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Subject: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir

Posted by on Mon, 26 Mar 2012 09:01:51 GMT

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Hallo allerseits,

Ich habe beim Erstellen von Beispielen zur Kilometrierung ([http://www.irfp.de/download/railml\\_doku\\_beispiele.pdf](http://www.irfp.de/download/railml_doku_beispiele.pdf), Seiten 4 ff.) quasi festgelegt, dass die Ausprägungen 'up' und 'down' der Attribute mileageChange.dir und track.mainDir streng numerisch ("hochzählen", "runterzählen") zu interpretieren sind und damit vom britischen Sprachgebrauch abweichen, wo 'up' = "in Richtung London" und 'down' = "weg von London" bedeuten.

Außerdem habe ich festgelegt, dass sich up/down von 'mainDir' immer auf die `_relative_` Kilometrierungsrichtung beziehen und damit abweichen vom Attribut mileageChange.dir, wo sich 'dir' natürlich auf die absolute Kilometrierungsrichtung bezieht. (Da es dort das Attribut 'absPos' gibt, wäre es konsequenter, wenn es auch 'absDir' hieße.)

Der Grund für die Festlegung von track.mainDir auf relative Kilometrierungsrichtung ist, dass sich track.mainDir immer auf das `_gesamte_` Gleis bezieht, während die absolute Kilometrierungsrichtung ja eben innerhalb des Gleises mehrfach wechseln kann und damit nicht eindeutig wäre.

Falls dies keine Zustimmung trifft, bitte ich um kurzfristigen Einspruch zwecks Korrektur der Beispiele.

Danke!

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In my examples on mileage I wrote that the values 'up' and 'down' of the attributes 'mileageChange.dir' and 'track.mainDir' relate to numerical interpretation (raising, falling = "to count up or down"). Therefore, they differ from the typical usage in British English where 'up' relates on "direction to London" and 'down' relates on "direction away from London"..

Additionally, I decided that up & down of 'mainDir' always refer to the `_relative_` mileage direction and therefore differ from the usage of the attribute mileageChange.dir, where 'dir' of course refers to the `_absolute_` mileage direction.

The reason for this decision is that 'track.mainDir' always applies to the whole track while the absolute mileage direction may change (several times) along this track. Therefore, the absolute mileage direction is not unique.

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Erstellt mit Operas revolutionärem E-Mail-Modul: <http://www.opera.com/mail/>

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by [Christian Rahmig](#) on Wed, 04 Apr 2012 22:07:11 GMT

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Hello Dirk,

- > Ich habe beim Erstellen von Beispielen zur Kilometrierung
- > ([http://www.irfp.de/download/railml\\_doku\\_beispiele.pdf](http://www.irfp.de/download/railml_doku_beispiele.pdf), Seiten 4 ff.)
- > quasi festgelegt, dass die Ausprägungen 'up' und 'down' der Attribute
- > mileageChange.dir und track.mainDir streng numerisch ("hochzählen",
- > "runterzählen") zu interpretieren sind und damit vom britischen
- > Sprachgebrauch abweichen, wo 'up' = "in Richtung London" und 'down' =
- > "weg von London" bedeuten.

Yes, your understanding of the direction attribute is correct. It always relates directly to the direction of the increasing position value.

- > Außerdem habe ich festgelegt, dass sich up/down von 'mainDir' immer auf
- > die `_relative_` Kilometrierungsrichtung beziehen und damit abweichen vom
- > Attribut `mileageChange.dir`, wo sich 'dir' natürlich auf die absolute
- > Kilometrierungsrichtung bezieht. (Da es dort das Attribut 'absPos' gibt,
- > wäre es konsequenter, wenn es auch 'absDir' hieße.)

Consequently, also `mileageChange` elements need to be referenced to the direction of the track, the so-called "relative direction" as you wrote since they are elements on the track. Therefore the track's direction parameter should be used as a reference. So, there doesn't exist an "absolute direction" as it would be (like the absolute position) not unique. Any comments from other users of the railML infrastructure schema? How do you understand the direction parameter in the element `<mileageChange>`?

Best regards

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Christian Rahmig  
railML.infrastructure coordinator

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by [Susanne Wunsch railML](#) on Fri, 13 Apr 2012 14:39:47 GMT

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Dirk Bräuer <dirk.braeuer@irfp.de> writes:

- > Ich habe beim Erstellen von Beispielen zur Kilometrierung
- > ([http://www.irfp.de/download/railml\\_doku\\_beispiele.pdf](http://www.irfp.de/download/railml_doku_beispiele.pdf), Seiten 4 ff.)
- > quasi festgelegt, dass die Ausprägungen 'up' und 'down' der Attribute
- > mileageChange.dir und track.mainDir streng numerisch ("hochzählen",
- > "runterzählen") zu interpretieren sind und damit vom britischen
- > Sprachgebrauch abweichen, wo 'up' = "in Richtung London" und 'down' =
- > "weg von London" bedeuten.

Zur nächsten größeren Version soll diese Aufzählung in "raising" und "falling" umbenannt werden. Siehe Trac Ticket #145. [1]

- > abweichen vom Attribut mileageChange.dir, wo sich 'dir' natürlich auf
- > die absolute Kilometrierungsrichtung bezieht. (Da es dort das
- > Attribut 'absPos' gibt, wäre es konsequenter, wenn es auch 'absDir'
- > hieße.)

Zur nächsten größeren Version soll dieses Attribut in "absDir" umbenannt werden. Siehe Trac Ticket #144. [2]

- > ---
- > In my examples on mileage I wrote that the values 'up' and 'down' of
- > the attributes 'mileageChange.dir' and 'track.mainDir' relate to
- > numerical interpretation (raising, falling = "to count up or
- > down"). Therefore, they differ from the typical usage in British
- > English where 'up' relates on "direction to London" and 'down'
- > relates on "direction away from London".

From the next major release on this enumeration values should be renamed to "raising" and "falling". See also Trac ticket #145 [1]

- > therefore differ from the usage of the attribute mileageChange.dir,
- > where 'dir' of course refers to the `_absolute_` mileage direction.

From the next major release on this attribute should be renamed to "absDir". See also Trac ticket #144 [2]

Dirk, thanks for your suggestions.

Kind regards...  
Susanne

- [1] <http://trac.assembla.com/railML/ticket/145>
- [2] <http://trac.assembla.com/railML/ticket/144>

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Susanne Wunsch

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by on Mon, 16 Apr 2012 14:38:17 GMT  
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Dear Susanne and all "along-readers",

this 'post' is mainly to bring the discussion to an intermediate agreement. (It is always confusing to have 'open' tasks for years without knowing the opinion of the others.)

I appreciate the clearness for the next major release.

Just to keep up appearances: @Christian, I think it is still up to you as the infrastructure scheme coordinator either to agree to the unexpected usage of mileages or to clarify how it should be done instead.

Dirk.

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by on Tue, 22 May 2012 19:56:37 GMT  
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Dear Christian,

since we have agreed in the meantime that the assumptions and examples on mileageChanges are generally right, there are some small changes still to do for RailML 2.2:

<mileageChange>.type should become optional (not applicable in all cases, not at the beginning of a track)

<mileageChange>.absPosIn should become optional (not applicable at the beginning of a track, redundant in all other cases)

Please close this issue by providing track ticket for these changes for RailML 2.2.

Thank you!  
Best regards,  
Dirk.

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir

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Posted by [Christian Rahmig](#) on Sun, 16 Sep 2012 18:30:54 GMT

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Dear railML users,

>> In my examples on mileage I wrote that the values 'up' and 'down' of  
>> the attributes 'mileageChange.dir' and 'track.mainDir' relate to  
>> numerical interpretation (raising, falling = "to count up or  
>> down"). Therefore, they differ from the typical usage in British  
>> English where 'up' relates on "direction to London" and 'down'  
>> relates on "direction away from London".  
>  
> From the next major release on this enumeration values should be renamed  
> to "raising" and "falling". See also Trac ticket #145 [1]  
>  
>> therefore differ from the usage of the attribute mileageChange.dir,  
>> where 'dir' of course refers to the `_absolute_` mileage direction.  
>  
> From the next major release on this attribute should be renamed to  
> "absDir". See also Trac ticket #144 [2]

after discussion with the other schema coordinators, we decided not to wait until the next major release and started with the implementation within railML 2.2 (see [3]):

The `<mileageChange>` element gets a new optional attribute "absDir", which provides the values 'raising' and 'falling'. It will replace the current attribute "dir" with the next major release and will become required then.

[1] <https://trac.assembla.com/railML/ticket/145>

[2] <https://trac.assembla.com/railML/ticket/144>

[3] <https://trac.assembla.com/railML/ticket/159>

Regards

--

Christian Rahmig  
railML.infrastructure coordinator

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir

Posted by [Christian Rahmig](#) on Sun, 16 Sep 2012 18:48:57 GMT

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Hello Dirk,

> `<mileageChange>.type` should become optional (not applicable in all

- > cases, not at the beginning of a track)
- > <mileageChange>.absPosIn should become optional (not applicable at the
- > beginning of a track, redundant in all other cases)
- >
- > Please close this issue by providing track ticket for these changes for
- > RailML 2.2.

the attributes "type" ('missing', 'overlapping') and "absPosIn" will become optional with the next major release since this change is not compatible with railML 2.x.

Regards

--

Christian Rahmig  
railML.infrastructure coordinator

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by [Christian Rahmig](#) on Sat, 22 Sep 2012 06:29:12 GMT  
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Dear railML users,

- > after discussion with the other schema coordinators, we decided not to
- > wait until the next major release and started with the implementation
- > within railML 2.2 (see [3]):
- >
- > The <mileageChange> element gets a new optional attribute "absDir",
- > which provides the values 'raising' and 'falling'. It will replace the
- > current attribute "dir" with the next major release and will become
- > required then.
- >
- > [3] <https://trac.assembla.com/railML/ticket/159>

In addition to the changes for the element <mileageChange>, it is now possible to define an absolute (mileage) direction at the beginning of a track, too. The type tTrackNode has been extended by the new attribute "absDir" providing the values 'raising' and 'falling'.

Regards

--

Christian Rahmig  
railML.infrastructure coordinator

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by [Christian Rahmig](#) on Mon, 01 Oct 2012 13:45:18 GMT  
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Dear railML users,

>> The <mileageChange> element gets a new optional attribute "absDir",  
>> which provides the values 'raising' and 'falling'. It will replace the  
>> current attribute "dir" with the next major release and will become  
>> required then.

>>

>> [3] <https://trac.assembla.com/railML/ticket/159>

>

> In addition to the changes for the element <mileageChange>, it is now  
> possible to define an absolute (mileage) direction at the beginning of a  
> track, too. The type tTrackNode has been extended by the new attribute  
> "absDir" providing the values 'raising' and 'falling'.

The mileage ticket has been modified again:

In order to keep a proper syntax, the new optional attribute "absPosIn"  
is introduced in the trackEnd element for defining the mileage of the  
(incoming) line. Thus, the track node provides the same parameters  
required for the mileage description like the mileageChange element.

Regards

--

Christian Rahmig  
railML.infrastructure coordinator

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by \_\_\_\_\_ on Tue, 02 Oct 2012 16:44:15 GMT  
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Dear Christian,

> the attributes "type" ('missing', 'overlapping') and "absPosIn" will  
> become optional with the next major release since this change is not  
> compatible with railML 2.x.

Accepted - with a deep regret.

> In addition to the changes for the element <mileageChange>, it is now  
> possible to define an absolute (mileage) direction at the beginning of a  
> track, too. The type tTrackNode has been extended by the new attribute  
> "absDir" providing the values 'raising' and 'falling'.

At least for 3.0, I would prefer a solution which describes the mileages in `_one_` structure for easier parsing. (With the above mentioned changes, the mileages currently are described in the structures `<trackBegin>`, `<trackEnd>`, and `<mileageChanges>`.)

- > In order to keep a proper syntax, the new optional attribute "absPosIn"
- > is introduced in the trackEnd element for defining the mileage of the
- > (incoming) line. Thus, the track node provides the same parameters
- > required for the mileage description like the mileageChange element.

Thank you.

- > The `<mileageChange>` element gets a new optional attribute "absDir",
- > which provides the values 'raising' and 'falling'. It will replace the
- > current attribute "dir" with the next major release and will become
- > required then.

Introducing "absDir": Very good, thank you.

Short remark (only for keeping it in mind for 3.0): Making it required from 3.0 should not be necessary. 'AbsDir' can be calculated by comparing two neighboring 'absPos' (better: 'absPosOut' from the previous and 'absPosIn' from the next change). From the triplet 'absPosOut', 'absPosIn' and 'absDir' of one section, one is redundant. Since we want to allow 'stretching' of absolute mileage, 'absDir' is redundant - we cannot omit 'absPosOut' and 'absPosIn' to calculate whether and how much the mileage is stretched.

Than you again,  
with best regards,  
Dirk.

---

Subject: Re: meaning of 'up' and 'down' in `mileageChange.dir` and `track.mainDir`  
Posted by [Christian Rahmig](#) on Wed, 03 Oct 2012 08:03:18 GMT  
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Hello Dirk,

- >> In addition to the changes for the element `<mileageChange>`, it is now
- >> possible to define an absolute (mileage) direction at the beginning of a
- >> track, too. The type `tTrackNode` has been extended by the new attribute
- >> "absDir" providing the values 'raising' and 'falling'.

- >
- > At least for 3.0, I would prefer a solution which describes the mileages
- > in `_one_` structure for easier parsing. (With the above mentioned
- > changes, the mileages currently are described in the structures
- > `<trackBegin>`, `<trackEnd>`, and `<mileageChanges>`.)



thank you for your good remark. I created a new trac ticket [1] in order not to forget about this aspect as well as the absDir attribute in railML 3.0.

[1] <https://trac.assembla.com/railML/ticket/166>

Regards

--

Christian Rahmig  
railML.infrastructure coordinator

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by [Christian Rahmig](#) on Mon, 26 May 2014 12:03:06 GMT  
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Hello everyone,

Am 16.09.2012 20:48, schrieb Christian Rahmig:

> Hello Dirk,

>

>> <mileageChange>.type should become optional (not applicable in all  
>> cases, not at the beginning of a track)

>> <mileageChange>.absPosIn should become optional (not applicable at the  
>> beginning of a track, redundant in all other cases)

>>

>> Please close this issue by providing track ticket for these changes for  
>> RailML 2.2.

>

> the attributes "type" ('missing', 'overlapping') and "absPosIn" will  
> become optional with the next major release since this change is not  
> compatible with railML 2.x.

In the next major release, the whole topic of mileage reference positioning will be solved following the new concept. Until then, please follow the guidelines mentioned in the wiki (see [1]).

[1] <http://wiki.railml.org/index.php?title=IS:mileage>

Best regards

--

Christian Rahmig  
railML.infrastructure coordinator

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Subject: Re: meaning of 'up' and 'down' in mileageChange.dir and track.mainDir  
Posted by [christian.rahmig](#) on Mon, 21 Jan 2019 12:15:38 GMT  
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Dear all,

Am 13.04.2012 um 16:39 schrieb Susanne Wunsch:

> [...]

>> In my examples on mileage I wrote that the values 'up' and 'down' of  
>> the attributes 'mileageChange.dir' and 'track.mainDir' relate to  
>> numerical interpretation (raising, falling = "to count up or  
>> down"). Therefore, they differ from the typical usage in British  
>> English where 'up' relates on "direction to London" and 'down'  
>> relates on "direction away from London".

>

> From the next major release on this enumeration values should be renamed  
> to "raising" and "falling". See also Trac ticket #145 [1]

>

>> therefore differ from the usage of the attribute mileageChange.dir,  
>> where 'dir' of course refers to the `_absolute_` mileage direction.

>

> From the next major release on this attribute should be renamed to  
> "absDir". See also Trac ticket #144 [2]

In railML 3.1, mileage changes are modelled using `<anchor>` points of  
`<linearPositioningSystem>`. I added a detailed example in the description  
of Trac ticket #144 [2]. Considering this proposal, an attribute `@dir` or  
`@absDir` is not needed.

> [1] <http://trac.assembla.com/railML/ticket/145>

> [2] <http://trac.assembla.com/railML/ticket/144>

Best regards  
Christian

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Altplauen 19h; 01187 Dresden; Germany [www.railml.org](http://www.railml.org)

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