Visualisation Facilities of the Graphical CSP Tool TERRA

Zhou LU 1 and Jan F. BROENINK

Robotics and Mechatronics, CTIT Institute, Faculty EEMCS, University of Twente, The Netherlands

Abstract. Graphs, animations, and visualisations are known to be valuable forms of presenting results of experiments, both simulation and real-life experiments. For CSP-based concurrent programs, the state of processes, CSP constructs and channels are relevant to show. For proper feedback, these can best be related to the form in which the program was entered by the user. In the case of the TERRA graphical CSP tool, feedback is given by colouring the diagram elements according to the specific state they are in, see Figure 1. Next to that, a textual log of events is produced, giving more details relevant in the development process. In this *Fringe* session, we demonstrate this visualisation facility of our graphical CSP tool TERRA. A paper [1] reporting context and technical details of this tool appears elsewhere in these *Proceedings*.

Keywords. simulation, visualisation, CSP algebra, animation, CPS, Eclipse

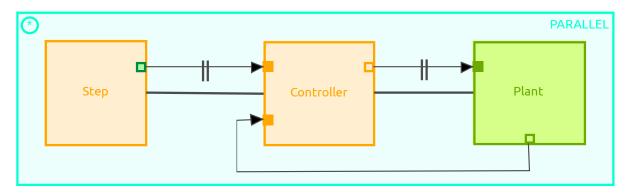


Figure 1. Animation view, from [1].

References

[1] Z. Lu, Ran T., and J. F. Broenink. Simulation and Visualization Tool Design for Robot Software. In *38th WoTUG Technical Meeting - Communicating Process Architectures 2016*, Copenhagen, DK, August 2016. Open Channel Publishing Ltd. 19 pages.

¹Corresponding Author: *Zhou Lu, Robotics and Mechatronics, University of Twente, P.O. Box 217, 7500 AE Enschede, The Netherlands.* Tel.: +31534894419; E-mail: z.lu@utwente.nl.