Subject: Re: [railML3.1] Modelling of a double slip switch
Posted by Jörg von Lingen   on Mon, 01 Jun 2020 13:37:34 GMT
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Dear all,

in-between I had a discussion about this topic with some users and want to add the outcome here for your info.

The attached pictures show the 3 steps of evolution from simple switches to a double slip crossing if you go into interlocking domain.
step01: For a simple switch one needs to do a geometrical check in order to find out what's right and left of the deviating branches,
step02: This is more an intermediate state for illustration. The two switches are a bit superimposed (not yet a real double slip but to show the evolution). Here the determination right/left shall be the same as in step01.
step03:The third step is the final superimposition but if you think of two simple switches making the picture then the decision for right/left shall be under the same rule.

The picture "switches01" shows the net plan for an example of double slip switch (SLIP SWITCH Dsw02):

1) select from straightBranch one with starting netElement
   nr_ne5ne12_dsw7 -> ne5
2) connection straight -> ne12
3) connection turning -> ne6
4) geometrical check: ne6 is right of ne12
   rightBranch=ne6, leftBranch=ne12
5) select the other end of the straightBranch -> ne12
6) connection straight -> ne5
   leftBranch=ne5 (due to symmetry)
7) connection turning -> ne2
   rightBranch=ne2

similar procedure for SLIP SWITCH Dsw04:

1) nr_ne9ne11_dsw10 -> ne9
2) straight -> ne11
3) turning -> ne6
4) geometrical check: leftBranch=ne6, rightBranch=ne11
5) ne11
6) straight -> ne9, rightBranch=ne11
7) turning -> ne10, leftBranch=ne10

Best regards,
Joerg v. Lingen - Interlocking Coordinator

Am 03.04.2020 um 06:05 schrieb Joerg von Lingen:
> Dear all,
>
> there seems to be a general issue when transforming a track plan into railML:
>
> 1) For an 'ordinarySwitch' we have in IS the elements 'leftBranch' and 'rightBranch'. Just from the netRelations it
> seems not really possible to decide which is one of the both branches. How would you solve the issue?
>
> 2) For a 'doubleSwitchCrossing' we have in IS the elements 'straightBranch' and 'turningBranch' but in IL we need to
> split into two normal switches which again have 'leftBranch' and 'rightBranch'. Could this be solved just from the
> topology information? How would you do this trick?
>

File Attachments

1) step01.jpg, downloaded 309 times
2) step02.jpg, downloaded 306 times
3) step03.jpg, downloaded 308 times
4) switches01.png, downloaded 312 times