Subject: Re: new attribute on the vehicle element
Posted by Susanne Wunsch railML on Tue, 17 Sep 2013 22:46:52 GMT

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Hello Horst,

I move the request to the rollingstock group. The 'vehicle' element is
part of the rollingstock sub-schema. I'm sure, Jörg (RS coordinator)
will provide some feedback. He already worked on parts of the UIC wagon
classification.

horst.naujoks@qnamic.com (Horst Naujoks) writes:

> Dear all,
>
> I'm a developer at Qnamic AG
> (http://http://www.railml.org//index.php/entwickler.html?show =35) and
> we using RailML in different contexts in our products.
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> I'd like to submit the following extension to the railMl
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>
> The element <vehicle> should be completed by an new optional attribute
> 'uicVehicleNumber'. The whole purpose of this number is documented
> here: http://en.wikipedia.org/wiki/UIC_wagon_numbers. The new
> attribute supposed as an explicit supplement to the existing
> id/code/name attribute facility. It should support a better data
> exchange in systems which share this number.
>
> Today, we already employ this attribute by the usage of a schema
> extension (as an 'any' attribute) and of course we'd like to replace
> this construct by an explicitly specified attribute.
>
> Kind Regards,
>
> Horst Naujoks

Crosspost & Followup-To: railML.rollingstock

Kind regards...
Susanne

--
Susanne Wunsch
Schema Coordinator: railML.common

Subject: Re: new attribute on the vehicle element
Posted by Joerg von Lingen on Mon, 23 Sep 2013 11:07:11 GMT
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Dear all,

we had already discussed the issue of UIC numbers for vehicles. The major point of discussion was whether the number
will stay with the vehicle during its entire lifetime or changes with the owner/operator. There we couldn't reach
clarification.

This question was of importance as to where storing the UIC-number in the tree. I would prefer to place it under
Classification/Operator because we then have a clear information of the time period the number is assigned to that
vehicle. At the moment the string element <operatorClass> can be used in that sense. However, I woul go for a more
stringent definition which shall be then cover all types of vehicles (wagons and loco).

I will try to provide a proposal on this within the next weeks.

Best Jörg.

Susanne Wunsch wrote the following on 18.09.2013 00:46:
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> Crosspost & Followup-To: railML.rollingstock
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> Kind regards...
> Susanne
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Subject: Re: new attribute on the vehicle element
Posted by Joerg von Lingen on Fri, 04 Oct 2013 07:42:22 GMT
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Dear all,

wrt UIC numbers I would propose to add an attribute <uicVehicleNumber> for the
<operator>-element of a vehicle:

<xs:simpleType name="tUicVehicleNumber">
  <xs:restriction base="xs:string">
    <xs:pattern
value=" [1-9][0-9]-[1-9][0-9]-[1-9][0-9][1-9][0-9]-[1-9][0-9][1-9]-[0-9] " />
    </xs:restriction>
  </xs:simpleType>

This shall allow numbers with the following meaning:
The complete vehicle number comprises 12 digits. The individual digits have the
following meaning:
Digits 1-2: Type of vehicle and indication of the interoperability capacity
(on multiple units, type)
Digits 3-4: Country Code (Owner before 2006)
Digits 5-8: Vehicle type information
Digits 9-11: Individual running number (serial number)
Digit 12: Self-check digit

Best Jörg.

On 23.09.2013 13:07, Joerg von Lingen wrote:
> Dear all,
>
> we had already discussed the issue of UIC numbers for vehicles. The major point of discussion

was whether the number
> will stay with the vehicle during its entire lifetime or changes with the owner/operator. There we couldn't reach
> clarification.
>
> This question was of importance as to where storing the UIC-number in the tree. I would prefer to place it under
> Classification/Operator because we then have a clear information of the time period the number is assigned to that
> vehicle. At the moment the string element <operatorClass> can be used in that sense. However, I woul go for a more
> stringent definition which shall be then cover all types of vehicles (wagons and loco).
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```
>>>
>>>  Horst Naujoks
>>
>> Crosspost & Followup-To: railML.rollingstock
>>
>> Kind regards...
>> Susanne
>>
>
```

--
Best regards,
Joerg v. Lingen

Rollingstock Coordinator

Subject: Re: new attribute on the vehicle element
Posted by Joerg von Lingen on Fri, 04 Oct 2013 07:46:26 GMT
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Sorry, must be (all digits 0-9 allowed)
```
<xs:pattern
 value=" [0-9][0-9]-[0-9][0-9]-[0-9][0-9][0-9][0-9]-[0-9][0-9][0-9]-[ 0-9] " />
```

```
On 04.10.2013 09:42, Joerg von Lingen wrote:
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> <operator>-element of a vehicle:
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>     <xs:pattern
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> The complete vehicle number comprises 12 digits. The individual digits have the
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> Digits 1-2:  Type of vehicle and indication of the interoperability capacity
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> Best Jörg.
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>>> Crosspost & Followup-To: railML.rollingstock
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>>> Kind regards...
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>>
>
>

--
Best regards,
Joerg v. Lingen

Rollingstock Coordinator

Subject: Re: new attribute on the vehicle element
Posted by Susanne Wunsch railML on Sun, 06 Oct 2013 21:09:45 GMT

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Joerg von Lingen <coord@rollingstock.railml.org> writes:

> Sorry, must be (all digits 0-9 allowed)
> <xs:pattern
> value=" [0-9][0-9]-[0-9][0-9]-[0-9][0-9][0-9][0-9]-[0-9][0-9][0-9]-[0-9] " />

Maybe, it's easier to read with use of the "quantity expression":

> <xs:pattern
> value="[0-9]{2}-[0-9]{2}-[0-9]{4}-[0-9]{3}-[0-9]" />

:-)

Kind regards...
Susanne

--

Susanne Wunsch
Schema Coordinator: railML.common

Subject: Re: new attribute on the vehicle element
Posted by   on Tue, 19 Nov 2013 17:53:46 GMT
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Dear Jörg,

thank you for posting this topic on UIC vehicle numbers. In general, I
would welcome such a possibility because there is hope that this
simplifies "finding the right vehicle series" when exchanging data between
different software programs.

To explain the problem behind it for the "along-reader": For the timetable
we normally have to refer to engine series. Engine series are not named
nor numbered uniquely throughout most countries. For instance, a German
"series 772" is something much different (and smaller) than a Czech
"series 772". To make it more difficult, not all countries or operators
have series numbers. And in most countries, "sub-series" are necessary to
describe a vehicle series exactly.

To clarify: From the view of timetables, we do not want to address certain
vehicles - always vehicle series. It is a much easier task to address a
certain vehicle (e. g. by its UIC number) than a series...

Well, there is hope that UIC numbers may help in future. But therefore -
and additionally to your suggestion - I think that it will be necessary to
distinguish between the "constant" and the "variable" part of the UIC
number:

The constant part does not change in a series. The variable part changes
 from unit to unit of a series.

So it would be easy if the constant and variable part would always be the
same set of digits in all UIC numbers throughout the UIC world. But: This
is not the case. So we need a possibility to "mark" the constant and
variable parts of a UIC number of a certain series such as:
(a) 92 80 0232 xxx-x D-xxx
(b) 94 80 0428 1xx-x D-xxx
where xxx mean the variable parts of a series.

It seams that (a) or (b) is the "series mask" for German vehicles. It
would also fit for some other countries but unfortunately not for all. One
of the more strange examples (in my opinion) is Sweden. Here are some
Swedish examples of UIC numbers:

---

92 74 0000 221-2 S-IBAB (Swedish class T43)
92 74 0000 001-8 S-MTAB (Swedish class T46)
92 74 000 0376-4 S-GC   (Swedish class Td)
91 74 106 1390-0 S-SJ   (Swedish class Rc6)
94 74 4620 004-2 S-ABTR (Swedish class X62)

So what is the "series mask" for Swedish engines? It seams that Swedish
UIC numbers are only unique throughout one operator (S-....). So, for a
Swedish mask, S-xxx would not be variable.

So for RailML, we should be aware that
  - we cannot skip the "letter part" ("S-IBAB" a.s.o.) despite one could
think that "74" and "S-" are redundant! In Sweden (and other countries),
there are several engines "74 0000 001-8". They differ only in the letters
behind "S-".

And we should ask ourselves
  - Can we provide a kind of "series mask" to describe which UIC vehicle
numbers are members of a vehicle series?
  - Which parts of UIC numbers are necessary for uniqueness? Which are
constant or variable in this meaning?

Best regards,
Dirk.

P.S.: Before somebody asks, here some German number examples of different
operators:
 92 80 0232 204-0 D-LEG
 95 80 0303 001-1 D-DEV
 94 80 0427 005-4 D-DB
 94 80 0428 120-0 D-ERB
 90 80 1001 003-5 D-ALS
 93 80 5411 062-3 D-DB
 91 80 6143 967-8 D-DB

By the way, it is even not clear whether to write the letters (D-DB,
S-MTAB) in front or behind the actual UIC no. Here, I have always written
it behind but in practice you'll find both solutions. So much for European
standardisation!