

Robotics Service Bus - Feature #1833

Feature # 44 (Resolved): Implement basic introspection support

Remove crashed processes from database after a (configurable) while

04/06/2014 03:44 PM - J. Moringen

Status:	Resolved	Start date:	04/06/2014
Priority:	Normal	Due date:	
Assignee:	J. Moringen	% Done:	100%
Category:	Introspection	Estimated time:	0.00 hour
Target version:	rsb-0.11		
Description			

Associated revisions

Revision 708c28e2 - 11/10/2014 09:05 PM - J. Moringen

Added remote introspection in `src/introspection/remote-introspection.lisp`

fixes #1744, fixes #1830, fixes #1833

The remote introspection implementation consists of three layers:

- ``introspection-receiver'` handles the event protocol and dispatches broadcasts and replies
- database object classes ``{participant,process,host}-entry'` are stored and maintained in a ``remote-introspection-database'`
- ``remote-introspection'` is a participant class that ties everything together by instantiating and configuring ``introspection-receiver'` instances and a database and performing timed updates.

- `src/introspection/protocol.lisp` (database-change-hook): new generic function; return the change hook of an introspection database object
(introspection-survey): new generic function; survey remote objects
(introspection-ping): new generic function; ping a remote object
(entry-info): new generic function; return info instance associated to entry object
(entry-parent): new generic function; return parent entry of an entry
(entry-children): new generic function; return child entries of an entry
- `src/introspection/mixins.lisp` (change-hook-mixin): new class; can be mixed into database classes to provide a change hook
(database-change-hook): new method; return database change hook
- `src/introspection/remote-introspection.lisp`: new file; contains remote introspection implementation with ``introspection-receiver'`, ``{participant,process,host}-entry'`, ``remote-introspection-database'` and ``remote-introspection'` classes
- `src/introspection/package.lisp` (package `rsb.introspection`): added `imported-from` `rsb.patterns.request-reply` symbols `remote-call-error`, `future-done?` `future-result`, `server-method` and `call`; added exported symbols `database-change-hook`, `introspection-survey`, `introspection-ping`, `entry-info`, `participant-entry`, `entry-parent`, `entry-children`, `process-entry` and `host-entry`
- `test/introspection/remote-introspection.lisp`: new file; unit tests for remote introspection functionality
- `test/introspection/package.lisp` (package `rsb.introspection.test`):

- added imported-from rsb.introspection symbol
- remote-introspection-database
- rsb-introspection.asd (system rsb-introspection): added file
src/introspection/remote-introspection.lisp
- (system rsb-introspection-test): added file
test/introspection/remote-introspection.lisp

History

#1 - 04/07/2014 09:06 PM - J. Moringen

- *Subject changed from Remove crashed processes from database after a while to Remove crashed processes from database after a (configurable) while*

#2 - 04/09/2014 07:08 PM - J. Moringen

- *Status changed from New to In Progress*
- *% Done changed from 0 to 50*

#3 - 09/14/2014 01:00 PM - J. Moringen

- *Category changed from Common Lisp to Introspection*

#4 - 11/10/2014 09:10 PM - J. Moringen

- *Status changed from In Progress to Resolved*
- *% Done changed from 50 to 100*

Applied in changeset commit:rsb-cl|708c28e28fd9948726c29b8e3d7e5839c560947a.