Transformation Tool Contest 2011: Call for Solutions

March 21, 2011

Homepage: http://is.ieis.tue.nl/staff/pvgorp/events/TTC2011/

Satellite to TOOLS 2011, Zurich (Switzerland): http://toolseurope2011.lcc.uma.es/

1 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 fifth of its kind (after an AGTiVE 2007 session, the Gra-BaTs 2008 and 2009 workshops, and TTC 2010 last year). It will be organized as a satellite event of the TOOLS conference, this time TOOLS 2011 in Zurich, Switzerland. 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.

2 TTC Procedure

2.1 [Past] Phase 1: Case proposal submission

In order to facilitate the comparison of transformation tools, we have solicited potential case studies. Out of six submissions, the following four case studies have been selected:

- Model Transformations for Program Understanding: A Reengineering Challenge (submitted by T. Horn),
- Compiler Optimization Case (submitted by S. Buchwald),

- The GMF Model Migration Case (submitted by M. Herrmannsdoerfer),
- Hello World! An Instructive Case for TTC (submitted by Steffen Mazanek).

A solution submission to the fourth case (Hello World) is a requirement for submitting solutions to the other cases. More specifically, each submission to one of the first three tracks should include a reference to a solution to the fourth case. The organizers will check this reference and will make all Hello World solutions available to the reviewers and the other contest participants. This new approach should facilitate that:

- 1. contest participants as well as readers of follow-up articles get an overview of all competing approaches in one shot,
- 2. an *online judge* system can be developed with a tool-independent architecture. The online judge system will later be used for assessing the correctness of solutions to the more complex case studies.

Important: The case descriptions are currently being refined based on the feedback of our case committee. The core challenges will remain the same though. Revised/extended versions will be made available via the contest website by end of March. We are also setting up an online forum to enable interaction between the case submitters and the solution developers.

2.2 [Present] Phase 2: Case solution submission

All those who like to participate in the contest are now asked to choose one or more case studies, take their favorite transformation tool and submit their solutions. A submission should consist of a paper and the actual solution. The paper should include a description of the chosen case study variant (if any) and a presentation of the chosen solution, including a discussion of design decisions. Examples can be exlored at the website of last TTC^1 .

Papers are to be submitted by May 2nd, 2011, to http://www.easychair.org/conferences?conf=ttc2011. Before the same deadline, each case study solution (tool, project files, documentation) should be made available for review and demonstration via SHARE. Signup at http://is.tm.tue.nl/staff/pvgorp/share/?page=Signup&bundlename=TTC11. See http://fmt.cs.utwente.nl/redmine/wiki/grabats/SHARE for instructions.

The major novelty of TTC 2011 will be that the solution reviewing before the workshop won't be done by the case committee anymore but rather by peers, i.e. the other solution submitters. So, all solution submitters have to review three other solutions to the case that they have addressed. These reviews won't be anonymous, since these reviewers ideally will also be the opponents at the workshop. The purpose of the peer reviewing is that the participants get as much insight into the competitor's solutions as possible and also to raise potential problems. Although the aim is to accept as many solutions as possible,

¹See http://is.ieis.tue.nl/staff/pvgorp/events/TTC2010/

the organizers can reject obviously irrelevant or extremely weak solutions, either straight away or after the peer reviews. In contrast, partial solutions will be accepted, if they cover the core or an interesting part of the problem.

2.3 [Future] 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 reference solutions for the case studies, testcases, online forum discussions, and refinements to the original case descriptions), please consult the TTC website.

3 Publication procedure

For TTC 2011 there will be three more or less formal publication opportunities:

- 1. The informal pre-proceedings will appear on the TTC website. They contain the descriptions of the accepted cases and all the solution papers.
- 2. After the workshop there will be more formal workshop proceedings. Solution submitters have to consider/address the opponent statements. The resulting solution papers will be reviewed by the TTC case committee. A selection of revised solution papers together with the case descriptions will be published in the DBLP-indexed workshop proceedings.
- 3. Finally, we aim at one journal publication per case. Those articles will introduce the case and compare the solutions from a high-level perspective. Also the results of the evaluation sheets filled in during the workshop will be considered. These articles will be compiled and edited by the case proponents together with the workshop organizers.

4 Important dates

• Solution submission deadline: 2 May 2011

• Notification of acceptance: 23 May 2011

• Workshop with live contest: 29-30 June 2011

5 Committees

5.1 Organizing Committee

- Pieter Van Gorp (Eindhoven University of Technology, The Netherlands)
- Steffen Mazanek (formerly Universität der Bundeswehr München)
- Louis Rose (University of York, United Kingdom)

5.2 Steering Committee (new!)

- Richard Paige (University of York, United Kingdom)
- Arend Rensink (University of Twente, The Netherlands)
- Bernhard Schätz (Technische Universität München, Germany)
- Albert Zündorf (University of Kassel, Germany)

5.3 Case Committee

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