AirportStatus

Introduction

Tags	Webservice, REST, XSD, Data mapping
Type of accelerator	Example project to demonstrate Blueriq functionality and accelerate your learning journey.
Download	AirportStatus.project.zip
Compatibility	Blueriq 16.0 and higher

Description

This example project demonstrates how Blueriq can be used for sending a REST request from a page model and mapping back the response. This can be achieved either using a domain schema or an xsd import. An xsd import is used in this particular application.

Prerequisites

In order to successfully run this project the following needs to be fulfilled:

1. The machine on which the Runtime is running has a working internet connection;
2. The Blueriq Library on the branch the project is on.

Observations

The model should be understandable for the business engineer. However the relation between the xsd and the domain model might be worth a short explanation (the xsd can be opened by opening the Home tab -> Schema set -> View schema set and then opening the 'StatusAnswer' element window).

```xml
<xs:element name="AirportStatus">
  <xs:complexType>
    <xs:all>
      <xs:element minOccurs="0" name="Name" type="xs:string" />
      <xs:element minOccurs="0" name="ICAO" type="xs:string" />
      <xs:element minOccurs="0" name="State" type="xs:string" />
      <xs:element minOccurs="0" name="Status">
        <xs:complexType>
          <xs:all>
            <xs:element minOccurs="0" name="AvgDelay" type="xs:string" />
            <xs:element minOccurs="0" name="ClosureEnd" type="xs:string" />
            <xs:element minOccurs="0" name="ClosureBegin" type="xs:string" />
            <xs:element minOccurs="0" name="Type" type="xs:string" />
            <xs:element minOccurs="0" name="MinDelay" type="xs:string" />
            <xs:element minOccurs="0" name="Trend" type="xs:string" />
            <xs:element minOccurs="0" name="Reason" type="xs:string" />
            <xs:element minOccurs="0" name="MaxDelay" type="xs:string" />
            <xs:element minOccurs="0" name="EndTime" type="xs:string" />
          </xs:all>
        </xs:complexType>
      </xs:element>
      <xs:element minOccurs="0" name="Delay" type="xs:string" />
      <xs:element minOccurs="0" name="IATA" type="xs:string" />
      <xs:element minOccurs="0" name="City" type="xs:string" />
      <xs:element name="Weather">
        <xs:complexType>
          <xs:all>
            <xs:element minOccurs="0" name="Weather" type="xs:string" />
            <xs:element minOccurs="0" name="Meta">
              <xs:complexType>
                <xs:all>
                  <xs:element minOccurs="0" name="Credit" type="xs:string" />
                  <xs:element minOccurs="0" name="Url" type="xs:anyURI" />
                  <xs:element minOccurs="0" name="Updated" type="xs:string" />
                </xs:all>
              </xs:complexType>
            </xs:element>
            <xs:element minOccurs="0" name="Wind" type="xs:string" />
            <xs:element minOccurs="0" name="Temp" type="xs:string" />
            <xs:element minOccurs="0" name="Visibility" type="xs:float" />
            <xs:element minOccurs="0" name="Error" type="xs:string" />
          </xs:all>
        </xs:complexType>
      </xs:element>
    </xs:all>
  </xs:complexType>
</xs:element>
```

As no domain schema is used, the mapping is deduced from the xsd schema set. The schema set contains a form of the domain model to map the response in. In this schema set, entities are set as complex types elements and they can further hold other elements which can be attributes (if the elements are simple) or relations to other entities (if the elements are also set as complex types). So for instance the complex type element *AirportStatus* (which is an entity) has a relation to the complex type element *Status* (which is again an entity) and moreover *Status* contains simple elements (attributes). It can also be observed that those xsd elements correspond to the real domain model.

AirportStatus_Status

- AvgDelay
- ClosureBegin
- ClosureEnd
- EndTime
- MaxDelay
- MinDelay
- Reason
- Trend
- Type