File: c-prs   Node: Database

Menu

Database
****

The content of the PRS database represents the current
beliefs of the system. Some of these beliefs are provided initially by the
system user. Typically, they include facts about static properties of
the application domain, such as the structure of some subsystem or the physical
laws that must be obeyed by certain mechanical components. Other beliefs are
derived by C-PRS itself as it executes its KAs. They are typically current
observations about the world or conclusions derived by the system from these
observations, and they may change over time. For example, at some times
C-PRS may believe that the pressure of a tank is within
acceptable operating limits, at other times not. Updates to the database
therefore necessitate the use of consistency maintenance techniques.

The database is one of the most important components of the C-PRS kernel.
Its role is basically to "remember" which expressions or
evaluable predicates are true and, to give the expressions back upon
consultation. This consultation can be done by the user himself with
a `consult' command, see *Note C-PRS Kernel Database Commands::, or
by the kernel itself when it tries to execute a procedure, see
*Note Procedure Execution and Run Time::.

On top of these basic functionalities, several related
functionalities are provided by the database and are very often
critical in the application using C-PRS. They are all presented in this
chapter.

The database uses a term indexing mechanism [Stieckel], which has
been extended in various ways to handle some specific mechanisms and allows
consultation in constant time.

* Menu:

* Database File Format::
* Unification and Frames::
* Conclude::
* Consultation::
* Closed World Predicates::
* Functional Facts::
* Basic Events::

Menu

Database File Format
Unification and Frames
Conclude
Consultation
Closed World Predicates
Functional Facts
Basic Events

XRef

C-PRS Kernel Database Cor
Procedure Execution and Ru

Menu   Xref   Goto   Search

Dismiss

(c-prs)Database, 2020 characters, subfile: c-prs-2

Message