

# SimpleXQueryProvider

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The SimpleXQueryProvider is a simple implementation of a provider for the operational support service. The provider is able to respond to simple queries only.

The remainder of this document assumes you are familiar with the OperationalSupport package documentation. See <http://westergaard.eu/2011/07/prom-package-documentation-operationalsupport/> for more information.

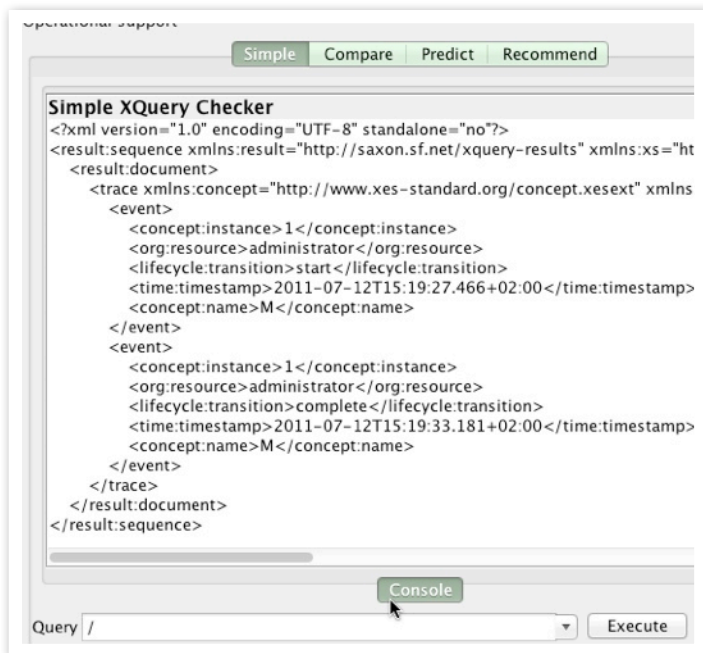
## *Preliminaries*

For the remainder of this documentation, we assume that you have set up and started the operational support provider and started the SimpleXQueryProvider as described in the OperationalSupport documentation.

We assume that you are using Declare for testing. More elaborate testing could and should be done using the unit testing approach indicated in the OperationalSupport documentation to avoid repeating tests manually in the future.

## *Query Language*

The SimpleXQueryProvider, surprisingly, uses the XQuery language. You should probably familiarize yourself with the language. I'm sure the internet contains such information hidden somewhere among the lolcat videos.



The provider basically performs XQuery evaluations on the current trace only. The trace is in a simplified XES format for traces. At the top level is a tag, `<trace>` which contains a number of `<event>` tags, one for each event. This is exactly like in XES.

Attributes are described simpler, though. Basically any attribute `<type key="the:key" value="theValue" />` is translated to `<the:key>theValue</the:key>`. Note that the prefix before the colon of XES attributes is carried over as an XML prefix.

For a quick overview of the format, try evaluating the query `"/"` (without quotes) as a simple query with the SimpleXQueryProvider loaded and a couple events executed.

## Standard Queries

Declare comes with a number of standard queries built in. To access them, activate the drop-down in the Query field of the Simple queries page. Selecting any query will place the corresponding XQuery code in the query field for execution or modification.

## Reporting

Declare tries to present the information sensibly. If it receives an XML document resembling a list, it displays data as a list. If it receives data resembling a table (a list of items with the same entries), it displays a table. It can also format HTML for full flexibility. If all else fails, the result is shown as XML.

