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Subject: Ontology for RailML 3.1.

Posted by [Gottfried Schenner](#) on Fri, 17 Apr 2020 11:26:51 GMT

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Hello,

My name is Gottfried Schenner. I am working for a research department of Siemens Corporate Technology in Vienna.

Two of our main research interests are product configurators for railway interlocking systems and Semantic Technologies.

One thing that we noticed is the lack of open standard ontologies for the railway domain. As we don't want to reinvent the wheel using a RDF (or similar) representation inspired by RailML 3.1 and the RailTopoModel concepts would be an obvious choice.

As a first step we are interested in the infrastructure/topology level of RailML/RTM as we want be able to answer questions about reachability/navigability etc.

Would this be of interest for the RailML community?

Are you aware of any similar work done in the community already, that we may have missed?

Would there be any interest in doing joint research in this direction (e.g. write a paper) or even develop a standard ontology/schema suitable for being used in a knowledge graph alongside of the XML based RailML 3.1.?

For us this is primarily a research topic and we would be interested in developing an open freely available standard rail ontology.

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Subject: Re: Ontology for RailML 3.1.

Posted by [christian.rahmig](#) on Fri, 24 Apr 2020 05:44:44 GMT

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Dear Gottfried,

welcome to the railML community!

Ontologies are a major topic indeed. Together with the dictionary of terms and objects they describe the basic layout of a data model. railML.org and me in particular are very interested in your work. Therefore, I would be very happy if you were able to hold a short presentation about your work and achievements and potentials for the railML standard at our next railML conference (currently scheduled for June 16, 2020 [1]:wink:). Together, we should investigate how ontologies may affect future railML 3.x development.

[1] <https://www.railml.org/en/event-reader/37th-railml-conference.html>

Best regards  
Christian

Gottfried Schenner wrote on Fri, 17 April 2020 13:26Hello,  
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Subject: Re: Ontology for RailML 3.1.  
Posted by [Gottfried Schenner](#) on Mon, 04 May 2020 07:47:38 GMT  
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This is good news! We will prepare a short presentation. I assume the presentation will be in German as the conference is also held in German? Unfortunately we will not be allowed to travel. I hope we can present online.