
Subject: some understanding questions: cross section & stations & stopping points
Posted by [Albrecht Achilles](#) on Mon, 14 Feb 2005 16:03:55 GMT
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Hello,

in connection with my thesis I am working on an interface between railML and the infrastructure planning tool FALKO.

During this work there came up some questions I'd like to ask.

1.crossSection

What is meant with this element?

In the schema it is an element in the "trackTopology" and I also found it in the demo-net file where it was situated at the position of the stations.

All translations lead to something like "querschnitt". Or is it meant in the way of crossing a section, in terms of changing the track?

2.stations

When I want to create a station on a track so i have to use the ocp's and its attributes!? But how can I indicate that the station has a length, and is not only a point?

and is the only reference between the track and the ocp container the crossSection, are there other possibility for referencing or is the no reference needed?

3.stopping points

how can I display a stopping point in a railml file?

Thank you very much for your patience.
best regards

Albrecht Achilles

Subject: Re: some understanding questions: cross section & stations & stopping points
Posted by [Volker Knollmann](#) on Wed, 16 Feb 2005 12:56:46 GMT
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On 14.02.2005 17:03, Albrecht Achilles wrote:

> 1.crossSection

> What is meant with this element?

I would guess that this element describes a passenger crossing in a station. Or other possibility: this describes the exact middle of a station (in German: "Bahnhofsmitte") which is a reference point for things like mileage, borders, etc.

Furthermore, in German there is the word "Bahnhofsquerschnitt" which is closest translation to "crossSection". AFAIK this "Bahnhofsquerschnitt" has a certain operational meaning, but I don't remember what it is. And neither Prof. Pacht's glossary nor allmighty google could answer that question. But perhaps I'm just wrong...

Can anyone please rectify or falsify my assumptions? Thanks!

- > 2.stations
- > When I want to create a station on a track so i have to use the ocp's and
- > its attributes!?

Yes.

- > But how can I indicate that the station has a length, and
- > is not only a point?

Well, "ocp" just introduces a station. It's more or less a declaration ("There is thing called ABCD").

And now it's time for some nitpicking:

<nitpick>

The "length of a station" (that's what you asked for) is given implicitly by the distance between it's entry signals. This information can be derived from the existing railML-scheme.

What you probably meant was the "length of a platform", and yes, this information is not yet provided in the infrastructure scheme.

</nitpick>

If you want to save the length of a platform, you could store it as "generalElement" indicating the start or end of a platform. Thus, you keep compatible with version 1.0.

But of course you may also think of a suitable XML-description and post it in this list for further discussion. Then your proposal can be taken into account for future railML-versions.

One last hint:

In one of the last railML-meetings (I think it was in Braunschweig in April 2004) we've had a presentation about a station-scheme. Perhaps you can find some useful information in the presentations and proceedings of that meeting. The documents are available on the railML-website. I don't know about the current status of the station-scheme.

- > 3.stopping points

> how can I display a stopping point in a railml file?

Quick and dirty (don't try this at home!):

```
<.....>
  <signal pos="4.242" function="stoppingPoint" type="sign"/>
<.....>
```

Occasionally, you can add "switchable=false" to indicate that this is a static sign and no switchable signal (if the "switchable"-attribute is really meant like that).

The schema does not give further constraints for the values of the "function"- or "type"-field of <signal>-elements. Basically, you can do whatever you want here and be perfectly compatible with yourself (and probably noone else).

IIRC, we have discussed that topic earlier here but without result. Perhaps we should reactivate that discussion for future versions.

Please anyone feel free to correct me!

HTH,
Volker Knollmann

Subject: Re: some understanding questions: cross section & stations & stopping points

Posted by [Albrecht Achilles](#) on Thu, 17 Feb 2005 14:44:00 GMT

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Hello,

> <nitpick>
> The "length of a station" (that's what you asked for) is given implicitly
> by the distance between it's entry signals. This information can be
> derived from the existing railML-scheme.
>
> What you probably meant was the "length of a platform", and yes, this
> information is not yet provided in the infrastructure scheme.
> </nitpick>

Thank you for being nitpicking, because that was exactly the hint I needed. FALKO does not care how long a platform of a switch is, but only wants to display the track-length in a station and that is defined by the signals

- > If you want to save the length of a platform, you could store it as
- > "generalElement" indicating the start or end of a platform. Thus, you keep
- > compatible with version 1.0.

I think "generalElements" should be the very last option to use.

- > But of course you may also think of a suitable XML-description and post it
- > in this list for further discussion. Then your proposal can be taken into
- > account for future railML-versions.

Perhaps there could be a container like "ocpSize" as child of an ocp-element, where all geometric data of the ocp-element like length, height or width could be stored.

>> 3.stopping points

Maybe in a further infrastructureSchema could be two optional ocp-attributes "type" and "direction", so you could display easily a stopping point without effecting every other kind of ocp.

The attribute "type" could also have a number of fix inputs. If your ocp is something like it is mentioned there you can indicate very early what kind of ocp you have otherwise you don't have to use the attribute.

Best regards
Albrecht Achilles

Subject: Re: some understanding questions: cross section & stations & stopping points

Posted by [Matthias Hengartner](#) on Wed, 16 Mar 2005 12:58:56 GMT

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Hello,

sorry for not giving an answer earlier...

- >> 1.crossSection
- >> What is meant with this element?
- >
- > I would guess that this element describes a passenger crossing in a
- > station. Or other possibility: this describes the exact middle of a
- > station (in German: "Bahnhofsmittle") which is a reference point for
- > things like mileage, borders, etc.
- >
- > Furthermore, in German there is the word "Bahnhofsquerschnitt" which is
- > closest translation to "crossSection". AFAIK this "Bahnhofsquerschnitt"
- > has a certain operational meaning, but I don't remember what it is. And

> neither Prof. Pachl's glossary nor allmighty google could answer that
> question. But perhaps I'm just wrong...
>
> Can anyone please rectify or falsify my assumptions? Thanks!

Yes, crossSection means Bahnhofsquerschnitt/Stationsquerschnitt. ASAIK, it don't has to be exactly in the middle of a station. I think, it is a logical assignement of a track to an station and has no physical meaning.

>
>> 2.stations
>> When I want to create a station on a track so i have to use the ocp's
and
>> its attributes!?
>
> Yes.

Yes, and you can assign the track(s) to the OCP via crossSection(s).

>> But how can I indicate that the station has a length, and
>> is not only a point?
>
> Well, "ocp" just introduces a station. It's more or less a declaration
> ("There is thing called ABCD").

--> see also discussions about a <stations>-scheme.

> And now it's time for some nitpicking:
>
> <nitpick>
> The "length of a station" (that's what you asked for) is given
> implicitly by the distance between it's entry signals. This information
> can be derived from the existing railML-scheme.

hmm, yes. And for an _explicit_ indication of a station-area, the element
<border> (type="station") can be used.
Furthermore some (most) track elements (in particular switches, signals,
balises, etc.) will assignable to an OCP-area, at the latest when the
interlocking schema becomes newsworthy.

Best regards from sunny Zurich B-)
Matthias Hengartner

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