

Arity/Prolog32 for Win32

Language and Product Specification

Arity/Prolog32 V1.1 for WIN32 provides a complete Prolog programming environment in which you can write, debug, and run Prolog programs in the Windows 95 and NT environment. Arity/Prolog32 V1.1 for WIN32 is a powerful, highly optimised, and extended version of the logic programming language Prolog. Arity/Prolog32 V1.1 for WIN32 is a complete compiler and interpreter written in Prolog, C, and Assembly language and is a superset of Clocksin and Mellish Prolog.

Arity/Prolog32 V1.1 for WIN32 produces extremely fast, compact and efficient production code for your applications. Arity/Prolog32 V1.1 for WIN32 includes a true compiler that allows you to build and distribute stand-alone executable applications without a run-time license or the additional burden of royalties. This package provides a powerful and sophisticated development and run-time environment for building a broad spectrum of applications, including manufacturing and process control, aerospace, insurance, banking, as well as database design and machine translation.

FEATURES

Language Integration * Arity/Prolog32 V1.1 for WIN32 contains a C compiler capable of handling C declarations, preprocessor directives, and C expressions embedded within Prolog source code. You can include C header files in your Prolog programs as well as declare Prolog code to be directly called from C and C++.

Support for Concurrent Prolog Execution * Arity/Prolog32 V1.1 for WIN32 allows you to build efficient multi-threaded applications. Arity/Prolog32 V1.1 for WIN32 allows threads within the same process to share access to an internal database. Applications that have more than one process may operate on more than one internal database concurrently. This flexibility allows you to build powerful applications such as expert system and knowledge base servers.

Integrated Programming Shell * Arity/Prolog's menu-driven, programming environment integrates the interpreter, editor, debugger, and help system. You can use either the built-in editor or any other text editor. The built-in editor supports nine buffers, search/replace, automatic indenting, and cut/copy/paste operations as well as optional automatic syntax checking when programs are loaded.

Virtual Databases * Arity/Prolog32 V1.1 for WIN32 provides the only true virtual database available in a Prolog implementation. Internal databases of up to four gigabytes in size are managed automatically. Sequential, hashed, and b-tree access methods are provided, as well as the ability to define custom access methods. Even with large quantities of variable-length data and multiple data structures, Arity/Prolog32's V1.1 database access speed is faster than that of the leading database products.

Debugger * A source level debugger lets you trace through your code and set spy points.

Arithmetic * An added feature of Arity/Prolog32 V1.1 for WIN32 lets you take advantage of full floating-point support including transcendentals. Also, Arity/Prolog32 V1.1 for WIN32 is the only Prolog to provide true 32-bit integer support.

String Support * Arity/Prolog32 V1.1 for WIN32 provides full text string support, including string concatenation, substring search with backtracking, extraction, and string I/O. String support also includes conversion between strings and other data types.

Unix Style File I/O and System Functions * Arity/Prolog32 V1.1 for WIN32 includes a versatile and convenient means of calling operating system functions from your program.

Definite Clause Grammar Support * Arity/Prolog32 V1.1 for WIN32 can use this programming notation for building natural language systems and applications.

Evaluable Predicates * Arity/Prolog32 V1.1 for WIN32 provides a more comprehensive set of system primitives than any other Prolog implementation. Callable routines can handle file, terminal, and character I/O; access and modify the database; collect, sort and classify terms; control program execution; evaluate arithmetic and logical expressions; and modify the program.

Arity/Prolog products are distributed on 3-1/2" disks. To use Arity/Prolog32 V1.1 for WIN32, you need either the Win32 SDK or equivalent. In order to build GUI applications you need to integrate Arity/Prolog with a development environment such as C or C++.