Subject: How to represent Line Continuation on railML
Posted by Fabiana Diotallevi on Mon, 08 Jul 2019 16:02:00 GMT
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Dear all,

if I want to export in railML 3.1 the schematic of a station that has several "real" bufferstops, and also some "fake" bufferstops representing the line borders (see image below), how can I export the fake ones?

I need to export them beacuse they define the borders of the tvdSection for the interlocking schema.

Any ideas?

Thanks in advance,
f.

File Attachments
1) bufferstops.JPG, downloaded 566 times

Subject: Re: How to represent Line Continuation on railML
Posted by Jörg von Lingen on Tue, 09 Jul 2019 04:27:37 GMT
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Hi,

from interlocking point of view I think the tvdSection is delimited by the trainDetectionElement. A bufferstop would be
no active element for an interlocking.

I have added some detection points and names to your example:
tvdSection "R1" is delimited by "dp01" and "dp02"

tvdSection "R4" is delimited by "bs01" and "dp03"

The infrastructure limits shall be marked by border elements.

Regards,
Jörg von Lingen - Interlocking Coordinator
Fabiana Diotallevi wrote on 08.07.2019 18:02:
> Dear all,
>
> if I want to export in railML 3.1 the schematic of a station
> that has several "real" bufferstops, and also some "fake"

> bufferstops representing the line borders (see image below),
> how can I export the fake ones?
>
>
>
> I need to export them beacuse they define the borders of the
> tvdSection for the interlocking schema.
>
> Any ideas?
>
> Thanks in advance,
> f.

File Attachments

1) bufferstop2.png, downloaded 290 times

Subject: Re: How to represent Line Continuation on railML
Posted by Fabiana Diotallevi on Tue, 09 Jul 2019 07:37:48 GMT
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Dear Joerg,
thanks for the quick answer.
I get your point, but I have another question then: what kind of "trainDetectionElement" could a line border be?

From the 3.1 railML documentation the possible values are:

```
<xs:enumeration value="axleCounter"/>
<xs:enumeration value="axleCountingCircuit"/>
<xs:enumeration value="clearancePoint"/>
<xs:enumeration value="insulatedRailJoint"/>
<xs:enumeration value="trackCircuit"/>
<xs:enumeration value="virtualClearancePoint"/
```

Any suggestion?

Thanks again in advance,

f.

Subject: Re: How to represent Line Continuation on railML
Posted by Jörg von Lingen on Tue, 09 Jul 2019 10:15:12 GMT
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Dear Fabiana,

1) "border" element of type="rail3:Border" is a separate functionalInfrastructure element

2) a "trainDetectionElement" delimiting a tvdSection can be only of type "axleCounter" or "insulatedRailJoint". You may
consider "insulatedRailJoint" also for locations limiting an audio frequency track circuit without having a physical
insulation in the rails.

A "trackCircuit" would be already an equivalent to "tvdSection", i.e. not representing a spotLocation.
A "clearancePoint" or "virtualClearancePoint" is not really a mean to detect the presence of a train on the track -
explanation for use is missing.
For "axleCountingCircuit" I have no clue what it stands for, but it seems also not representing a spotLocation.

Regards,
Jörg von Lingen - Interlocking Coordinator
Fabiana Diotallevi wrote on 09.07.2019 09:37:
> Dear Joerg,
> thanks for the quick answer.
> I get your point, but I have another question then: what
> kind of "trainDetectionElement" could a line border be?
>
> From the 3.1 railML documentation the possible values are:
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> <xs:enumeration value="insulatedRailJoint"/>
> <xs:enumeration value="trackCircuit"/>
> <xs:enumeration value="virtualClearancePoint"/
>
> Any suggestion?
>
> Thanks again in advance,
>
> f.
>

Subject: Re: How to represent Line Continuation on railML
Posted by Fabiana Diotallevi on Fri, 12 Jul 2019 16:09:41 GMT
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Ok,
thank you for the answer!

f.

Subject: Re: How to represent Line Continuation on railML
Posted by christian.rahmig on Mon, 26 Aug 2019 12:24:24 GMT
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Dear Fabiana,
dear Jörg,

let me also contribute to this topic :-)

Am 09.07.2019 um 12:15 schrieb Joerg von Lingen:
> [...]
> 2) a "trainDetectionElement" delimiting a tvdSection can be only of type "axleCounter" or "insulatedRailJoint". You may
> consider "insulatedRailJoint" also for locations limiting an audio frequency track circuit without having a physical
> insulation in the rails.

Yes, "insulatedRailJoint" and "axleCounter" are the train detection elements that can be modelled via spot location elements.

> A "trackCircuit" would be already an equivalent to "tvdSection", i.e. not representing a spotLocation.

A "trackCircuit" is a track circuit and it is used (from interlocking perspective) as "tvdSection" detecting the presence of a railway vehicle inside.

> A "clearancePoint" or "virtualClearancePoint" is not really a mean to detect the presence of a train on the track -
> explanation for use is missing.
> For "axleCountingCircuit" I have no clue what it stands for, but it seems also not representing a spotLocation.

A "clearancePoint" can be used as a "manual border" of a "tvdSection": the dispatcher checks (by looking) if the end of train has passed the clearance point at the switch before allowing the next train to run the switch on its other branch. Therefore, the "clearancePoint" (together with the dispatcher) is also some kind of train detector.

The "virtualClearancePoint" is probably not really relevant. It describes a clearance point, that is not linked with a physical element, e.g. the "police man" in Germany [1]. @community: What id your opinion about "virtualClearancePoint"?

[1]
https://upload.wikimedia.org/wikipedia/commons/thumb/e/e6/Bahn-Grenzzeichen_aus_Blech_im_D%C3%BCsseldorfer_Hafen.jpg/1200px-Bahn-Grenzzeichen_aus_Blech_im_D%C3%BCsseldorfer_Hafen.j pg

Best regards
Christian

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Christian Rahmig - Infrastructure scheme coordinator
railML.org (Registry of Associations: VR 5750)
Phone Coordinator: +49 173 2714509; railML.org: +49 351 47582911
Altplauen 19h; 01187 Dresden; Germany www.railml.org