Subject: infrastructureVisualization in railML 2.2?
Posted by at on Thu, 22 Aug 2013 13:09:41 GMT

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Dear colleagues,
I had a look at the infrastructure visualization implementation in
railML 2.2.
There is no real documentation in the wiki and no forum post about it.
The only thing I found was the thesis of Hengartner in the document
library dating back to 2003.
(http://railml.org//index.php/bibliothek.html?file=tl_files/r
ailML.org/documents/science/hengartner.thesis_da.pdf)

```
<visualization id="infraVis">
    <lineVis ref="">
      <trackVis>

      </trackVis>

  <trackVis>

      </trackVis>
  ...
    </lineVis>
   </visualization>
```

What I was wondering is the strange structure of track inside line,
which reminds me of the old railML infrastructure structure (1.x), but
doesn't make sense for the 2.x infrastructure model. Am I right? Does
anybody use this with railML 2.x? Or is it useful to adapt the structure
in the next railML release?

Best regards
Thomas Albrecht
TU Dresden
Chair for Traffic Control Systems and Process Automation
tu-dresden.de/vlp

Subject: Re: infrastructureVisualization in railML 2.2?
Posted by bob.janssen on Wed, 04 Sep 2013 14:40:37 GMT

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Hello Thomas,
I'm not over the moon with the present visualisation model either. I'm
however convinced that visualisation is important for two reasons:
1. a visual representation of the infrastructure helps both the modeller
and the user. This is highly useful for gaining acceptance of RailML.

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RailML can go the GIS-way. Lack of visualisation makes for a very opaque tool.
2. often, multiple plans, maps, schemas are linked with an infrastructure. E.g. there's a track plan of a station for maintenance purpose and another schema of the same station for dispatching. Both refer to the very same infrastructure. It is helpful to associate more than one set of coordinates with infrastructure. So, in my opinion, it is great if we can link an object with several coordinates. This actually reduces the probability there are multiple discordant plans floating around.

concluding - visualisation is important but the XSD needs some improvement.

Yours,
Bob Janssen
Siemens NL

Thomas Albrecht wrote:
> Dear colleagues,
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> Thomas Albrecht
> TU Dresden
> Chair for Traffic Control Systems and Process Automation
> tu-dresden.de/vlp
>
>
>

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----== posted via PHP Headliner ==----

Subject: Re: infrastructureVisualization in railML 2.2?
Posted by bob.janssen on Mon, 23 Sep 2013 13:01:11 GMT
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Hello Again Thomas,
the presentation by Eurocontrol made it clear that they use GML for
geographical object description. This may be a way forward as GML has wide
following and is supported by many tools.
Did you ever give thought to that idea ?
Yours, Bob

--
----== posted via PHP Headliner ==----

Subject: Re: infrastructureVisualization in railML 2.2?
Posted by Christian Rahmig on Wed, 06 Nov 2013 20:59:29 GMT
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Dear Thomas,

On 22.08.2013 15:09, at wrote:
> Dear colleagues,
> I had a look at the infrastructure visualization implementation in
> railML 2.2.
> There is no real documentation in the wiki and no forum post about it.
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>
> [...]
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> What I was wondering is the strange structure of track inside line,
> which reminds me of the old railML infrastructure structure (1.x), but
> doesn't make sense for the 2.x infrastructure model. Am I right? Does
> anybody use this with railML 2.x? Or is it useful to adapt the structure
> in the next railML release?

You are right: the railML infrastructure visualisation branch looks
rather like a railML 1.x than the current schema structure of railML
2.2. The reason for this is that while the regular infrastructure schema
has been updated over the years following the documented user
requirements, there haven't been any requests for an update of the
visualisation schema. I guess, it has not been used in the meantime.

However, if there is a need for having this infrastructure visualisation
branch, then we should think about an adaptation of its structure with a
new release.

Best regards

--
Christian Rahmig
railML.infrastructure coordinator

Subject: Re: infrastructureVisualization in railML 2.2?
Posted by Christian Rahmig on Wed, 06 Nov 2013 21:13:56 GMT
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Dear Bob,

On 04.09.2013 16:40, Bob Janssen wrote:
> Hello Thomas,
> I'm not over the moon with the present visualisation model either. I'm
> however convinced that visualisation is important for two reasons:
> 1. a visual representation of the infrastructure helps both the modeller
> and the user. This is highly useful for gaining acceptance of RailML.
> RailML can go the GIS-way. Lack of visualisation makes for a very opaque
> tool.
> 2. often, multiple plans, maps, schemas are linked with an infrastructure.
> E.g. there's a track plan of a station for maintenance purpose and another
> schema of the same station for dispatching. Both refer to the very same
> infrastructure. It is helpful to associate more than one set of
> coordinates with infrastructure. So, in my opinion, it is great if we can
> link an object with several coordinates. This actually reduces the
> probability there are multiple discordant plans floating around.
>
> concluding - visualisation is important but the XSD needs some
> improvement.

thank you very much for sharing your thoughts on the visualisation
model. Indeed, an infrastructure can be transferred in a number of
different graphical representations. Some of these representations are
easy to create directly from the infrastructure data e.g. by using the
geo-coordinates. There has been also an approach for generating
topological map representations from the railML topology data [1]. In
general, the question about which aspects of a graphical representation
have to be explicitly defined and which are implicitly given in the
data, is not easy to answer. In this case, we also rely on the feedback
and the requests of the users of the infrastructure visualisation branch.

[1]
 http://documents.railml.org/events/slides/2012-11-14_dlr_bur khardt-railml-viewer.pdf

Best regards

--
Christian Rahmig
railML.infrastructure coordinator

Subject: Re: infrastructureVisualization in railML 2.2?
Posted by Christian Rahmig on Wed, 06 Nov 2013 21:19:14 GMT
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On 23.09.2013 15:01, Bob Janssen wrote:
> Hello Again Thomas,
> the presentation by Eurocontrol made it clear that they use GML for
> geographical object description. This may be a way forward as GML has wide
> following and is supported by many tools.
> Did you ever give thought to that idea ?
> Yours, Bob
>

PS: Yes, railML infrastructure schema does not use GML so far, but I
agree with you, that before re-inventing a schema for geo-data
representations, we can build on a GML approach.

Best regards

--
Christian Rahmig
railML.infrastructure coordinator