

## Robotics Service Bus - Bug #327

### XPath filtered logger

05/26/2011 03:32 PM - J. Wienke

|   |                   |                        |            |
|---|-------------------|------------------------|------------|
| <b>Status:</b>                              | Resolved          | <b>Start date:</b>     | 05/26/2011 |
| <b>Priority:</b>                            | Normal            | <b>Due date:</b>       |            |
| <b>Assignee:</b>                            | J. Moringen       | <b>% Done:</b>         | 100%       |
| <b>Category:</b>                            | Common Lisp Tools | <b>Estimated time:</b> | 0.00 hour  |
| <b>Target version:</b>                      | rsb-0.16          |                        |            |
| <b>Description</b>                          |                   |                        |            |
| A logger should be able to filter by XPath. |                   |                        |            |

#### Associated revisions

##### Revision 3736d734 - 04/03/2017 03:36 PM - J. Moringen

Initial builder-based filter implementation in src/filter/xpath-filter.lisp

refs #327

This change allows this system to work with the new XPath filter implementation. XPath expression can descend from the event, into the data relation and from there into the XML document object or the XOP package.

This is achieved using the following technique:

1. An `:around` method on ``xpath-protocol:child-pipe-using-navigator'` for the navigator of the `architecture.builder-protocol.xpath` system checks whether the current node is the result of descending into a node representing an ``stp:document'` via  
the `:data` relation of an ``rsb:event'`  
or the `:document` relation of an ``rsb.xop:package1'`  
For these cases, the child pipe is replaced with a pipe containing only the document element of the document.
2. Methods on all `xpath-protocol` generic functions dispatch to the `:default-navigator` if the node is an ``stp:node'`.
  - `src/filter/xpath.lisp`: removed; no longer needed
  - `src/filter/xpath-filter.lisp`: new file; contains builder-based filter implementation
  - `src/filter/package.lisp` (header): updated copyright  
(package `rsb-xml.filter`): added used package `let-plus`; added import from `architecture.builder-protocol.xpath` symbols `navigator`, `node-proxy-value`, `relation-proxy`, `{,-parent,-relation,-target}` and `instead`, `{,-value}`
  - `test/filter/xpath-filter.lisp` (header): updated copyright  
(define `filter-match-test xpath-filter`): changed payloads from strings to document objects; adapted XPath expressions to match the whole event instead of just the payload
  - `rsb-xml.asd` (system `rsb-xml`): removed file `src/filter/xpath.lisp`;

added file src/filter/xpath-filter.lisp

#### Revision a89b6770 - 04/03/2017 04:07 PM - J. Moringen

Initial conversion of xpath filter in src/filter/xpath-filter.lisp

fixes #327

The filter now uses the architecture.builder-protocol.xpath system and is thus applicable to events as well as generic payloads.

- src/filter/xpath-filter.lisp (xpath-filter): removed superclasses payload-matching-mixin and fallback-policy-mixin  
(xpath-filter::navigator): new slot; stores the navigator used for evaluating XPath queries  
(shared-initialize :after xpath-filter t): accept builder initarg; pass to navigator  
(compute-filter-function xpath-filter): return a function that evaluates the compiled XPath using the navigator and translates the result  
(xpath-navigator): new function; return a navigator with suitable peek function and printers  
(xpath-result->filter-result): check node-sets for non-emptiness, otherwise call `unwrap'
- test/filter/xpath-filter.lisp  
(define-basic-filter-tests xpath-filter): removed cases for fallback behavior; added a case specifying the builder  
(define-filter-match-test xpath-filter): added lots of cases for various nodes and attributes in event and payload
- rsb-filter-xpath.asd (header): updated copyright  
(system rsb-filter-xpath): added system dependencies on architecture.builder-protocol.xpath and rsb-builder

#### Revision 5ed8acec - 04/03/2017 04:51 PM - J. Moringen

Mention improved XPath filter in news.rst

refs #327

- news.rst (RSB 0.16): mention improved XPath filter in CL implementation and logger command

#### Revision 2335104a - 04/03/2017 05:00 PM - J. Moringen

Adapted example to changed XPath filter in src/common/help.lisp

refs #327

- src/common/help.lisp (make-filter-help-string): adapted XPath filter example to changes in the filter

Mention improved XPath filter in news.rst

refs #327

- news.rst (RSB 0.16): mention improved XPath filter in CL implementation and logger command

## History

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### #1 - 09/25/2011 02:02 PM - J. Moringen

- Category set to *Common Lisp Tools*
- Status changed from *New* to *In Progress*
- Assignee set to *J. Moringen*
- % Done changed from *0* to *70*

XPath-based filtering of

- XML Payloads ☐
- XOP Payloads
- Protocol Buffer Payloads (merge pending)

### #2 - 12/10/2013 11:47 PM - J. Moringen

- Target version changed from *rsb-0.10* to *rsb-0.11*

### #3 - 02/06/2014 05:30 PM - J. Moringen

- Target version changed from *rsb-0.11* to *rsb-0.12*

### #4 - 04/30/2015 05:35 PM - J. Moringen

- Target version changed from *rsb-0.12* to *rsb-0.13*

### #5 - 03/02/2016 08:55 AM - J. Moringen

- Target version changed from *rsb-0.13* to *rsb-0.14*

### #6 - 06/08/2016 09:01 PM - J. Moringen

- Target version changed from *rsb-0.14* to *rsb-0.15*

### #7 - 11/07/2016 10:32 AM - J. Moringen

- Target version changed from *rsb-0.15* to *rsb-0.16*

### #8 - 04/03/2017 04:10 PM - J. Moringen

- Status changed from *In Progress* to *Resolved*
- % Done changed from *70* to *100*

Applied in changeset commit:rsb-cl|a89b6770c53cddb55fc920ada02c10813e27bcd5.