Subject: Re: crossing of 2 continuous tracks
Posted by Volker Knollmann on Tue, 08 Feb 2005 17:02:15 GMT
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On 03.02.2005 16:39, Matthias Hengartner wrote:
> Now that we have a "stable" version 1.00, I'd like to come up with an old
> topic: How to map the following topology on railML:
>   /
>   /
> Track1   /
>   ----------+----------
>   /
>   /
>   / Track2
>
> [...]
>
> At the moment, I'd prefer the first solution.

Yes, basing on the current version, I'd agree.

> Other opinions? Questions? Ideas?

Well, what I don't like about the first solution is the flood of <connection>-elements which are provoked. Theoretically they are not neccessary, since no track starts or end at a crossing. It's just that accidently two tracks share the same physical position.

So what if we just declare this physical point? I could be similar to the following code (let's call it "Version 3"):

```
<track1>
  <crossing pos="InsertRelativePositionOnTrack1Here" crossingTrackId="2"
   crossingLineID="42"
   crossingTrackPos="InsertRelativePositionOnTrack2Here"/>
</track1>

<track2>
  <crossing pos="InsertRelativePositionOnTrack2Here" crossingTrackId="1"
   crossingLineID="42"
   crossingTrackPos="InsertRelativePositionOnTrack1Here"/>
</track2>
```

Additionally, we could introduce a kind of "length"-attribute for the crossing. Thus, a collision of two trains at a crossing could be detected (very much like a level crossing).

Advantages of version 3:
* Tracks are continuous at crossings, just like in real life. No <connection>-flood (IT-Freaks would think of a SYN-Flood here, :-D)
* Easy implementation

Disadvantages:
* Two <crossing>-elements for one real crossing; redundancy; possible inconsistency
* Not compatible with V1.0

Looking forward to your comments,
Volker Knollmann

P.S.: I just found out that I have an urgent appointment in Braunschweig on March 9, so that I cannot come to the RailML-Meeting... perhaps I can shift that appointment to one of my colleagues... I'd rather like to visit Zürich eeeeeeh the railML-conference! ;-)