

Jadex Add-ons

The basic Jadex software package already includes the BDI reasoning engine along with several tools. This site presents and describes further tools and extensions that have been built for the development with Jadex. These add-ons are not available for direct download, because some of them are only available under a more restrictive license than LGPL. If you are interested in an add-on please contact us per email. For non-commercial use of course all add-ons are freely available. In the following the different add-ons are presented.

If you are interested in obtaining add-ons, please contact us at:

jadex-addons@lists.sourceforge.net

After being approved you can download the Add-Ons from the protected download area:

[Add-ons download page](#)

Add-Ons for Jadex V2

There are currently no add-ons for Jadex V2 available.

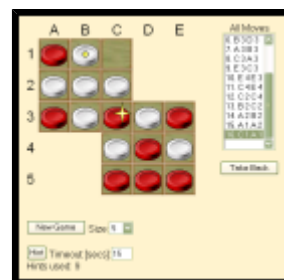
Add-Ons for Jadex 0.96

Expression Compiler

The expression compiler is a fast alternative to normal Jadex expression interpreter. It is based on [Janino](#) and allows to compile Java expressions on demand at runtime. The expression compiler can be used to further improve the performance of agents significantly. In addition to the **faster evaluation of expressions** the Jadex expression compiler add-on also provides the possibility to **define inline plan bodies**. This means that a whole agent can be programmed in one XML file without any additional plan classes. The add-on includes also a precompiler tool that allows to generate precompiled expression files for ADFs that are stored on disk. Using the tool avoids the need for runtime compilations of expressions that would delay the first agent execution otherwise.

Web-bridge Solution

The Web-bridge tool builds a bridge between agent-oriented applications and web-based frontends. For this purpose the state-of-the-art Java Servlet technology is connected transparently with the Jadex platform. This means that a web-designer responsible for creating user interfaces and interactions has nothing to know about the agent technology used at the business layer. On the other hand web requests are mapped to agent messages on the agent layer allowing agent programmers to handle web requests exactly as goals. Web-bridge includes an example J2EE application that may be used and extended for own projects incorporating direct access from Java Server Pages to an agent container. It provides a complete multi-tier architecture. The front-end is based on standard J2EE technologies situated in a servlet container and the application tier is based on agent technology. A simple web application based on the puzzle example is available for online testing.



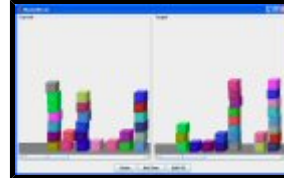
Add-Ons for Jadex 0.95 and older

Windows Service Wrapper

The service wrapper allows to **run the Jadex platform as a Windows service**. It is based on the [Java Service Wrapper](#) .

Planner

Jadex is available in an extended version with an integrated high-speed state-of-the-art planner, as for certain problem domains reactive planning cannot deliver the best achievable solution. Instead planning from first principles should be used. The planner can be called from jadex plans and works on agent beliefs evaluating future states and possible solutions for a given problem. The planning problem, given by agent beliefs and goals, requires a solution composed from actions available to the agent. The design priorities for the planner have been speed and real-time dynamics. To achieve a satisfying performance the planner is able to utilize domain specific knowledge in form of search control rules, heuristic and complex action preconditions.



Diet Agent Adapter (experimental)

Besides the JADE and Standalone adapter an **experimental adapter for the [Diet platform](#)** has been developed. It shows the applicability of Jadex even running on fundamentally different middleware platforms. The adapter is still experimental as it has not reached a level of maturity yet and also does not explore the full potential of the Diet platform. Nonetheless, we could achieve that all examples bundled with the normal Jadex release are executable under every adapter including Diet without changes.