



# Declarativa

## InterProlog 2.1: a Java front-end and enhancement for Prolog

InterProlog is a Java front-end and functional enhancement for standard Prologs, running on Windows, Linux and Mac OS X, and currently supporting [XSB Prolog](#) and [SWI Prolog](#).

InterProlog provides Java with the ability to *call any Prolog goal* through a [PrologEngine](#) object, and for Prolog to *invoke any Java method* through a [javaMessage](#) predicate, while *passing virtually any Java objects and Prolog terms* between both languages with a single instruction. Mutual recursion and (Java) multithreading are supported. Java Reflection and Serialization mechanisms, together with Prolog's natural strengths, are used to give the combination great flexibility and dynamism. Whereas some Java - Prolog interfaces taste like objectified Prolog/C interfaces, InterProlog provides a higher-level API equating objects to terms, inducing a more concise and declarative programming style. Upcoming versions will support other Prologs.

- [Gallery](#)
- [Prolog-side API](#)
- [Java-side API documentation](#)
- [FAQ](#)
- Other reading
  - Paper at [EPIA 2001](#), slightly outdated, but worth reading([Word](#), [zipped PDF](#))
  - Presentation at [PACLP99](#)
  - Other [Java+Prolog interfaces](#)
  - [Article](#) published in the COMPULOG Newsletter, December 98 update
- [Download and install](#)

In the present version there are three PrologEngine subclasses available:

- [XSBSubprocessEngine](#) and [SWISubprocessEngine](#) provide a sockets interface to XSB and SWI Prolog respectively.
- [NativeEngine](#) provides a JNI interface for XSB Prolog

InterProlog is implemented as a set of standard Java classes and Prolog predicates and also some C code (for the JNI functionality), and is available under the terms of the GNU Library License.

Comments to: [interprolog@declarativa.com](mailto:interprolog@declarativa.com)

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*Among other things (cf. our declarative [web database tool](#)) Declarativa provides contract services for Java+Prolog application development, porting, maintenance, etc. This work was sponsored partly by the PROLOPPE (Praxis/3/3.1/TIT/24/94) and REAP (Fundação Luso-Americana para o Desenvolvimento) projects in late 1997 and early 1998, as well as by Servisoft (<http://www.servisoft.pt>), and later Declarativa. Special thanks also to [Universidade Nova de Lisboa](#) and the [XSB group](#) at SUNY Stony Brook, for their continued encouragement, feedback and help. Since 1999 InterProlog maintenance and improvements have been largely supported by its largest user [XSB, Inc](#), who has also agreed to release its (JNI) NativeEngine as part of InterProlog 2.0 on 2002. Individual thanks are due to Luis Moniz Pereira, Terry Swift, David S. Warren, Rupert Hopkins, Tatyana Vidrevich, Luis Castro, and others. InterProlog was developed by [Miguel Calejo](#).*

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