Subject: Re: Time Relations of Infrastructure and External References via <any> Attribute
Posted by christian.rahmig on Mon, 20 Nov 2017 13:04:50 GMT
View Forum Message <> Reply to Message

Dear all,

I created a related Trac ticket in [1]. Please feel free to write me
your feedback that may be very valuable for finalizing the first version
of new railML baseline 3: railML 3.1.

[1] https://trac.railml.org/ticket/315

Thank you very much and best regards
Christian

Am 20.06.2017 um 10:27 schrieb Tobias Bregulla:
> Dear railML infrastructure community,
>
> our software GPSinfradat is an integrated hard- and software solution
> for GNSS- and video based infrastructure survey of railways. This
> hardware is combined by a tailor-made software suite from an in-house
> development with a certified railML 2.2 and 2.3 export interface.
>
> For our application we are currently missing a central aspect in the
> model: the time. In particular, we want to specify for each
> infrastructure element the time when it has been recorded by our system
> and the relation to the corresponding video picture. Although this seems
> to be a very specific problem, it relates to a more generic topic to be
> discussed: the introduction of a more complex time dimension model
> within railML.
>
> Therefore, we propose having a generic solution, which can be adopted by
> other applications / use cases, too. We currently can formulate the
> following requirements for our application:
>   - Recording of time with millisecond accuracy
>   - Absolute time stamps following the UTC time
>   - Relative time in form of seconds since start of recording
>
> The following reduced example of a signal shows how we imagine to see it
> implemented in railML:
>
> <signal id="si01" >
>   <times>
>   <time id="si01_t01" date="2017-05-24" utcTime="09:30:10.320Z"
> relTime="32.812" type="survey"
> gpsinfradat:SurveyRefID="c134f4a0-6085-48f4-a3e4-79daa2305 e78" >
>   </times>

> </signal>
>
> The type shall be used to define different kinds of timestamps, e.g.
> "validFrom", "validTo", "updated", "modified" etc. The time values
> itself can be of type xs:date (date), xs:time (utcTime) and
> xs:nonNegativeInteger (relTime).
>
> @railML community:
> - Do you have similar requirements?
> - Do you have any special constraints how to model time aspects?
> - Do you know about other types of modelling(OpenStreetMap or others)?
>
> Further, we would like to reference an external data source with our
> recordings. In particular, it should be possible to reference a video
> file with the <track> element. Though we think that this is a very
> specific request to be most probably realized in a schema extension, we
> want to share our proposal with you:
>
> <track id="tr01" ... >
>   <trackTopology>
>   ...
>   </trackTopology>
>   <gpsinfradat:survey id=c134f4a0-6085-48f4-a3e4-79daa2305e78
> startTime="2017-05-30T09:30:10.320Z">
>   <gpsinfradat:video id=ad0c3743-281d-44ee-97ec-24778981967b
> type="front" fileRef="\customer\project\video01.mp4"/>
>   <gpsinfradat:gnss id=bd0c3743-281d-44ee-97ec-24778981967b
> type="rawSatelitte" fileRef="\customer\project\video01.gnssraw"/>
>   <gpsinfradat:video id=42b739b7-1176-4681-b940-994bb9a77038
> type="front" fileRef="\customer\project\video01.mp4"/>
>   <gpsinfradat:gnss id=4916e3bd-5568-40a0-9cb6-5a2926c1eb30
> type="matched" fileRef="\customer\project\video01.gnsscrypt"/>
>   </gpsinfradat:survey>
> </track>
>
> @railML community:
> • Does anyone have similar requirements?
> • Are there other members in the railML community who used the terms
> above in another meaning?
> • Whats your opinion about shortening of tags ("videoRef" instead
> "videoReference") in the railML syntax?
>
> Best regards,
>
> Tobias Bregulla
> Bahnkonzept Dresden/Germany

--
Christian Rahmig - Infrastructure scheme coordinator
railML.org (Registry of Associations: VR 5750)
Phone Coordinator: +49 173 2714509; railML.org: +49 351 47582911
Altplauen 19h; 01187 Dresden; Germany   www.railml.org