

New Partners











dwh technical solutions simulation services









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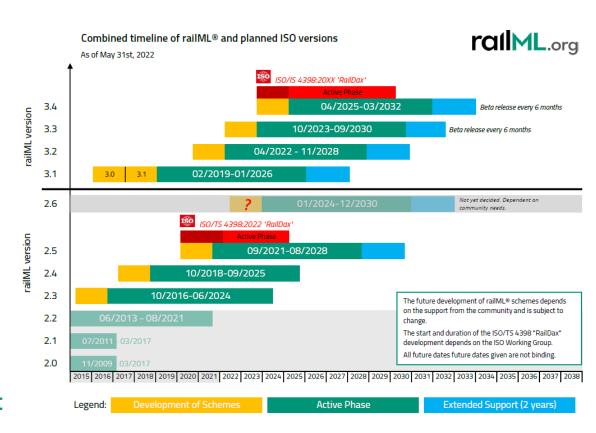
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railML: Scheme Planning and Lifecycle Policy



- railML 2.3: Support period shall end on June 30th 2024 (update projects / tenders!). If against this, let us know until End of May.
- Existing railML interfaces
 can be used after this date
 for an unlimited time; but
 no new interfaces possible.
- Guaranteed: railML 2.3-2.x and 3.x supported for a min. 6-8 years after release
- Extended support for developers with paid partnership
- Support end of each version will be announced at least 2 years in advance
- Any railML 2.6 development depends from demand and contribution of community.





railML 3.2 – Final version release!

- railML 3.2 has been **officially released** on **April 26**th, **2022**
- Support guaranteed until end 2028,
 2 years longer for supporting partners
- Supported use cases:
 - ITMS with extended drafts of TT
 - ECTS
 - SCTP
 - NSTM, including RINF reporting
 - RSIM





railML 3.2

The officially released railML® 3.2 scheme version is available here for free download.

Please note the railML license agreement and the requirement for certification before productive use.

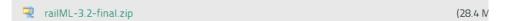
Version: 3.2

Repository tag name: railML-3.2-final (railML's Gitlab revision hash:

46fb90043746b6a0c96079bc1c94492104aa4e68)

Status: Official release for productive use

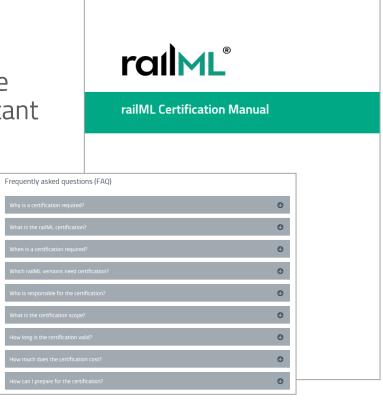
Release date: April 26th, 2022





Certification of railML interfaces

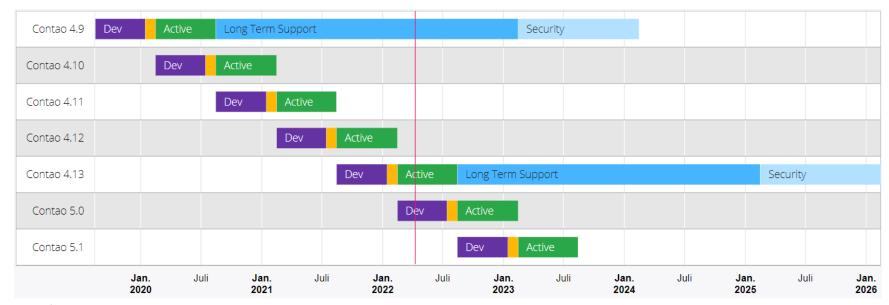
- First certifications successfully completed
- Good cooperation between applicant, consultant and railML.org
- Multitude of references, ideas and clarifications for <u>all</u> parties
- railML.org is aware about waiting times
- Certification manual (V 1.0; July 2017)
 - Download from the railML.org website for partner main contact, most important questions listed as FAQ on website
 - Reworking by Neat (Rome, IT)
 - No improvement requests from community received
 - Beta+comments: Jun-Jul 2022
 - Final version: August 2022
 - Effective in September 2022





Website railML.org

- Current CMS v 3.x is not longer supported
- Update to Contao 4.9 in Spring 2022
- With acquired funding from partners
- Opportunity to review and improve structure and content → All feedback is wanted!
- Focus: Usability, Single Sign On, Community





Collaboration in the cloud



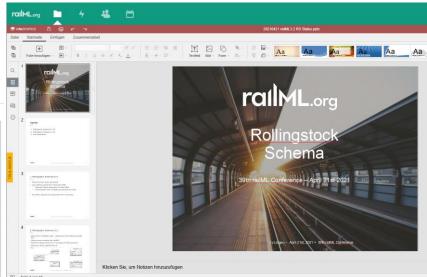
- The cloud has been updated to version 21 (latest release)
- Integrated Texteditor, Spreadsheet, ... (OnlyOffice) is now enabled
- This allows for real-time collaboration between multiple users
- Improves workflow and is superior to sending emails with updated files

 Possible thanks to partners' funding!

Maintenance and Release Schedule

Andy Scherzinger edited this page 4 days ago · 241 revisions

	release date	end of life	current version	next version
23	2021-11-30	2022-12	23.0.4 (2022-04-21)	23.0.5 (2022-05-19)
22	2021-07-06	2022-07	22.2.7 (2022-04-21)	22.2.8 (2022-05-19)
21	2021-02-22	2022-02	21.0.9 (2022-02-15)	End of Life
20	2020-10-03	2021-11	20.0.14 (2021-11-11)	End of Life
19	2020-06-03	2021-06	19.0.13 (2021-07-01)	End of Life





railVIVID - The railML Viewer and Validator

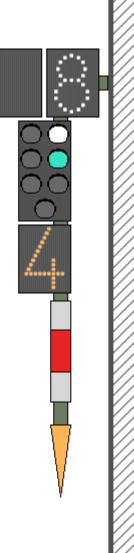


- Last version: May 2019 (1.21 beta), then frozen
- New versions to process railML 2.5 and 3.2 files planned for May 2022
- Used as main tool for export certification
- Code shall be moved to railML's new repository (Gitlab)
- Call for Proposals planned for June/July 2022 to extend railVIVID with extended infrastructure viewing capabilities (supported by Bane NOR; Siemens; Thales).
- Code clean-up needed
- Question: Further development in the community on a freelance basis or through railML.org by paid developers with fixed releases and reliable development?
- Usage and feature feedback needed.



The history of RailTopoModel (RTM)

- RTM was initially developed in 2013 in the UIC financed ERIM project
- Foundation for a common exchange format (e.g., railML)
- Systemic approach describing only core infrastructure characteristics
- Data model supporting all railway business needs:
 - Topology: The logical representation of the railway network as a graph (Nodes, Edges) as well as the track geometry
 - Objects & Events location with the following types:
 - Spot (e.g., Signals, ...)
 - Linear (e.g., Speed limits, Platforms, ...)
 - Area (e.g., Locally controlled areas, Zones, ...)
 - Paths: The possible movements on the network.

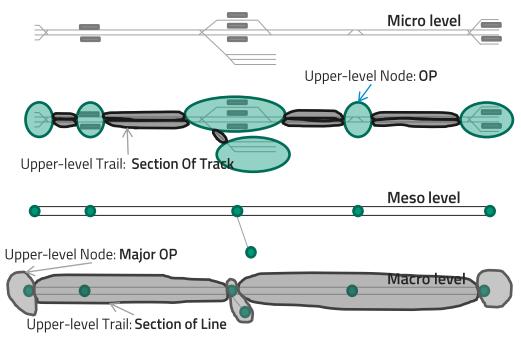




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What is RTM and what can it do?

- RailTopoModel is designed to have the same structure at each level of details.
- Data model which supports all railway business needs, including:
 - Multi-Referencing: Geo- and screen coordinates, Linear referencing, mileage posts and "rail addresses"
 - Consistent multi-scale aggregation:
 - Track → Micro
 - Line → Meso
 - Network → Macro



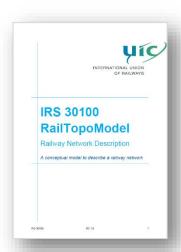
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RTM development now and later

- In the Spring of 2016, the UIC RTM 1.1 became the UIC International Railway Solution: IRS 30100
- RTM is not the same as RailSystemModel (RSM)
- RSM is a "fork" of RTM developed within the LinX4Rail research project funded by Shift2Rail
 - railML.org is not a Shift2Rail partner and therefore not involved in the development
- RTM 1.2 was last version available for use in railML 3.1, no new features or maintenance are planned for this version.
- RTM 1.4 is to be released independently by railML.org to be used together with railML 3.2 and it shall include small patches and functional improvements
- RTM 1.5 planned with an open and transparent development including a ticket system





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Updated development environment

- Before: Apache Subversion repository (SVN for short).
- Now: As of August 5th, 2021, the development of railML 3 shall be continued on the GitLab repository
- New railML 3 repository and ticket system can be found at https://development.railml.org/railml
- railML 2 has been moved to the new GitLab environment in early 2022 as well
- News article published in August 2021



svn.railml.org



Further work on documentation and examples

- Documentation and ticket work is being supported
- Different manuals created
- The manuals shall be updated and adapted to railML 3.2
- Work is expected to be finalized until End of May
- Another example of work made possible thanks to partners' funding

28.02.22 railML infrastructure	06.12.21 DE / Siemens /Martin ∠ien	Double switch crossing,	reply to Martin ∠ien	
28.02.22 railML infrastructure	08.12.21 DE / Siemens / Karl Friedemann Jero	sch delete value "midOfTrair	n", conclusion if "mid	
28.02.22 railML infrastructure	20.02.22 DE / railML / Christian Rahmig	Waiting for feedback for	railML 3.2 in regard	
28.02.22 railML infrastructure	21.02.22 DE / railML / Christian Rahmig	Waiting for answers in re	egards to designator	
28.02.22 railML infrastructure	25.02.20 NO / JBD /Torben Brand	Waiting for answer which	h option by Dominik	
28.02.22 railML infrastructure	14.02.22 DE / railML / Milan Wölke stop Des	scription	stopTimes	Documentation transferred from wiki
28.02.22 railML infrastructure	03.02.22 NO / JBD / Torben Brand	orintian	eten A etivities	Documentation changed
28.02.22 railML infrastructure	17.02.22 DE / railML / Christian RastopDes	scription	stopActivities	Documentation changed
28.02.22 railML infrastructure	03.09.19 DE / Thales / Heidrun Jos	scription	platformEdgeRef	Documentation differs from wiki entry.
28.02.22 railML infrastructure	08.12.21 DE / Siemens / Kari Fried			-
28.02.22 railML timetable	16.12.21 DE / PSI / Andrea Hoffma <mark>stopDes</mark>	scription	serviceSectionRef	Documentation changed
28.02.22 railML timetable	25.04.21 DE / railML / Milan Wölke 22.11.21 DE / railML / Milan Wölke topDes	crintion	trackInfo	Wiki link corrected and documentation
28.02.22 railML timetable	22.11.21 DE / railML / Milan Wölke	scription		
28.02.22 railML timetable	05.10.21 DE / railML / Milan Wolke stopAct	ivities	stopActivity	Documentation transferred from wiki
28.02.22 railML timetable	25.06.21 DE / railML / Jörg von Lin	stionall InitDinalina	vahialaOnaratar	Decumentation transferred from wiki
28.02.22 railML interlocking	17.01.22 DE / railML / Jörg von Lingorganiza		vehicleOperator	Documentation transferred from wiki
28.02.22 railML interlocking	08.07.21 DE / railML / Jörg von Lingorganiza 29.10.21 DE / Siemens / Stefan W	ationalUnitBinding	customer	Documentation transferred from wiki
28.02.22 railML common				5
28.02.22 railML common	16.06.20 NO / railML / Thomas Nyc <mark>organiza</mark>	ationalUnitBinding	railwayUndertaking	Documentation transferred from wiki
	organiza	ationalUnitBinding	operationalUndertaking	Documentation transferred from wiki
	organiza	ationalUnitBinding	concessionaire	Documentation transferred from wiki
	organiza	ationalUnitBinding	contractor	Documentation transferred from wiki



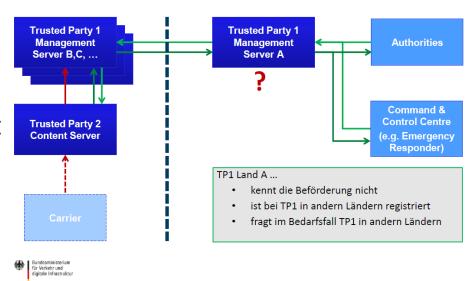
OTIF





- Information on handling dangerous goods is needed to the ITMS UseCase for railML 3.2
- Standard in Paper established: RID (https://otif.org/de/?page_id=1105)
- Transformation in XSD under construction by the Dangerous Goods Transport Information Network Association (DGTINA)
- Good Modelling alignment by using UML
- railML.org will follow up and support
- Please contact us if you are interested and would like to know more
- Suspended (...)

Das elektronische Beförderungspapier – Internationaler Datenaustausch

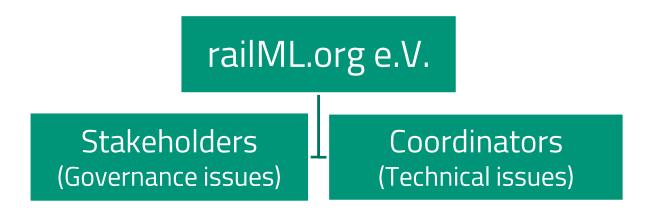




www.bmvi.de | 23/09/2020

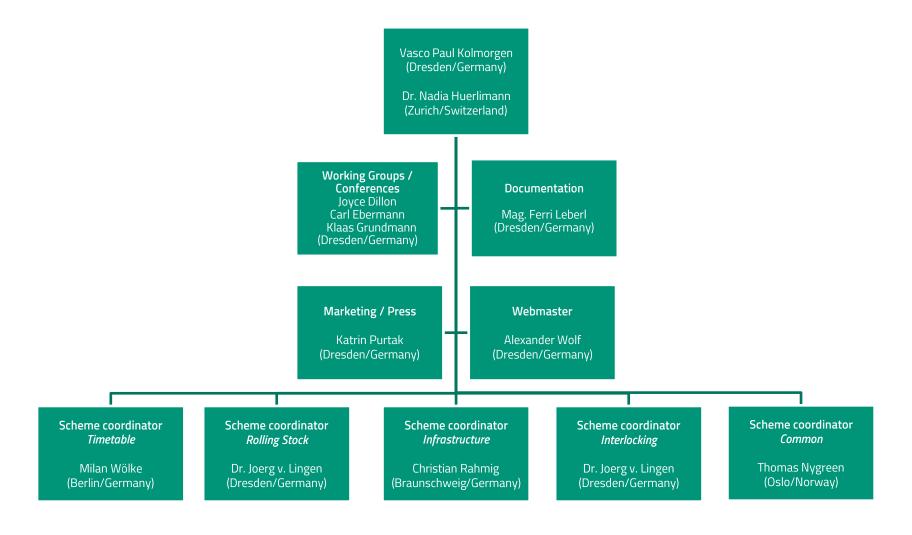
railML.org e.V.

- The railML.org e.V. association is the **legal backbone** of the railML initiative
- Registered in the German register of associations in Dresden.
- The association is open to everybody
- Decisions are made by the stakeholders (governance issues) and the coordinators (technical issues)
- Input from the community and the users





People at railML.org





Current railML.org Working Groups

Working Group	Scheme Coordinator
Infrastructure Currently three sub working groups for: Integrated Traffic Management System (ITMS) Schematic Track Planning (SCTP) ETCS Track Net (ETCS) (joint with IL working group) Forum: news://railML.infrastructure	Christian Rahmig DLR, Braunschweig
Timetable Forum: news://railML.timetable	Milan Wölke Bahnkonzept, Dresden
Interlocking Forum: news://railML.interlocking	Jörg von Lingen IfB, Dresden
Rolling Stock Forum: news://railML.rollingstock	Jörg von Lingen IfB, Dresden
Common Forum: news://railML.misc	Thomas Nygreen Jernbanedirektoratet, Oslo



Partnership model of railML.org

- Partnership fees are only used for operation costs to keep the development work going
- The **fees cover basics** like website maintenance, servers, organisational staff, travel costs related to the development, wiki and cloud maintenance
- The coordinators and working groups are not paid and work on a voluntary basis
- The partnership model became binding on the 1st of July 2020
- All new partners must sign a partnership agreement (free of cost, only a formality)
- For a complete list of the benefits of a paid partnership, please contact the us per email at <u>partner@railML.org</u>



Partnership model of railML.org

- Development of membership model for railML.org
- Effective for all railML.org partners as of July 1st, 2020
 - Three membership categories with different services/privileges
 Strategic Associated Basic
 - <u>Basic partnership</u> will include <u>current service/privileges at no fee</u>
 - All existing partnerships are automatically converted to a basic partnership for free
 - Partnership fees range from
 € up to 41.400 € per year
 - Fees depend on size, type of entity partnership category

1.1 Strategic (Gold)

Entity and Size	Micro	Small	Medium	Large
Authorities, Infrastructure Managers & Railway Undertakings			27.600,00€	41.400,00€
Consultancies, Software Providers, Manufacturers	4.025,00€	6.900,00€	13.800,00€	27.600,00€
Research Institutions	4.600,00€	9.200,00€	16.100,00€	32.200,00€
Universities, Schools			4.600,00€	13.800,00€

1.2 Associated (Silver)

Entity and Size	Micro	Small	Medium	Large
Authorities, Infrastructure Managers & Railway Undertakings			16.560,00€	24.840,00€
Consultancies, Software Providers, Manufacturers	2.415,00€	4.140,00€	8.280,00 €	16.560,00€
Research Institutions	2.760,00€	5.520,00€	9.660,00€	19.320,00€
Universities, Schools			2.760,00€	8.280,00€



Benefits of paid partnership

- Benefits depend on the partnership category chosen. They include:
 - Extended version support
 - Free certification cycles
 - Workshops from railML.org
 - Dedicated and quick support
 - Access to the stakeholder and use case steering groups
 - Marketing possibilities



• For all benefits, please request the Partnership Terms & Conditions by email (partner@railML.org)



Future Conferences

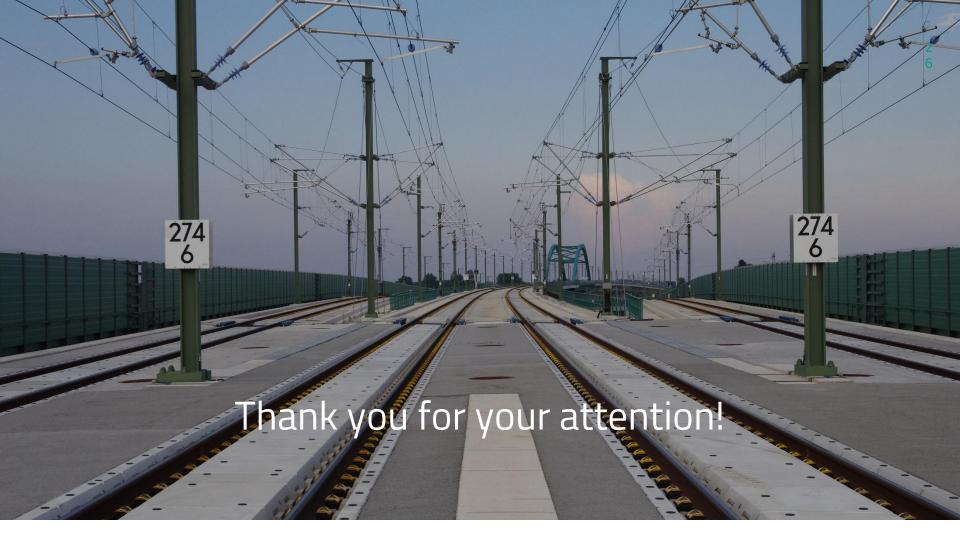
- November 8th, 2022: 42nd railML conference **as a hybrid conference** (location still to be announced)
- Starting in 2023, the conferences will be as follows:
 - Only one as a hybrid conference in full length (9:00 to 17:00 o'clock)
 - Additionally, two shorter virtual conferences (10:00 to 15:00 o'clock)
 - 4-months between conferences
 - All conferences in English
 - Conferences in German only if enough interest (replaces the English conference in August)
 - Projected time plan:
 - End of April (hybrid EN),
 - End of August (virtual EN or DE),
 - December/January (virtual EN)



Future workgroup meetings in TT and IS

- Working groups
 - Interlocking (IL): Phone conference every 3-4 weeks (together with IS)
 - Infrastructure (IS): Phone conference every 3-4 weeks for different working groups
 - Timetable (TT): Phone conference every 2 weeks (focus: railML 3)
 - Rollingstock (RS) & Common (CO): Currently no meetings
- Regular stakeholder telephone conferences & meetings (every 6 weeks)
- Regular coordinator telephone conferences & meetings (every 6 weeks)





Vasco Paul Kolmorgen Governance Coordinator railML.org



