

Design Space Exploration - Feature #3690

Feature # 3689 (New): Extend the DseML to enable expressions to specify non-existing elements and attributes

Extend the DseML for VariablePropertyLiterals and a generic Property Lookup method for binding functions of two elements

03/21/2019 10:44 AM - Alexander Diewald

| | | | |
|--|---------------------------|------------------------|------------------------------|
| Status: | Rejected | Start date: | 03/21/2019 |
| Priority: | High | Due date: | |
| Assignee: | Alexander Diewald | % Done: | 60% |
| Category: | | Estimated time: | 5.00 hours |
| Target version: | AF3 2.17 (Feature Freeze) | | |
| Description | | | |
| <ul style="list-style-type: none">• Add a "VariablePropertyLiteral" to enable specifying non-existing attributes of model elements.• Add a generic binding function to specify lookups of properties of one model element from another one. | | | |
| Related issues: | | | |
| Related to Change Request #3472: Scheduling Formalizatio: Clarify / cleanup S... | | Rejected | 07/05/2018 |
| Blocks Feature #3667: Move the schedule latency minimization to a pattern | | New | 03/06/2019 |
| Precedes Change Request #3551: In the formulation of a scheduling problem, re... | | New | 04/30/2019 04/30/2019 |

History

#1 - 03/21/2019 10:44 AM - Alexander Diewald

- Parent task set to #3689

#2 - 03/22/2019 05:37 PM - Alexander Diewald

- Status changed from New to In Progress

#3 - 05/08/2019 02:41 PM - Alexander Diewald

- Assignee changed from Alexander Diewald to Marco Volpe

- % Done changed from 0 to 30

As discussed in the JF.

#4 - 05/08/2019 02:41 PM - Alexander Diewald

- Related to Change Request #3554: Cleanup DSML w.r.t. newly added Functions added

#5 - 05/13/2019 02:15 PM - Johannes Eder

- Target version changed from AF3 2.15 RC1 (Feature Freeze) to AF3 2.16 RC1 (Feature Freeze)

#6 - 05/13/2019 04:06 PM - Simon Barner

- Related to Change Request #3472: Scheduling Formalizatio: Clarify / cleanup StartTimeDummy and DurationDummy added

#7 - 07/02/2019 10:59 AM - Alexander Diewald

- Assignee changed from Marco Volpe to Alexander Diewald

- Target version changed from AF3 2.16 RC1 (Feature Freeze) to Team Programming July 2nd 2019

#8 - 07/08/2019 11:04 AM - Alexander Diewald

- Target version changed from Team Programming July 2nd 2019 to AF3 2.16 RC1 (Feature Freeze)

#9 - 09/30/2019 02:17 PM - Alexander Diewald

- Target version changed from AF3 2.16 RC1 (Feature Freeze) to AF3 2.17 (Feature Freeze)

#10 - 10/08/2019 09:38 AM - Alexander Diewald

- Related to Change Request #3551: In the formulation of a scheduling problem, replace ResourceAllocations with Tasks and Signals added

#11 - 10/08/2019 09:38 AM - Alexander Diewald

- Related to deleted (Change Request #3551: In the formulation of a scheduling problem, replace ResourceAllocations with Tasks and Signals)

#12 - 10/08/2019 09:39 AM - Alexander Diewald

- Precedes Change Request #3551: In the formulation of a scheduling problem, replace ResourceAllocations with Tasks and Signals added

#13 - 10/25/2019 11:22 AM - Alexander Diewald

- Priority changed from Normal to High

#14 - 01/15/2020 12:02 PM - Alexander Diewald

- Blocks Feature #3667: Move the schedule latency minimization to a pattern added

#15 - 02/03/2020 04:35 PM - Alexander Diewald

- Assignee changed from Alexander Diewald to Marco Volpe

- % Done changed from 30 to 60

The functional style ModelElementPropertyLiterals are done now and can be reviewed. They are now named IPropertyLiterals --> ArithmeticPropertyLiteral / BooleanPropertyLiteral.

As discussed before, I'd ask you to review this one for an intermediate merge such that this branch does not diverge again.

MR: https://git.fortiss.org/af3/af3/merge_requests/278

Please review the code as-is and define some Objective(s) and Constraint(s) and execute both the task mapping and scheduling. Please also import one of your old models (with objectives/constraints defined) to verify that the migrator is operating correctly.

Thanks!

#16 - 02/21/2020 07:35 PM - Marco Volpe

- File test_dse (1).af3_23 added

Tested and reviewed. It seems to work fine. I also tried on some old model.

Only found problems in importing models where some timing constraint is defined by using StartTimeDummy or DurationDummy variables, e.g., the enclosed one.

But maybe we can live with that.

#17 - 02/21/2020 07:35 PM - Marco Volpe

- Assignee changed from Marco Volpe to Alexander Diewald

#18 - 02/25/2020 11:04 AM - Alexander Diewald

Thanks! The intermediate merge is done.

The StartTimeDummy and DurationDummy annotations were just stubs to denote the variable parameters to be explored. They are constructed on-the-fly when launching an exploration and do not even have an assigned value after exploration. Hence, they only appear in the DseML formulation that is saved with the solutions, but they do not provide any value there such that we can just ignore them.

#19 - 04/16/2020 11:27 AM - Alexander Diewald

- Related to deleted (Change Request #3554: Cleanup DSML w.r.t. newly added Functions)

#20 - 04/16/2020 11:29 AM - Alexander Diewald

- Status changed from In Progress to Rejected

Files

| | | | |
|---------------------|--------|------------|-------------|
| test_dse (1).af3_23 | 199 KB | 02/21/2020 | Marco Volpe |
|---------------------|--------|------------|-------------|