNOLS Data Committee chartered
Oct. ‘07 – MG&G Advisory Committee recommends routine data flow directly from ship to shore
Sept. ‘08 – R2R pilot funded
Sept. ‘08 – LOE/R2R workshop with operators
Oct. ‘08 – UNOLS Data Committee report to Council
Dec. ’08 – R2R presents initial results at AGU
**Initial Focus**

**YES –**

- “cruise-level” metadata
- **standard underway instruments** (operated by ship technicians per OITS guidelines)
- event log

**NO –**

- national facility data (e.g. NDSF, OBSIP, MGL)
- sample logs
- science party instruments
**Design**

- contact with (18) operators, not (1000+) scientists
- maximize efficiency for ~500 cruises/year
- synchronize with UNOLS STRS and NSF inspection
- routine submission to national data centers
LOE/R2R Workshop

• Sept. 3-5, 2008 at LDEO

• 22 participants (+guests) – ship technicians, data managers, UNOLS Office, agency reps
LOE/R2R Workshop

Conclusions:

• metadata app – standalone, multi-purpose, saves history

• data distros
  • end-of-cruise – rotating USB disk or network
  • near-realtime – nav+met+tsg via satellite
  • shared standard processing code (“final nav”) 

• prop. holds – ironclad with auto notification
Cruise Catalog

- UNOLS metadata schema → ISO 19115-2
- consolidated vocabularies
  - cruise id – unified namespace
  - vessel id (ICES)
  - institution id (IANA)
  - port id (UNOLS)
  - device type (SCF)
- modular automatic inventory + RSS updates
Status

*Thompson* – DAS feed active; full cruise distros begin Jan.’09

*Kilo Moana* – 155 full cruise distros online (*entire history*)

*Sharp* – SMS feed active

*Healy* – 108 full cruise distros queued (*entire history*)

*Langseth* – 18 full cruise distros queued (*entire history*)

+ *Palmer* and *Gould* online

http://www.rvdata.us/catalog
Next Steps

• continue cruise inventory

• Feb.’09 working meeting at SIO – development
  • metadata app
  • vessel profiles
  • event logger
  • “final nav” code
  • cruise reports

• full collaborative proposal
Thank you.

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