# ASPARTIX Conquers the Web

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Nowadays, the argumentation community faces a growing multitude of semantics for abstract argumentation frameworks. While theoretical properties for these semantics are quite well understood (see, e.g. [1]), it is also indispensable to experiment with concrete examples in order to understand how different semantics apply to certain scenarios. A uniform platform thus is needed which has to satisfy the following design goals:

- Evaluation of frameworks wrt. different well-established semantics.
- Comparison of the semantics.
- Experimentation with frameworks by modification of the arguments and attacks.
- Visualization of the framework and the results.
- Platform-independency.

We present here such a platform which is directly accessible from the web with standard browsers. The system underlying the web-platform is ASPARTIX (see [2] for a detailed description), an answer-set-programming based argumentation tool which makes use of the solver DLV. However, the actual usage of DLV is completely hidden from the user and thus makes the system easy to apply and understand. We identify the following advantages of the web application of ASPARTIX:

- Many semantics are supported (admissible, stable, complete, grounded, preferred, semi-stable, ideal and cf2).
- Compact syntax for input representation in terms of relational facts.
- Appealing graphical representation using the GraphMLViewer.
- Platform-independency and no installation is necessary.
- Runtimes scale up to frameworks with over 100 nodes.
- We can easily update the underlying engines (either ASPARTIX or DLV) to gain better performance or add to new semantics.

Visit `http://rull.dbai.tuwien.ac.at:8080/ASPARTIX/` to see the web application. (This work is supported by WWTF under grant ICT08-028.)

## References

[1] P. Baroni and M. Giacomin. Semantics of Abstract Argument Systems. In I. Rahwan and G. R. Simari, editors, *Argumentation in Artificial Intelligence*, pages 25–44. Springer US, 2009.

[2] U. Egly, S. A. Gaggl, and S. Woltran. Answer-Set Programming Encodings for Argumentation Frameworks. *Argument and Computation*, 2010. Accepted for publication.

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