Subject: [railML2] modeling of a car ramp
Posted by Torben Brand on Mon, 03 Jun 2019 09:47:12 GMT
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Problem description
The Norwegian railML community needs to model a car ramp (Example image https://images.app.goo.gl/avBsC8MYFjGLvDML7) on the end of a track for loading/unloading cars.
The purpose/use case is Network statement and schematic track plan.

Mapping
As I see it we can use either choose to use:

- Use <platformEdge>
- use <serviceSection>
- model a (nor) extension for freight equipment on a microscopic level

The wiki states that the <platformEdge> (https://wiki.railml.org/index.php?title=IS:platformEdge) is used for "A <platformEdge> A <platformEdge> defines the border line between platform and railway track, where passengers are meant to board and un-board the train."

We could use <serviceSection>
https://wiki.railml.org/index.php?title=IS:serviceSection
https://www.railml.org/forum/index.php?t=msg&th=122 instead
(it is also listed in the railML2.4nor documentation https://www.jernbanedirektoratet.no/railml graphics on page 10 to be used as is in Norway).
However, the wiki states that "A <serviceSection> defines the border line between a railway service area and a railway track, where the service for the train takes place. A service section is always connected with exactly one railway track."
So strictly speaking it is meant for, as I understand it, the service of the train/ the trains maintenance. So, freight loading/unloading facilities are not part of it.

There are no freight loading facilities in the railML2.4 on a microscopic level (under trackElements). There are macroscopic elements under ocp<propService> (https://wiki.railml.org/index.php?title=IS:propService).

Solution suggestion

A. an extension
An extension should be done properly. So here a complete modelling should be made for all necessary elements and attributes. Probably a new element <freightEquipment> under <trackElements>?. This would demand a proper use case be defined. Which is not in place for now and is not anticipated.

B. Use <platformEdge>
The definition clearly states " where passengers are meant to board and un-board the train"
Thus, I understand not to use <platformEdge> for loading facilities like a car ramp.

C. Use <serviceSection>
As an easy solution for now. We could choose to see the term "service" broader.
There is an attribute @ramp (and @loadingFacility for other freight loading). The definition is unfortunately not really helpful:
@ramp:" defining the service section as being a ramp"
@loadingFacility:"defining the service section as being equipped with loading facilities".

I find the suggested definitions in the initial forum posting far more helpful and precise:
"ramp" (ramp for loading / unloading goods)
"maintenance" (maintenance facilities e. g. in a depot)
"loadingFacility" (Goods can be (un-)loaded from the wagon's
top / underfloor

I suggest going for @ramp for the car ramp.

Also more important the forum posting for serviceSection (https://www.railml.org/forum/index.php?t=msg&th=122& amp ;goto=283&#msg_283) anticipated loading of freight. The attribute descriptions are clearly meant for loading/unloading of freight. However, this has been "lost in translation" into the wiki.
I suggest improving the wiki page for <serviceSection> with a clear definition to mean service and freight handling of trains. Also, a more elaborate definition of the attributes would be helpful (like the initial suggested definitions).

Another problem is, as a car ramp is not alongside the track. There is another challenge for using <serviceSection> as it is defined to be alongside the track (like platformEdge). This both in the wiki definition, the presence of a @length attribute and in the @side attribute being restricted to the values "left" and "right".
This could be solved with a semantical rule for objects being at the end of the track instead of alongside it. This either with the rule:

1. No use of the attribute @side and a @length attribute of "0". This would restrict the attribute defining the length of the ramp outside the track area (in front of the track). This might be ok as @lagth in railML is always seen as along the tracks prespective.
2. No use of the attribute @side and a serviceSection@pos value corresponding to the @pos value of <trackEnd> or <trackBegin> with the sub element <bufferStop> placed.
3. In railML 2.5 extend serviceSection@side with the value "end"

I suggest C2 as the solution for now and C3 for later. What does the railML community think?

Subject: Re: [railML2] modeling of a car ramp
Posted by christian.rahmig on Mon, 26 Aug 2019 14:58:41 GMT
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Dear Torben,
dear all,

please apologize my very late reply on your car ramp modelling issue...

Now, being back from holidays, I want to work on this topic, so that we can come up with a solution for future railML versions 2.5 and 3.2.

Some thoughts from side of the infrastructure coordinator:
* don't use <platformEdge> as it is intended for passenger traffic
* <serviceSection> might be the right place, but list of attributes etc. needs to be adapted as already identified by you
* <ocp><propService> seems suitable to be used for macroscopic model
* car ramp as new element sounds quite specific and can probably be modelled with a (generic) ramp

However, I am open to any ideas and throughts coming from the railML community. So, dear experts, please don't hesitate to share your opinion/experiences with us...

In order not to forget about the car ramp, I created a Trac ticket to collect all information and proposals on the solution of the issue [1].

[1] https://trac.railml.org/ticket/362

Best regards
Christian

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Subject: Re: [railML2] modeling of a car ramp
Posted by christian.rahmig on Fri, 18 Sep 2020 14:08:54 GMT
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Dear railML community,

what are your thoughts and ideas on the car ramp issue?
What would you need for a first implementation in railML 2.5?

Any comment is highly appreciated...

Best regards
Christian

Subject: Re: [railML2] modeling of a car ramp
Posted by on Sat, 19 Sep 2020 16:45:19 GMT
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Dear Torben and Christian,

Laderampen (as we call them in German) are a common feature of railways, so I would prefer a railML-internal solution and not an extension.

I would not welcome the usage of <platformEdge> since I can rarely imagine a loading ramp which can equally used for passengers as well as freight (concerning height, access, service properties as labelling, roof, benches, lamps... not to write about cleanliness). Rather, a software should be able to distinguish between passenger platforms and freight loading ramps/platforms. So, I think we should limit <platformEdge> to passenger usage.

I don't see any objections against the usage of <serviceSection>. I would agree with Torbens solution C2 (no @side; @pos
corresponding to the @pos value of <trackEnd> or <trackBegin>). I would use this even after r2.5 (no <serviceSection>@side="end").

Please be aware that there are combined "Kopf- und Seitenrampen" (side and end loading ramps) which should possibly be split into two railML <serviceSection>s, one with @side and @length>0 and one with no @side... Also, there should be a possibility to distinguish between the simple loading ramps (Kopf- und/oder Seitenladerampe, flat level concrete) and the special ones for cars (with metal car drives) like that on Torben's photo - may be by a @type or @kind attribute.

Best regards,
Dirk.

Subject: Re: [railML2] modeling of a car ramp
Posted by christian.rahmig on Fri, 28 May 2021 12:27:29 GMT
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Dear Torben and Dirk,

I updated the Trac ticket #362 [1] with a railML 2.5 solution proposal based on your feedback here in the forum. Please feel free to review and confirm the way of modelling.

For distinguish between different construction types of the car ramp, I suggested to introduce a new attribute <serviceSection>@rampType with possible enumeration values "flat" and "metalBridge". What are your comments on this proposal?

[1] https://trac.railml.org/ticket/362

Thank you very much and best regards
Christian

Subject: Re: [railML2] modeling of a car ramp
Posted by Dominik Looser on Mon, 07 Jun 2021 11:46:31 GMT
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Hi,

I agree with the proposed solution to use <serviceSection>s to model car ramps here. The new @rampType attribute should be optional.

Best regards,
Dominik

Subject: Re: [railML2] modeling of a car ramp
Posted by christian.rahmig on Fri, 11 Jun 2021 12:44:30 GMT
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Dear all,

thank you for your feedback. I updated the proposed railML 2.5 solution in Trac ticket #362 [1] accordingly. The new attribute @rampType will be implemented in the schema together with upcoming railML 2.5.

For a better understanding of modelling car ramps, it would be great having at least one best practice example for a car ramp included in the railML 2 wiki. Can anyone from the community contribute with a best practice example of a car ramp from their railway network once railML 2.5 has been finally released?

[1] https://trac.railml.org/ticket/362

Thank you very much and best regards
Christian