
Subject: Re: Link a "doubleSwitchCrossing" to two switchesIL
Posted by [Thomas Nygreen](#) on Tue, 01 Mar 2022 08:53:03 GMT
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Dear all,

Thank you, Martin, for these proposals and examples. I suggest to use the existing type="doubleSwitchCrossing" and type="singleSwitchCrossing", also when the individual halves are included. The belongsToParent attribute is a general feature in the infrastructure schema, and I believe that we should not start splitting up types to signal that this feature is used. A simple Xpath query (from the context of the first switch in the given example: `../switchIS[@belongsToParent = "swi_10"]`) will provide the "child" switches, if there are any.

I also hope that we can identify a more intuitive term than "partitionSwitch". When used in compound nouns, the word partition is normally placed last (e.g. hard disk partition), but this use is also rare. Some alternative suggestions: "switchPart", "switchCrossingPart", "partialSwitch", "componentSwitch", "virtualSwitch".

Regarding "virtualSwitch", the point is that these two halves are a virtual model of the physical switches placed in the opposite direction at each "corner" (i.e. at a, b, c and d for double switch crossings, and at either a and b or c and d for single switch crossings). Should our modelling reflect that, and also include the more physical (and nanoscopic) perspective as an option?

In the case of the single switch crossing, I also assume that the two <switchIL>s should be linked using <hasPositionRestriction> as described in [1]. It is not completely clear to me what the missing <branchTip> should point to in these cases. Perhaps that topic is worth a new thread in the IL part of the forum?

[1] https://wiki3.railml.org/wiki/IL:switchIL#Single_Slip_Switch
