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Subject: formations of roolinfstocks

Posted by [KAWABATA Yasuyuki](#) on Mon, 22 Sep 2003 12:26:17 GMT

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Hello.

Now we are using rollingstock scheme for the exchanging among train management systems at switchyards and terminals.  
(only for urban commuter passengers' cars)

We have some suggestions(requests) for the rollingstock scheme depended on characteristic of our trains.

1. We have no engine cars. (like tram or metro in Europe.)  
So we use "wagon" and "passenger" elements for all rollingstocks.  
We would like to add 3 attributes of technical specifications to the "passenger" element.  
'maxTractEffort','resistFactor' and 'rotMassFactor'
2. And we have some services for 1 rollingstock. Now we have 1 attribute 'service' for 1 rollingstock, it is useful for us if it is repeatable.
3. We hope "rs" element have a key index attribute like 'rsType' because all rollingstocks have their unique ID numbers in our systems.
4. Our trains are composed fixed some rollingstocks, so we manage them by unit of train compositions called formations, not by unit of rollingstocks.  
So we hope the elements for the formations. Now we are planning the "formations" element which is at the same level to "rollingstocks" element. Our draft files are at  
<https://www.jrsi.co.jp/railml/trainFormationJ/>  
which are included over 1 to 3 items.  
trainFormationJ.xsd.xml --- scheme difinition file  
please get it and rename to trainFormation.xsd  
trainFormationJ.xml --- example data file  
trainFormationJ.txt --- an explanation file

Comments or questions are welcome.

Best regards from Tokyo

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Subject: Re: formations of roolinfstocks

Posted by [Joerg von Lingen](#) on Tue, 24 Feb 2004 10:57:48 GMT

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Hallo.

I am worked on the rolling stock scheme the last months incorporating several new elements according suggestions. I hope to be able to publish the scheme in a couple of days. Here some remarks on your suggestions:

> 1. We have no engine cars. (like tram or metro in Europe.)  
> So we use "wagon" and "passenger" elements for all rollingstocks.  
> We would like to add 3 attributes of technical specifications  
> to the "passenger" element.  
> 'maxTractEffort', 'resistFactor' and 'rotMassFactor'  
'resistFactor' and 'rotMassFactor' has been added to element 'wagon', thus it can be used for passenger and freight wagons. However, the 'maxTractEffort' is characteristic for motored cars only, therefore it is not sensible to appear for trailer cars.

> 3. We hope "rs" element have a key index attribute like  
> 'rsType' because all rollingstocks have their unique  
> ID numbers in our systems.

Yes, the 'rs' element comprises a 'rsID' to have a unique identifier for reference.

> 2. And we have some services for 1 rollingstock. Now we have  
> 1 attribute 'service' for 1 rollingstock, it is useful for  
> us if it is repeatable.

> 4. Our trains are composed fixed some rollingstocks, so  
> we manage them by unit of train compositions called  
> formations, not by unit of rollingstocks.

> So we hope the elements for the formations. Now we  
> are planning the "formations" element which is at the  
> same level to "rollingstocks" element. Our draft  
> files are at

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According your proposal I have enhanced to scheme:

- 'class' element (general data of vehicle) now optional reference via 'rsID' attribute of 'rs' element
- two branches under 'railml': 'rollingstock' & 'formations'  
'formations' contains all data related to a train as a set of 'rs' elements
- 'trainResistance' element has been moved into 'formation' branch as it is

train related

- attribute 'tunnelFactor' has been moved from 'rs' to 'trainResistance'
- for all elements containing a 'math' element the 'valueTable' element was added as alternative, i.e. both possibilities are optional
- consequent use of attribute type decimal for any floating point value
- attribute 'rotMass' at 'rs' deleted, but 'rotMassFactor' at 'wagon' added  
(rotating mass for non-motored axles)
- attribute 'resistFactor' at 'wagon' added  
'rotMassFactor' and 'resistFactor' can now be used for motored cars ('propulsion') and non-motored cars ('wagon').

Best regards,

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