

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
