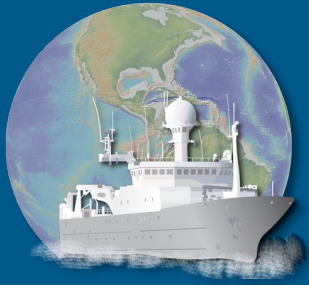# Rolling Deck to Repository (R2R)

Breakout

Collaborators

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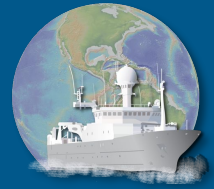
Funding/in-kind support

Breakout: R2R Best Practices Overview

Directory Structures & Data Transfer Methods

Rafael Uribe
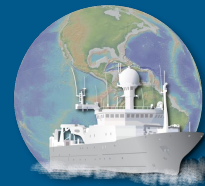
R2R
ROLLING DECK TO REPOSITORY

Directory Structure - Best Practices

Goals:

1. Preserve original full resolution data from the instruments - especially primary navigation
2. Organize files in a standard directory structure that can be "broken out" shoreside with a regex matching against a vessel profile
3. Segregate the "routine underway" data from documentation, products, and processed data
4. Exclude science party information from the distro entirely

R2R Suggested Directory Structure

CRUISEID /

  docs / — general cruise docs eg. personnel list, operations report, vessel diagrams

  SYSTEM / — where *SYSTEM* is either the vessel's native serial acquisition system (*scs, lds, suds, vids, etc*) or a standalone system (*adcp, ctd, echo, multibeam, xbt, etc*)

    docs / — manuals, photos, calibration sheets, etc. specific to this instrument system

    raw /

      DEVICETYPE [_[MAKE][MODEL]][_LOCATION][_MNEMONIC]–DATE T TIME Z

      where *MNEMONIC* allows finer-grained separation of devce interfaces (could be serial number, datatype ("centerbeam"), or just a number 1, 2, 3)

  proc / — if processing was done at sea

  r2r/

    elog / — produced by (or formatted for) the R2R Event Logger

  science / — "dropbox" files created by the science party including photos, blogs, etc. This directory is provided to separate science party information from that of the vessel operator and should not be included in the cruise distribution provided to R2R.

For more detailed guidance refer to the R2R Directory Structure Documentation

Review of Data Transfer Methods

	Free For R2R Data Pull	Quick Transfer Time	Secure Transfer	Automatic Resumption of Interrupted Transfers	Allows Operator to Push Data to R2R	Allows the Transfer of Large Data Sets	Does Not Require System Configuration by operator IT
Globus	✗	✓	✓	✓	✓	✓	✗
SFTP SSH/rsync	✓	✓	✓	✓	✗	✓	✓
Cloud Downloads (dropbox, gdrive, box, ...)	✓	✗	✗	✗	✗	✗	✓
Physical Drive	✓	✗	✗	✗	✗	✓	✓

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