Subject: [railML 2] ocp modeling
Posted by Larissa Zhuchyi on Wed, 05 Apr 2023 16:18:22 GMT
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Dear all

In this example, railway station X is described that has three yards (parts of the station). Yard X.Y as part of station X is used only for freight trains, yard X.Z is used by passenger trains and yard X.J is only operational (no freight nor passenger traffic). Additionally, during the winter time, yard X.Y is used for passenger trains as well. In summer the whole station is closed.

Station X has three spatial parts (yards) X.Y, X.Z, X.J. Yard X.Y has a temporal part as soon as its properties change over time. Please, communicate your ideas on questions (1, 2) to clarify the principles of modelling properties that change over time using railML 2:

(1) Does yard Y1 referring to yard Y imply that yard Y is always "freight" and "passenger" only in winter?
(2) Is there any other way to represent properties that change over time in railML 2?

The source code in railML 2 is as follows:

```
<operationControlPoints>
   <ocp id="X" name="X" type="operationalName">
      <propOperational operationalType="station"/>
      <propOther>
         <states>
            <state status="disabled"
                  startDateTime="2023-06-01T08:00:00"
                  endDateTime="2023-08-31T18:00:00"/>
         </states>
      </propOther>
   </ocp>
   <ocp id="Y" name="X.Y" type="operationalName" parentOcpRef="X">
      <propOperational trafficType="freight"/>
   </ocp>
   <ocp id="Z" name="X.Z" type="operationalName" parentOcpRef="X">
      <propOperational trafficType="passenger"/>
   </ocp>
   <ocp id="J" name="X.J" type="operationalName" parentOcpRef="X">
      <propOperational trafficType="operational"/>
   </ocp>
   <ocp id="Y1" name="X.Y" parentOcpRef="Y">
      <propOperational trafficType="passenger"/>
      <propOther>
         <states>
            <state status="operational"
                  startDateTime="2023-01-01T08:00:00"
                  endDateTime="2023-02-28T18:00:00"/>
```

```
        </states>
      </propOther>
   </ocp>
</operationControlPoints>
```

Here, winter, spring and summer are represented by infrastructure/operationControlPoints/ocp/propOther/states/s tate element.

Yards (ocp) are the spatial part of the station (ocp).

Freight, passenger and staff aspects are represented by infrastructure/operationControlPoints/ocp/propOperational/@t rafficType attribute.

"Parts" are linked with the "whole" using the @parentOcpRef attribute.

See the figure below.

File Attachments

1) 2023-04-04 (2).png, downloaded 213 times