memory view

review of existing scheme foreign function interface libraries

Portable libraries

r6rs-pffi

- https://github.com/ktakashi/r6rs-pffi
- supported:
 - chez
 - mosh
 - guile
 - mzscheme
 - vicare

comments: - provides both a portable ffi and struct handling - unhygienic

scheme-bytestructures

- https://github.com/TaylanUB/scheme-bytestructures
- \bullet supported:
 - r7rs
 - chibi
 - gauche
 - larceny
 - guile
 - kawa

comments: - it deals with working with C structs in scheme - does not support functions in struct

Implementation specific libraries

bigloo

• https://www-sop.inria.fr/mimosa/fp/Bigloo/bigloo-3.html#Documentation

chez

• https://cisco.github.io/ChezScheme/csug9.5/foreign.html

chibi

• http://synthcode.com/scheme/chibi#h2_CFFI

comments:

- it provides a C structs representation in scheme
- it provides a "stubber" that reads a .c file and generate scheme wrapper

chicken

- $\bullet \ \ \, http://wiki.call-cc.org/man/5/Interface\%20 to\%20 external\%20 functions\%20 and\%20 variables comments:$
 - see http://wiki.call-cc.org/eggref/5/bind

gauche

not found

• https://practical-scheme.net/gauche/man/gauche-refe/index.html

guile

 $\bullet \ https://www.gnu.org/software/guile/manual/html_node/Foreign-Function-Interface.html\#Foreign-Function-Interface \\$

comments:

 $\bullet \ \ see \ https://www.nongnu.org/nyacc/ffi-help.html$

ikarus

• http://ikarus-scheme.org/#documentation

kawa

not found

 $\bullet \ \ https://www.gnu.org/software/kawa/$

larceny

 • http://larcenists.org/Documentation/Documentation1.3/user-manual-alt.html#FfiChapter

comments:

 $\bullet \ \ see \ https://www.researchgate.net/publication/237748861_The_Layers_of_Larceny's_Foreign_Function_triangles and the second seco$

mosh

 $\bullet \ \ http://mosh.monaos.org/files/lib/mosh/ffi-ss.html$

vicare

not found

racket

 $\bullet \ \ https://docs.racket-lang.org/foreign/index.html$