
Subject: infrastructure_V094_13

Posted by [Matthias Hengartner](#) on Thu, 27 Nov 2003 14:30:49 GMT

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Hello,

on http://www.theband.ch/matthias/railml/infrastructure_V094_13.zip you can find a new suggestion for the infrastructure-schema.

After a short meeting with Nikolaus Fries last friday, we agreed that Nikolaus will make some considerations about signals and other "operation- and controlsystem elements" (ocs) resp. "command and control system elements", whereas I'll think about switches and connections.

In my scheme, there are some parts adopted from Nikolaus' thesis and from the suggestions of Volker Knollmann.

Some suggestions from Volker are not yet included, because they concern mostly the area of ocs. And there are more elements and attributes in Nikolaus' scheme which could be adopted in a next draft.

Let's begin:

--- begin switches ---

A <switch> can be either a <junction> (Abzweigung) or a <crossover> (direkter Gleiswechsel). A crossover refers to another crossover, while a junction refers to a <connection> element.

For each track, there can be at maximum 2 connection elements. A connection element is meant to be the begin or the end of another track. It refers either to another connection element (to connect 2 tracks) or to a switch element (which has to be a junction in this case).

Additionally, I added the attribute "branchFile" to the switch element to give the possibility to refer another railML infrastructure file in which the branch track (and its superior line) is stored.

If a switch is a crossover, there can be appended one or more <clearTrackContrElements>, which can be <trackCircuitBorders> or <axleCounters>. clearTrackContrElements can also appear as "normal" track elements (in trackData). This idea is fully adopted from the scheme of Nikolaus and covers parts of the suggestions from Volker Knollmann.

--- end switches ---

--- begin unique IDs ---

For a first approach, I've added an attribute named "uniqueId" to the elements <infrastructure>, <line>, <track>, <ocp> and all the elements in

<trackData>. The "old" IDs (lineId, trackId etc.) are kept in the scheme, because they are intended to correspond to "real-world"-IDs. If we really introduce these unique IDs, it becomes unnecessary to provide lineId, trackId and elemId to identify an track element uniquely. But we could leave these attributes to accelerate search in the data structure.
--- end unique IDs ---

--- begin other ---

Finally, I reintroduced the attribute "ocpld" for the element <crossSection>, which refers to a <ocp> and I adapted the visualisation part of the scheme according to the changes described above.
--- end other ---

That's it for the moment...

Kind regards,
Matthias Hengartner
