RSBag - Feature #1496
Integrate extended recovery features

05/10/2013 09:55 AM - J. Moringen

Status:	Resolved		**Start date:**	05/10/2013
Priority:	Normal		**Due date:**	
Assignee:	J. Moringen		**% Done:**	100%
Category:	TIDELog Backend		**Estimated time:**	0.00 hour
Target version:	rsb-0.9			

Description

Associated revisions

Revision 9659f2c5 - 05/10/2013 10:16 AM - J. Moringen

Added test for recovering from missing index in CMakeLists.txt

refs #1496

- CMakeLists.txt: store TIDELog files into new variables {VALID,RECOVERABLE}_TIDE_FILES; use these variables in test to
  decide where error recovery is necessary; adapted to renamed files
- test/data/*/*.tide: renamed files; added prefix "valid-" for valid
  files and prefix "recoverable-" for files with recoverable errors
- test/data/0.9/recoverable-missing-index.tide: new file; test data
  for recovering from missing index

Revision 7fc1a907 - 05/10/2013 10:19 AM - J. Moringen

Extended error recovery in TIDELog backend

refs #1496

- src/backend/tidelog/repair.lisp: new file; contains functions for
  rebuilding missing or damaged indices
- src/backend/tidelog/util.lisp (read-chunk-of-length): allow
  continuing with incomplete block via `continue' restart after short
  read
- src/backend/tidelog/generator.lisp (type-spec->deserializer):
  generate a `continue' with allow continuing without reading a
  complete sequence of records
- src/backend/tidelog/io.lisp (scan stream eql :tide): allow ignore
  the remainder of a stream's content via a `continue' restart
  (unpack stream eql :block-header): signal error with more
  descriptive report
  (unpack stream eql :block): check whether the block is within the
  bounds of the file; allow trying to read it anyway via `continue'
  restart
- src/backend/tidelog/file.lisp (shared-initialize :after file): when
  chunks are read but no index, signal an error and allow to continue
  by regenerating indices
- cl-rsbag.asd (system cl-rsbag-tidelog): added file
  src/backend/tidelog/repair.lisp

History

#1 - 05/10/2013 10:41 AM - J. Moringen

- % Done changed from 70 to 90

#2 - 07/19/2013 10:08 AM - J. Moringen

- Status changed from In Progress to Resolved

- % Done changed from 90 to 100

Recovery from different kinds of problems, most importantly missing indices and incomplete chunks, is implemented and tested automatically.