

# Call for Cases: Transformation Tool Contest 2010

1-2 July 2010

Satellite workshop to TOOLS 2010, Malaga.

## 1 Scope: Why people who have never heard of transformation tools should also submit cases

Today models are used in a wide range of application domains from biology to logistics, from geographic information systems to finance, and, of course, also in software engineering.

With more and more models, the requirement naturally arises to transform (i.e. convert) models into other models. As an example, consider a tool that requires its input data in a particular form, but the actual data is only available in another form. Another popular use case of model transformation is the simulation of dynamic systems. Here, the model evolves by successively applying certain rules. For instance, using state-of-the-art transformation tools, problems such as the intra-cellular synthesis of proteins have been modeled successfully.

A (non-exhaustive) list of typical use cases of transformation tools:

- model synchronisation and merging,
- interoperability and migration,
- model execution and simulation,
- verification (of models or rule sets),
- knowledge extraction.

The Transformation Tool Contest (or TTC) aims at bringing the people from such problem domains together with the people that master tools for solving their transformation problems. Since it is difficult for people unfamiliar with model transformation to judge whether their problem is appropriate for TTC and, if so, to specify their problem in a way understandable by model transformation professionals, the organizing committee (see below) welcomes any questions in this respect.

## 2 About TTC

The aim of this event is to compare the expressiveness, the usability and the performance of graph and model transformation tools along a number of selected case studies. A deeper understanding of the relative merits of different tool features will help to further improve graph and model transformation tools and to indicate open problems.

This contest is the fourth of its kind (after an AG-TiVE 2007 session, and the GraBaTs 2008 and 2009 workshops), but the first to appear under this new acronym. It will be organized as a satellite event of the TOOLS conference, this time TOOLS 2010 in Malaga, Spain. Since TOOLS is colocated with the international conference on model transformation (ICMT), teams from the major international players in the development and use of model transformation tools are expected to participate.

## 3 TTC Procedure

**Phase 1: Case proposal submission** In order to facilitate the comparison of transformation tools, we are soliciting potential case studies. If you have a suitable case study, please describe it shortly but as detailed as needed and submit it before March 15 to the online submission system. Cases that have already been solved using a particular tool (or general purpose programming language) are also very welcome. Please include a reference solution for such cases to support the evaluation of the correctness of submitted solutions.

A committee will select a small, but representative set of case studies to be used for the contest. Case descriptions should answer the following questions:

- What is the context of the case?  
(provide a short description and references)
- What is the subject to be modeled?
- What should the model (be able to) do?  
(what manipulations/rules should be possible?)
- What is the purpose of the model?  
(what would it be used for from a larger perspective?)

- What are variation points in the case?  
(divide up your case in core characteristics and extensions)
- How should the model be used?  
(e.g., are visual aspects important, is manual simulation allowed/required?)
- What are the challenges involved in the case?  
(suggestions on how to measure submissions with respect to these challenges)
- Are there reference input/output documents (models/graphs)?  
(please include them in the case description)

Please submit at <http://www.easychair.org/conferences/?conf=ttc2010>

### Phase 2: Case solution submission

All those who like to participate in the contest will be asked to choose one or more case studies, take their favorite transformation tool and submit their solutions. A separated call for solutions will be distributed, after the cases have been selected.

### Phase 3: Workshop and live contest

Besides the presentations of the submitted solutions, the workshop will comprise a live contest. For more details (such as example cases and solutions from previous editions), please consult the TTC website: <http://is.tm.tue.nl/staff/pvgorp/events/TTC2010/>

## 4 Important dates

Event	Deadline	Interval to next deadline
Call for cases	8 February	5 weeks
Case submission deadline	15 March	2 weeks
Call for solutions	29 March	6 weeks
Solution submission deadline	10 May	2,5 weeks
Notification	26 May	5 weeks
Workshop	1-2 July 2010 (tentative)	

## 5 Committees

### 5.1 Organizing Committee

- Pieter Van Gorp (Eindhoven University of Technology, The Netherlands)
- Steffen Mazanek (formerly Universität der Bundeswehr München)
- Arend Rensink (University of Twente, The Netherlands)

### 5.2 Case Committee

- Barbara König (University of Duisburg-Essen, Germany)
- Jordi Cabot, (École des Mines de Nantes, INRIA, France)
- Tihamér Levendovszky (Budapest University of Technology and Economics, Hungary)
- Steffen Mazanek (formerly Universität der Bundeswehr München)
- Anantha Narayanan (Vanderbilt University, Nashville, Tennessee)
- Arend Rensink (University of Twente, The Netherlands)
- Bernhard Schätz (Technische Universität München)
- Gabriele Taentzer (University of Marburg, Germany)
- Pieter Van Gorp (University of Antwerp, Belgium)
- Gergely Várro (Budapest University of Technology and Economics, Hungary)
- Albert Zündorf (University of Kassel, Germany)