TDL Rapporteur’s Meeting

# Date

2015-03-05, 14:00 – 16:00 [CET]

# Participants

Andreas Ulrich (Siemens, TDL-MM part 1 rapporteur, meeting moderator)

Stephan Schulz (Conformiq), Finn Kristoffersen (Cinderella), Gusztav Adamis (Ericsson), Andrus Lehtmets (Elvior), György Rethy (Ericsson), Miguel A. Reina (ETSI), Anthony Wiles (ETSI), Martti Käärik (Elvior), Philip Makedonski (U Göttingen), Jens Grabowski (U Göttingen) and Helene Schmidt (ETSI)

# Agenda

TOP1: agreement to use version 1.2.7 for further discussion;

TOP2: agreement on editorial changes and changes from previous meeting;

TOP3: agreement on semantics definition of OmitValue.

# Minutes

**TOP1**: It was agreed to use TDL-MM draft version 1.2.7, which is MTS(15)000025r1\_TDL-MM-part1, and versions created from here for further discussion.

**TOP2**: Introduced changes on document that are different from clause 6.3.8 OmitValue are accepted.

**TOP3**:

Omit value needs to be supported technically in TDL, requested by Ericsson and ETSI.

Stephan: The topic is wider and covers: OmitValue, AnyOrOmit, optional Member. These concepts do not need to be included in TDL explicitly because they are likely for a small set of users. If OmitValue is removed from the MM, then dependent parts need to be removed as well.

It was agreed to get a better understanding about the purpose of OmitValue first by reviewing Ericsson’s submission “MTS(15)000026\_On\_the\_wording\_for\_OmitValue\_in\_TDL\_MM” to the meeting.

## Review of Ericsson’s document MTS(15)000026.

### Properties of OmitValue (as discussed in the meeting)

1. The semantic meaning of OmitValue is to identify explicitly and unambiguously that in the argument of an interaction a given optional member of a structured data instance shall not be present.
2. OmitValue shall not be used in assignments to mandatory members directly or indirectly, ~~neither temporarily~~ nor in arguments of interactions.  
   The following cases need to be distinguished.
   1. Msg.x = omit – disallowed; static semantics rule in 6.3.1
   2. Var v = omit; msg.x = v – runtime error 🡪 add sentence to semantics
   3. Var v = omit; msg.x = v; Interaction msg – runtime error 🡪 add note in interaction clause
3. It shall be possible to use OmitValue like other values within TDL specifications, except the case in item 2) above. In particular:
   1. It shall be possible to assign OmitValue to variables
   2. It shall be possible to pass OmitValue as actual parameter
   3. It shall be possible to use OmitValue in operations (defined as function instances in TDL MM).

There was no objection on properties 1 and 3 from above. Property 2 required more discussion. The text describing property 2 was modified to make it less ambiguous, as it is given above. The resulting consequences for the draft on the discussed examples are added in red. The above property description reflects the consensus reached among participants at the end of this discussion and caused no objections.

This discussion was followed by a discussion about the semantics definition in the draft. It was made clear that the semantics definition shall not be dependent on a specific context because its usage in a TDL spec is broader as it was clarified above.

The restrictions of the usage of OmitValue in a TDL spec and the cases of runtime error (in case of wrong usage) shall be described independently from its semantics definition at the various places in the draft, where these restrictions can be checked actually (that is, in assignments to variables and members).

Independently from the above discussion there was agreement to keep OmitValue as a concept in the MM instead of moving it to instance level (like, e.g., Boolean or pass verdict).

**Side note**: The draft contains no formal concept of “runtime error” for now, which could be defined similarly like the “undefined” concept. A review of the semantics part to be due in TDL phase 3 shall identify all cases that cause a runtime error and formally define its meaning.

# Next steps

The rapporteur Andreas produces a new version based on the decisions from this meeting and uploads it to the draft folder on the portal.

The missing definition of the semantics of OmitValue shall be agreed in an exchange of e-mails beforehand. Andreas makes a first proposal.

Only if agreement by e-mail cannot be obtained, another TDL meeting will be planned. If agreement is achieved, the version will be subjected to Remote Consensus.