
Subject: Network location

Posted by [christian.rahmig](#) on Mon, 06 Aug 2018 09:40:45 GMT

[View Forum Message](#) <> [Reply to Message](#)

Dear RTM colleagues,

RTM 1.1 model contains SpotLocations, LinearLocations and AreaLocations. Although this approach covers all eventualities, there is potential for simplification:

A new EntityLocation sub-class NetworkLocation would reference a LocatedNetEntity to the whole Network (or LevelNetwork) without explicitly naming all the contained NetElements. This approach will be useful to define "global values", e.g. the railway electrification parameters or the track gauge for the whole railway network.

Consequently, I suggest to improve RTM 1.2 by adding a new EntityLocation sub-class NetworkLocation. Any comments are highly appreciated...

Best regards
Christian

--

Christian Rahmig - Infrastructure scheme coordinator

railML.org (Registry of Associations: VR 5750)

Phone Coordinator: +49 173 2714509; railML.org: +49 351 47582911

Altplauen 19h; 01187 Dresden; Germany www.railml.org

Subject: Re: Network location

Posted by [Airy Magnien](#) on Thu, 16 Aug 2018 08:36:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Located net entities are net entities, and Net Entities are Network Resources. As such, they can be unambiguously associated with any Network or LevelNetwork without referring to any particular Net Element.

In your quoted example, a "global parameter" or (rather) "global subsystem description" would rather correspond with the Net Entity class. So far, I thought NetEntity to be an abstract class, but you just provided an example by which it could be meaningfully instantiated.

Provisional conclusion : your need seems to be fulfilled by the current version (RTM 1.1) without any changes.

If you agree with this conclusion, I'll update the wiki accordingly (or you - we'll toss it up).

Subject: Re: Network location

Posted by [christian.rahmig](#) on Mon, 17 Sep 2018 11:37:26 GMT

[View Forum Message](#) <> [Reply to Message](#)

Dear RTM Expert Group,

Am 16.08.2018 um 10:36 schrieb Airy Magnien:

- > Located net entities are net entities, and Net Entities are
- > Network Resources. As such, they can be unambiguously associated with
- > any Network or LevelNetwork without
- > referring to any particular Net Element.
- >
- > [...]
- >
- > Provisional conclusion : your requirement seems to be
- > fulfilled by the current version (RTM 1.1) without any
- > changes.

I am not sure whether my requirement is fulfilled by current RTM 1.1 without any changes. EntityLocation derived classes may only refer to an instance of PositioningNetElement via "netElement". If I read the RTM UML correctly, this reference cannot be used to refer to a Network or LevelNetwork. Secondly, referencing a Network or LevelNetwork does not require an attribute "applicationDirection" (SpotLocation and LinearLocation) or "associatedNetElements" (AreaLocation).

So, to cut it short: I don't see how to use existing *Location classes to model a reference to a Network in whole. Please correct me if I am wrong.

Best regards
Christian

--

Christian Rahmig - Infrastructure scheme coordinator

railML.org (Registry of Associations: VR 5750)

Phone Coordinator: +49 173 2714509; railML.org: +49 351 47582911

Altplauen 19h; 01187 Dresden; Germany www.railml.org
