

Dear Christoph,

there is currently no other option than to use the "any other" extension point of an <ocp> to add an <infraAttributes> to an <ocp>.

Since an <ocp> has plenty of attributes and properties so far, I guess there was no need to do so.

But, it is normally not in the sense of railML to extend it with a structure coming from railML itself. In other words, the "any other" extension point should, in my understanding, only be used with your own sub-structures. If you really need an extension with a railML-own sub-structure (as <infraAttributes>) there should be an "official" way to do so.

So my question would be now: Which information exactly do you want to add to an <ocp>? Since there are these plenty of properties of <ocp>s I wonder why there is not already a solution for it.

To describe the "owner" of an <ocp>, what your example suggests:

- Please be aware that <ocp> is only a virtual place for a cross-reference from lines and tracks to the timetable (and vice-versa). Therefore, the typical place for an <ocp> is the middle of a station or the middle of a platform of a station alongside a track. There is no <ocp> in reality. That's why there is no "direct" owner of an ocp so far.

- For the owner of the tracks of an ocp, use <owner infrastructureManagerRef=.../> of the track.

- For the owner of the platforms of an ocp, there should be a possibility to use an /infrastructureManagerRef/ attribute at a <platformEdge>. I do not know whether there is one right now, but if not it should be better to solve the problem in this way.

- For the owner of the overhead wires of an ocp... And so on, there should be /infrastructureManagerRefs/ at each physical infrastructure element.

It is surely not acceptable to use "dummy tracks".

I would suggest you write here by which attributes you want to extend an <ocp>. This may help us to understand the character and generality of the extension. May be Christian can check whether there is already a

solution for them.

With best regards,
Dirk Bräuer.

Am 16.08.2016 um 15:24 schrieb Christoph Jobmann:

> Greetings,
>
> I recently started looking into the infrastructure
> subschema.
>
> As far as I can tell the element InfraAttrGroup and thereby
> the underlying InfraAttributes elements can only be
> references by track elements. That makes sense considering
> that most infraAttributes children are strongly connected to
> tracks.
>
> Are there similar elements that can be used for the elements
> of type ocp? If not - are there plans to add them?
> For now I see three ways to add information I would rather
> wrap up in some kind of attribute Containers:
>
> Use the regular extension Point and add an element for
> referencing infraAttributes Element Use the "other"
> extension point and add references as user-defined
> attributes or elements. Add a trackref pointing to a dummy
> track that contains an appropriate attributeGroupRefs
> element
>
> I prefer the first option, even though it has the downside
> that it enables connecting an ocp with attributes that only
> make sense for tracks.
> The second option has the downside that the
> generalInfraAttribute Elements can not be used anymore.
> The third option is not really an option from my point of
> view - but it is the only way I see without adding new
> user-defined elements or attributes.
>
> I made up an example where the options are demonstrated and
> hope that they help understanding my point. Extensions are
> marked by a NEW: prefix.
>
> <railml>
> <metadata>
> <infrastructureManager id="im1" name="DB Netz AG"/>
> </metadata>

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> <infrastructure id="i">
>   <infraAttrGroups>
>     <infraAttributes id="ia1">
>       <owner infrastructureManagerRef="im1"/>
>     </infraAttributes>
>     <infraAttributes id="ia2">
>       <generalInfraAttributes>
>         <generalInfraAttribute>
>           <attributes>
>             <attribute name="myNewAttribute" value="42"/>
>           </attributes>
>         </generalInfraAttribute>
>       </generalInfraAttributes>
>     </infraAttributes>
>   </infraAttrGroups>
>   <tracks>
>     <track id="dummy1">
>       <infraAttrGroupRefs>
>         <infraAttrGroupRef ref="ia1"/>
>         <infraAttrGroupRef ref="ia2"/>
>       </infraAttrGroupRefs>
>     </track>
>   </tracks>
>   <operationControlPoints>
>     <ocp id="ocp1">
>       <!-- Option 1 -->
>       <NEW:infraAttrGroupRefs>
>         <NEW:infraAttrGroupRef ref="ia1"/>
>         <NEW:infraAttrGroupRef ref="ia2"/>
>       </NEW:infraAttrGroupRefs>
>     </ocp>
>     <ocp id="ocp2" NEW:OwnerRef="im1">
>       <!-- Option 2 -->
>       <NEW:myNewAttribute value="42"/>
>     </ocp>
>     <ocp id="ocp3">
>       <!-- Option 3 -->
>       <propEquipment>
>         <trackRef ref="dummy1">
>       </propEquipment>
>     </ocp>
>   </operationControlPoints>
> </infrastructure>
> </railml>
>
> Am I missing something? Which way is considered as best, are
> there other ways?

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>
> Kind regards
> Christoph Jobmann
