Subject: Wiki documentation for border <ocpTT> between two chained <trainPart>
Posted by on Tue, 21 Jul 2015 15:28:04 GMT
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Hello everyone,

due to some problems while importing railML timetable data I thought about some rules concerning border <ocpTT> between two chained <trainPart> elements. Example:

```
<trainParts>
  <trainPart id='_tp1'>
    <ocpsTT>
      <ocpTT ocpRef='_ocp_A'/>
      <ocpTT ocpRef='_ocp_B'/>
    <ocpsTT>
  </trainPart>
  <trainPart id='_tp2'>
    <ocpsTT>
      <ocpTT ocpRef='_ocp_B'/>
      <ocpTT ocpRef='_ocp_C'/>
    <ocpsTT>
  </trainPart>
</trainParts>
```

(Both train parts are referenced by the same <train> using two consequent <trainPartSequence> elements)

The <ocpTT> data for "_ocp_B" is included in both train parts. Therefore it's evident that both <ocpTT> nodes should not contain contradictionary information.

So I came to following rules which I would like to transfer to the "Best practice" section of the <ocpTT> wiki page if anyone agrees:

- Exporting programs should ensure, that border <ocpTT> do not contain contradictionary information. All properties concerning the stop or the passing of the train (e.g. ocpType, stopDescription, trackRef) should have the same values.
- Importing programs should read attributes concerning arrival from the <ocpTT> element of the previous <trainPart>, attributes concerning departure from the <ocpTT> of the next <trainPart>
- It is not recommended to use border <ocpTT> to model a stop or passing in a ocp with different properties for arrival and departure, e.g. a different <trackRef> for the arrival and departure track

Kind regards
Christian Rößiger

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Subject: Re: Wiki documentation for border <ocpTT> between two chained <trainPart>
Posted by Burkhard Franke on Thu, 23 Jul 2015 12:01:30 GMT
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Hello Christian

thanks for this input. I agree on your point but would not call it a "recommendation" or "best practice": is there any reason why the border properties should differ? I cannot think of any.
And how should importing programs deal with contradicting properties (different station tracks, arrival later than departure, ...) in border ocps?

So I´d like to raise your point: Exporting programs MUST ensure that border <ocpTT> do not contain contradictionary information. Otherwise the railML-file is not (semantically) valid.

Or is this too harsh?

Best regards
Burkhard

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Subject: Re: Wiki documentation for border <ocpTT> between two chained <trainPart>
Posted by Philip Wobst on Fri, 24 Jul 2015 10:54:39 GMT
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Hello Christian,

did you have a use case where the data for the two ocpTTs was not the same although it should have been the same?

Maybe there are some use cases where the data would not be the same and I can think of one customer scenario where this might be the case (not using railML yet - unfortunately).

If we create the MUST criteria for the exporting system to define which ocpTT attributes must be identical at a border ocpTT then we also define must have rules for the importing system and all other railML tools.
On the Wiki page for the ocpTT an example for such a scenario exists and possibly a description of the 'border ocpTT' and the clarification of the term makes sense. Together with this we could outline that the attributes a, b, c do not change at a border ocpTT in all known 'normal' train operation scenarios. Furthermore, no importing system is expected to handle/interpret changes if different attributes a, b, c were provided.

Best regards,

Philip Wobst

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Registry Court/Amtsgericht: Hannover HRB 1712
Managing Directors/Geschäftsführer:
Michael Frankenberg, Werner Sommerfeld, Peter Talke

Subject: Re: Wiki documentation for border <ocpTT> between two chained <trainPart>
Posted by on Fri, 24 Jul 2015 14:17:23 GMT
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Hello Philip,

Am 24.07.2015 um 12.54 schrieb Philip Wobst:
> Hello Christian,
>
> did you have a use case where the data for the two ocpTTs was not the
> same although it should have been the same?

I got a railML file with different data in two border ocpTTs, but I don't believe that this was intended by the creator. Of course I can imagine usecases where we need different arrival / departure tracks, stop posts and so on, but my intention was to answer the question: Are border ocpTTs the right place to model different arrival and departure locations? I considered the existance of border ocpTTS as a potentially unwanted and completely redundant consequence of the current railML timetable structure, so I wanted to "forbid" using them for things that cannot modeled with non-border-ocpTTs.
If there is consensus under the railML developers that is okay to do so then I exclude all subordinated attributes of ocpTT for locating a trains from my initially request, but I expect all other attributes of border ocpTTs not to be contradictionary. They may be left out e.g. "departure" in the first ocpTT and "arrival" in the second ocpTT, but if present in both elements, they must be equal.

> If we create the MUST criteria for the exporting system to define which
> ocpTT attributes must be identical at a border ocpTT then we also define
> must have rules for the importing system and all other railML tools.

What do you mean with "must have rules for the importing system"? I, as a developer of a importing system look for something like: "The importing system can trust, that border ocpTT do not contain contradictionary information(, except for infrastructure references). It should evaluate both ocpTT elements and merge its data".

> On the Wiki page for the ocpTT an example for such a scenario exists and
> possibly a description of the 'border ocpTT' and the clarification of
> the term makes sense. Together with this we could outline that the
> attributes a, b, c do not change at a border ocpTT in all known 'normal'
> train operation scenarios. Furthermore, no importing system is expected
> to handle/interpret changes if different attributes a, b, c were provided.

I tried to figure out, which attributes come in consideration for a, b, c and I came to the conclusion, that all attributes (if given) should be equal, as mentioned above. So I would rather define the exception for

this rule: infrastructure references.

Kind regards
Christian Rößiger

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