

Clusters found in the ACL2 book repository

Jónathan Heras and Ekaterina Komendantskaya

Abstract

In this note, we use ACL2(ml) [1, 3] to analyse the redundancies in the ACL2 book repository. The results presented in this note are an extension of the results presented in [2]. We analyse clusters that are produced in the ACL2 distribution version 6.4 using the K-means algorithm and the value 3 as granularity parameter. We can distinguish the following classification of clusters.

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1 C.1. Functions re-defined in several books of the same library

39% of the clusters are related to a function that has been defined several times in different books of the same library.

Cluster 39

Definition /rtl/rel1/support/logdefs.lisp::BITS

Definition /rtl/rel1/support/logxor-def.lisp::BITS

Definition /rtl/rel1/lib1/float.lisp::bits

Definition /rtl/rel1/lib1/bits.lisp::bits

Definition /rtl/rel1/lib3/float.lisp::bits

Definition /rtl/rel1/lib3/bits.lisp::bits

Cluster 105

Definition /rtl/rel1/support/refs.lisp::sigf

Definition /rtl/rel1/lib1/refs.lisp::sigf

Definition /rtl/rel1/lib3/rep.s.lisp::sigf

Cluster 381

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-pp4_alt-theta_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-pp4_alt-theta_alt

Cluster 380

Definition /centaur/misc/smm-impl.lisp::smme-blocks-wfp

Definition /centaur/misc/smm.lisp::smme-blocks-wfp

Cluster 376

Definition /coi/gacc/gacc.lisp::syntax-consp-or-symbol

Definition /coi/gacc/gacc2.lisp::syntax-consp-or-symbol

Cluster 377

Definition /rtl/rel1/lib1/rep.s.lisp::plistp

Definition /rtl/rel1/lib3/rep.s.lisp::plistp

Cluster 378

Definition /rtl/rel8/support/lib2.delta1/rtl-new.lisp::setbits_alt

Definition /rtl/rel8/support/lib2.delta1/rtl-new-proofs.lisp::setbits_alt

Cluster 110

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::theta_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::theta_alt

Cluster 379

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-pp8_alt-eta_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-pp8_alt-eta_alt

Cluster 372

Definition /rtl/rel1/support/fadd/lop3.lisp::LAMZ

Definition /rtl/rel1/lib3/fadd.lisp::lamz

Cluster 135

Definition /rtl/rel8/lib/add.lisp::rc-carry

Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::rc-carry

Definition /rtl/rel8/support/lib2.delta1/add.lisp::rc-carry

Definition /rtl/rel8/support/lib2.delta2/add.lisp::rc-carry

Cluster 140

Definition /proofstyles/counterexamples/memory-clearing.lisp::factorial

Definition /proofstyles/counterexamples/realistic.lisp::!

Cluster 142

Definition /coi/alists/bindequiv.lisp::assoc-transparent

Definition /coi/alists/alists-definitions.lisp::assoc-transparent

Cluster 373

Definition /misc/defabsstobj-example-3.lisp::st\$ap

Definition /misc/defabsstobj-example-1.lisp::st\$ap

Cluster 272

Definition /rtl/rel1/support/merge.lisp::shft

Definition /rtl/rel1/lib3/bits.lisp::shft

Cluster 374

Definition /coi/gacc/gacc.lisp::syntax-consp-or-quote

Definition /coi/gacc/gacc2.lisp::syntax-consp-or-quote

Cluster 191

Definition /centaur/defrstobj/groundwork/demo2.lisp::st-set1

Definition /centaur/defrstobj/groundwork/demo1.lisp::st-set1

Cluster 199

Definition /rtl/rel8/support/lib2.delta1/bits-new.lisp::sumbits_alt

Definition /rtl/rel8/support/lib2.delta1/bits-new-proofs.lisp::sumbits_alt

Cluster 375

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::pp8_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::pp8_alt

Cluster 370

Definition /misc/defabsstobj-example-3.lisp::update\$a

Definition /misc/defabsstobj-example-1.lisp::update\$a

Cluster 253

Definition /misc/defabsstobj-example-3.lisp::misc\$a

Definition /misc/defabsstobj-example-1.lisp::misc\$a

Cluster 254

Definition /coi/lists/set.lisp::setequiv

Definition /coi/lists/listset-induction.lisp::setequiv

Cluster 288

Definition /coi/osets/sets.lisp::intersect

Definition /coi/osets/outer.lisp::intersect

Cluster 371

Definition /rtl/rel1/support/rep.lisp::REPP

Definition /rtl/rel1/lib1/rep.s.lisp::repp

Definition /rtl/rel1/lib3/rep.s.lisp::repp

Cluster 368

Definition /coi/symbol-fns/symbol-fns.lisp::map-symbol-list-to-package

Definition /coi/symbol-fns/symbol-fns-definitions.lisp::map-symbol-list-to-package

Cluster 365

Definition /rtl/rel8/support/lib2.delta1/rtl-new.lisp::setbitn_alt

Definition /rtl/rel8/support/lib2.delta1/rtl-new-proofs.lisp::setbitn_alt

Cluster 362

Definition /misc/defabsstobj-example-3.lisp::map\$ap

Definition /misc/defabsstobj-example-1.lisp::map\$ap

Cluster 360

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-pp4_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-pp4_alt

Cluster 357

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-eta_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-eta_alt

Cluster 352

Definition /unicode/list-defuns.lisp::revappend-without-guard

Definition /unicode/rev.lisp::revappend-without-guard

Cluster 349

Definition /coi/symbol-fns/symbol-fns.lisp::list-to-string

Definition /coi/symbol-fns/symbol-fns-definitions.lisp::list-to-string

Cluster 348

Definition /rtl/rel1/support/near.lisp::near-witness

Definition /rtl/rel1/lib1/round.lisp::near-witness

Definition /rtl/rel1/lib3/round.lisp::near-witness

Cluster 346

Definition /rtl/rel1/support/logdefs.lisp::SHL

Definition /rtl/rel1/support/logxor-def.lisp::SHL

Cluster 343

Definition /rtl/rel1/support/fadd/lop3.lisp::LAMT

Definition /rtl/rel1/lib3/fadd.lisp::lamt

Cluster 344

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-theta_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-theta_alt

Cluster 340

Definition /rtl/rel1/support/fadd/lop3.lisp::LAMG

Definition /rtl/rel1/lib3/fadd.lisp::lamg

Cluster 336

Definition /make-event/gen-defun-check.lisp::defun-from-body

Definition /make-event/gen-defun.lisp::defun-from-body

Cluster 337

Definition /coi/symbol-fns/symbol-fns.lisp::safe-witness

Definition /coi/symbol-fns/symbol-fns-definitions.lisp::safe-witness

Cluster 334

Definition /coi/alist/bindequiv.lisp::cross-domain-binding

Definition /coi/alist/alist-definitions.lisp::cross-domain-binding

Cluster 331

Definition /coi/osets/sets.lisp::delete

Definition /coi/osets/outer.lisp::delete

Cluster 332

Definition /misc/defabsstobj-example-3.lisp::update-misc\$a

Definition /misc/defabsstobj-example-1.lisp::update-misc\$a

Cluster 333

Definition /coi/alist/bindequiv.lisp::unified-domain-binding

Definition /coi/alist/alist-definitions.lisp::unified-domain-binding

Cluster 328

Definition /rtl/rel1/support/fadd/lop3.lisp::LAM4

Definition /rtl/rel1/lib3/fadd.lisp::lam4

Cluster 329

Definition /centaur/defrstobj/groundwork/demo2.lisp::st-get1

Definition /centaur/defrstobj/groundwork/demo1.lisp::st-get1

Cluster 330

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::pp4_alt-psi_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::pp4_alt-psi_alt

Cluster 326

Definition /rtl/rel1/support/rep.lisp::DECODE

Definition /rtl/rel1/lib1/rep.lisp::decode

Definition /rtl/rel1/lib3/rep.s.lisp::decode

Cluster 327

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::bmux4_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::bmux4_alt

Cluster 322

Definition /rtl/rel8/support/lib2.delta1/round-new-proofs.lisp::roundup_alt

Definition /rtl/rel8/support/lib2.delta1/round-new.lisp::roundup_alt

Cluster 323

Definition /rtl/rel1/support/fadd/lop3.lisp::LAMB

Definition /rtl/rel1/lib3/fadd.lisp::lamb

Cluster 324

Definition /rtl/rel1/support/rep.s.lisp::ENCODE

Definition /rtl/rel1/lib1/rep.s.lisp::encode

Definition /rtl/rel1/lib3/rep.s.lisp::encode

Cluster 320

Definition /rtl/rel8/support/lib2.delta1/bits-new.lisp::sumbits_alt-badguy

Definition /rtl/rel8/support/lib2.delta1/bits-new-proofs.lisp::sumbits_alt-badguy

Cluster 316

Definition /misc/defabsstobj-example-3.lisp::corr-mem

Definition /misc/defabsstobj-example-1.lisp::corr-mem

Cluster 314

Definition /rtl/rel1/support/odd.lisp::odd

Definition /rtl/rel1/lib1/round.lisp::odd

Definition /rtl/rel1/lib3/round.lisp::odd

Cluster 310

Definition /centaur/misc/smm-impl.lisp::smme-mem-clear

Definition /centaur/misc/smm.lisp::smme-mem-clear

Cluster 307

Definition /coi/gacc/gacc.lisp::syntax-atom

Definition /coi/gacc/gacc2.lisp::syntax-atom

Cluster 303

Definition /rtl/rel8/lib/bits.lisp::signextend

Definition /rtl/rel8/support/lib2.delta2/add-lib.lisp::signextend

Definition /rtl/rel8/support/lib2.delta2/bits.lisp::signextend

Cluster 304
Definition /proofstyles/soundness/stepwise-invariants-partial.lisp::run-fn
Definition /proofstyles/soundness/stepwise-invariants-total.lisp::run-fn
Definition /proofstyles/soundness/clock-partial.lisp::run-fn
Definition /proofstyles/soundness/clock-total.lisp::run-fn

Cluster 301
Definition /rtl/rel8/support/lib2.delta1/rep-s-new-proofs.lisp::esigf_alt
Definition /rtl/rel8/support/lib2.delta1/rep-s-new.lisp::esigf_alt

Cluster 298
Definition /rtl/rel8/lib/add.lisp::lamt
Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lamt
Definition /rtl/rel8/support/lib2.delta1/add.lisp::lamt
Definition /rtl/rel8/support/lib2.delta2/add.lisp::lamt

Cluster 297
Definition /misc/defabsstobj-example-3.lisp::st\$cp+
Definition /misc/defabsstobj-example-1.lisp::st\$cp+

Cluster 296
Definition /rtl/rel1/support/rep-s.lisp::GET-SBITS
Definition /rtl/rel1/lib1/rep-s.lisp::get-sbits
Definition /rtl/rel1/lib3/rep-s.lisp::get-sbits

Cluster 293
Definition /make-event/basic-pkg-check.lisp::bar
Definition /make-event/basic-pkg.lisp::bar
Definition /make-event/basic-check.lisp::bar

Cluster 294
Definition /proofstyles/counterexamples/memory-clearing.lisp::mem
Definition /proofstyles/counterexamples/halt-flg.lisp::mem

Cluster 287
Definition /coi/sets/sets.lisp::mergesort-exec
Definition /coi/sets/sort.lisp::mergesort-exec

Cluster 286
Definition /proofstyles/counterexamples/memory-clearing.lisp::==
Definition /proofstyles/counterexamples/halt-flg.lisp::==
Definition /proofstyles/counterexamples/realistic.lisp::==

Cluster 280
Definition /misc/csort.lisp::data
Definition /misc/hanoi.lisp::pop

Cluster 281

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::delta_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::delta_alt

Cluster 277

Definition /rtl/rel1/support/rep.s.lisp::FORMATP

Definition /rtl/rel1/lib1/rep.s.lisp::formatp

Definition /rtl/rel1/lib3/rep.s.lisp::formatp

Cluster 278

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::gamma_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::gamma_alt

Cluster 275

Definition /centaur/misc/smm-impl.lisp::smme-sizes-okp

Definition /centaur/misc/smm.lisp::smme-sizes-okp

Cluster 269

Definition /centaur/misc/smm-impl.lisp::smmlp

Definition /centaur/misc/smm.lisp::smmlp

Cluster 266

Definition /rtl/rel8/support/lib2.delta1/rep.s-new-proofs.lisp::esgnf_alt

Definition /rtl/rel8/support/lib2.delta1/rep.s-new.lisp::esgnf_alt

Cluster 262

Definition /rtl/rel8/lib/add.lisp::rc-sum

Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::rc-sum

Definition /rtl/rel8/support/lib2.delta1/add.lisp::rc-sum

Definition /rtl/rel8/support/lib2.delta2/add.lisp::rc-sum

Cluster 259

Definition /rtl/rel1/support/rep.s.lisp::NORMAL-ENCODING-P

Definition /rtl/rel1/lib1/rep.s.lisp::normal-encoding-p

Definition /rtl/rel1/lib3/rep.s.lisp::normal-encoding-p

Cluster 260

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-pp4_alt-phi_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-pp4_alt-phi_alt

Cluster 261

Definition /rtl/rel1/support/fadd/lop3.lisp::LAM3

Definition /rtl/rel1/lib3/fadd.lisp::lam3

Cluster 256

Definition /rtl/rel1/support/reprs.lisp::sgnf

Definition /rtl/rel1/lib1/reprs.lisp::sgnf

Definition /rtl/rel1/lib3/reprs.lisp::sgnf

Cluster 252

Definition /rtl/rel1/support/rnd.lisp::RND

Definition /rtl/rel1/lib1/round.lisp::rnd

Definition /rtl/rel1/lib3/round.lisp::rnd

Cluster 247

Definition /misc/defabsstobj-example-3.lisp::st\$corr

Definition /misc/defabsstobj-example-1.lisp::st\$corr

Cluster 248

Definition /rtl/rel8/support/lib2.delta1/reprs-new-proofs.lisp::isgnf_alt

Definition /rtl/rel8/support/lib2.delta1/float-new-proofs.lisp::isgnf_alt

Definition /rtl/rel8/support/lib2.delta1/reprs-new.lisp::isgnf_alt

Definition /rtl/rel8/support/lib2.delta1/float-new.lisp::isgnf_alt

Cluster 249

Definition /rtl/rel1/support/logdefs.lisp::INDUCT-NAT

Definition /rtl/rel1/support/logxor-def.lisp::INDUCT-NAT

Cluster 243

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::eta_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::eta_alt

Cluster 239

Definition /coi/osets/sets.lisp::difference

Definition /coi/osets/outer.lisp::difference

Cluster 240

Definition /coi/osets/sets.lisp::mergesort

Definition /coi/osets/sort.lisp::mergesort

Cluster 241

Definition /arithmetic-4/lib/basic-ops/integerp-meta.lisp::meta-integerp

Definition /arithmetic-4/lib/basic-ops/integerp-meta.lisp::meta-rationalp

Cluster 242

Definition /rtl/rel8/lib/log.lisp::logop-3-induct-g

Definition /rtl/rel8/support/lib2.delta1/log-proofs.lisp::logop-3-induct-g

Definition /rtl/rel8/support/lib2.delta1/log.lisp::logop-3-induct-g
Definition /rtl/rel8/support/lib2.delta2/log.lisp::logop-3-induct-g

Cluster 235

Definition /rtl/rel7/lib/mult.lisp::sum-phi
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-phi
Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-phi
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-phi
Definition /rtl/rel8/support/lib2/mult.lisp::sum-phi

Cluster 233

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::pp8_alt-eta_alt
Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::pp8_alt-eta_alt

Cluster 223

Definition /rtl/rel8/lib/add.lisp::lamb
Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lamb
Definition /rtl/rel8/support/lib2.delta1/add.lisp::lamb
Definition /rtl/rel8/support/lib2.delta2/add.lisp::lamb

Cluster 220

Definition /rtl/rel1/support/merge.lisp::fl-half
Definition /rtl/rel1/lib1/basic.lisp::fl-half
Definition /rtl/rel1/lib3/basic.lisp::fl-half

Cluster 216

Definition /deduction/passmore/prover.lisp::filter-duplicates
Definition /deduction/passmore/general.lisp::filter-duplicates

Cluster 217

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::pp4_alt
Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::pp4_alt

Cluster 218

Definition /coi/termination/assuming/zero.lisp::tarai-open
Definition /coi/termination/assuming/complex.lisp::tarai-open

Cluster 213

Definition /rtl/rel1/support/rnd.lisp::IEEE-MODE-P
Definition /rtl/rel1/lib1/round.lisp::ieee-mode-p
Definition /rtl/rel1/lib3/round.lisp::ieee-mode-p

Cluster 208

Definition /coi/termination/assuming/zero.lisp::m1
Definition /coi/termination/assuming/complex.lisp::m1

Cluster 209

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::bmux8_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::bmux8_alt

Cluster 204

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-phi_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-phi_alt

Cluster 197

Definition /coi/overkill/overkill-definitions.lisp::bozo-include-book-dir

Definition /coi/overkill/bozo-ld.lisp::bozo-include-book-dir

Cluster 198

Definition /rtl/rel1/support/fadd/top.lisp::SIGM

Definition /rtl/rel1/support/fadd/stick.lisp::SIGM

Definition /rtl/rel1/lib3/fadd.lisp::sigm

Cluster 190

Definition /rtl/rel1/support/add.lisp::FLIP

Definition /rtl/rel1/lib1/round.lisp::flip

Definition /rtl/rel1/lib3/round.lisp::flip

Cluster 186

Definition /rtl/rel1/support/merge.lisp::bvecp

Definition /rtl/rel1/lib3/bits.lisp::bvecp

Cluster 183

Definition /make-event/gen-defun-check.lisp::gen-name

Definition /make-event/gen-defun.lisp::gen-name

Cluster 180

Definition /rtl/rel1/support/fadd/lop3.lisp::LAM1

Definition /rtl/rel1/lib3/fadd.lisp::lam1

Cluster 174

Definition /rtl/rel1/support/float.lisp::expo

Definition /rtl/rel1/lib1/round.lisp::expo

Definition /rtl/rel1/lib1/float.lisp::expo

Definition /rtl/rel1/lib3/round.lisp::expo

Definition /rtl/rel1/lib3/float.lisp::expo

Cluster 176

Definition /rtl/rel1/support/trunc.lisp::trunc
Definition /rtl/rel1/lib1/round.lisp::trunc
Definition /rtl/rel1/lib3/round.lisp::trunc

Cluster 172

Definition /rtl/rel8/lib/add.lisp::lam4
Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lam4
Definition /rtl/rel8/support/lib2.delta1/add.lisp::lam4
Definition /rtl/rel8/support/lib2.delta2/add.lisp::lam4

Cluster 169

Definition /coi/alist/bindequiv.lisp::equiv-domain-binding
Definition /coi/alist/alist-definitions.lisp::equiv-domain-binding

Cluster 170

Definition /rtl/rel8/lib/bits.lisp::sgndintval
Definition /rtl/rel8/support/lib2.delta2/add-lib.lisp::sgndintval
Definition /rtl/rel8/support/lib2.delta2/bits.lisp::sgndintval

Cluster 165

Definition /rtl/rel1/support/float.lisp::expo2
Definition /rtl/rel1/lib1/round.lisp::expo2
Definition /rtl/rel1/lib1/float.lisp::expo2
Definition /rtl/rel1/lib3/round.lisp::expo2
Definition /rtl/rel1/lib3/float.lisp::expo2

Cluster 166

Definition /rtl/rel8/lib/add.lisp::lam3
Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lam3
Definition /rtl/rel8/support/lib2.delta1/add.lisp::lam3
Definition /rtl/rel8/support/lib2.delta2/add.lisp::lam3

Cluster 157

Definition /coi/osets/sets.lisp::union
Definition /coi/osets/outer.lisp::union

Cluster 158

Definition /rtl/rel8/support/lib2.delta1/rep-new-proofs.lisp::eexpof_alt
Definition /rtl/rel8/support/lib2.delta1/rep-new.lisp::eexpof_alt

Cluster 159

Definition /centaur/misc/smm-impl.lisp::smme-wfp
Definition /centaur/misc/smm.lisp::smme-wfp

Cluster 150

Definition /rtl/rel8/lib/log.lisp::logop-2-induct-g
 Definition /rtl/rel8/support/lib2.delta1/log-proofs.lisp::logop-2-induct-g
 Definition /rtl/rel8/support/lib2.delta1/log.lisp::logop-2-induct-g
 Definition /rtl/rel8/support/lib2.delta2/log.lisp::logop-2-induct-g

Cluster 146

Definition /rtl/rel8/lib/add.lisp::lam1
 Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lam1
 Definition /rtl/rel8/support/lib2.delta1/add.lisp::lam1
 Definition /rtl/rel8/support/lib2.delta2/add.lisp::lam1

Cluster 143

Definition /rtl/rel1/support/float.lisp::expo1
 Definition /rtl/rel1/lib1/round.lisp::expo1
 Definition /rtl/rel1/lib1/float.lisp::expo1
 Definition /rtl/rel1/lib3/round.lisp::expo1
 Definition /rtl/rel1/lib3/float.lisp::expo1

Cluster 144

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::psi_alt
 Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::psi_alt

Cluster 145

Definition /rtl/rel8/lib/add.lisp::lamg
 Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lamg
 Definition /rtl/rel8/support/lib2.delta1/add.lisp::lamg
 Definition /rtl/rel8/support/lib2.delta2/add.lisp::lamg

Cluster 138

Definition /rtl/rel1/support/away.lisp::away
 Definition /rtl/rel1/lib1/round.lisp::away
 Definition /rtl/rel1/lib3/round.lisp::away

Cluster 136

Definition /rtl/rel1/support/rnd.lisp::RND-CONST
 Definition /rtl/rel1/lib1/round.lisp::rnd-const
 Definition /rtl/rel1/lib3/round.lisp::rnd-const

Cluster 133

Definition /rtl/rel1/support/logdefs.lisp::CAT
 Definition /rtl/rel1/support/logxor-def.lisp::CAT
 Definition /rtl/rel1/lib1/reprs.lisp::cat
 Definition /rtl/rel1/lib3/bits.lisp::cat
 Definition /rtl/rel1/lib3/reprs.lisp::cat

Cluster 134

Definition /coi/symbol-fns/symbol-fns.lisp::symbol-list-to-string
Definition /coi/symbol-fns/symbol-fns-definitions.lisp::symbol-list-to-string
Definition /coi/records/defrecord.lisp::symbol-list-to-string
Definition /coi/records/defrecord-fast.lisp::symbol-list-to-string

Cluster 126

Definition /centaur/misc/smm-impl.lisp::u32-list-listp
Definition /centaur/misc/smm.lisp::u32-list-listp

Cluster 127

Definition /coi/symbol-fns/symbol-fns.lisp::number-symbol-list
Definition /coi/symbol-fns/symbol-fns-definitions.lisp::number-symbol-list

Cluster 122

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::pp4_alt-theta_alt
Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::pp4_alt-theta_alt

Cluster 120

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::pp4_alt-phi_alt
Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::pp4_alt-phi_alt

Cluster 115

Definition /centaur/misc/smm-impl.lisp::smme-nextfree
Definition /centaur/misc/smm.lisp::smme-nextfree

Cluster 116

Definition /rtl/rel1/support/fadd/top.lisp::KAP
Definition /rtl/rel1/support/fadd/stick.lisp::KAP
Definition /rtl/rel1/lib3/fadd.lisp::kap

Cluster 117

Definition /rtl/rel8/lib/add.lisp::lamz
Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lamz
Definition /rtl/rel8/support/lib2.delta1/add.lisp::lamz
Definition /rtl/rel8/support/lib2.delta2/add.lisp::lamz

Cluster 112

Definition /coi/osets/sets.lisp::cardinality
Definition /coi/osets/outer.lisp::cardinality

Cluster 113

Definition /rtl/rel1/support/logdefs.lisp::SHR
Definition /rtl/rel1/support/logxor-def.lisp::SHR

Cluster 100

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-psi_alt
Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-psi_alt

Cluster 94

Definition /rtl/rel8/lib/add.lisp::lam2
Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lam2
Definition /rtl/rel8/support/lib2.delta1/add.lisp::lam2
Definition /rtl/rel8/support/lib2.delta2/add.lisp::lam2

Cluster 89

Definition /rtl/rel1/support/rep.s.lisp::GET-EBITS
Definition /rtl/rel1/lib1/rep.s.lisp::get-ebits
Definition /rtl/rel1/lib3/rep.s.lisp::get-ebits

Cluster 87

Definition /rtl/rel1/support/fadd/lop3.lisp::LAM2
Definition /rtl/rel1/lib3/fadd.lisp::lam2

Cluster 88

Definition /centaur/misc/smm-impl.lisp::smme-addblock
Definition /centaur/misc/smm.lisp::smme-addblock

Cluster 83

Definition /rtl/rel1/support/float.lisp::sgn
Definition /rtl/rel1/lib1/round.lisp::sgn
Definition /rtl/rel1/lib1/float.lisp::sgn
Definition /rtl/rel1/lib3/round.lisp::sgn
Definition /rtl/rel1/lib3/float.lisp::sgn

Cluster 77

Definition /proofstyles/completeness/clock-partial.lisp::clock-fn
Definition /proofstyles/completeness/clock-total.lisp::clock-fn

Cluster 75

Definition /rtl/rel1/support/sticky.lisp::STICKY
Definition /rtl/rel1/lib1/round.lisp::sticky
Definition /rtl/rel1/lib3/round.lisp::sticky

Cluster 76

Definition /rtl/rel1/support/rep.s.lisp::expf
Definition /rtl/rel1/lib1/rep.s.lisp::expf
Definition /rtl/rel1/lib3/rep.s.lisp::expf

Cluster 73

Definition /rtl/rel1/support/basic.lisp::cg
Definition /rtl/rel1/lib1/round.lisp::cg

Definition /rtl/rel1/lib1/basic.lisp::cg
Definition /rtl/rel1/lib1/bits.lisp::cg
Definition /rtl/rel1/lib3/round.lisp::cg
Definition /rtl/rel1/lib3/basic.lisp::cg
Definition /rtl/rel1/lib3/basic.lisp::cg
Definition /rtl/rel1/lib3/bits.lisp::cg

Cluster 70

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-pp8_alt
Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-pp8_alt

Cluster 63

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::phi_alt
Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::phi_alt

Cluster 41

Definition /misc/defabsstobj-example-3.lisp::lookup\$a
Definition /misc/defabsstobj-example-1.lisp::lookup\$a

Cluster 42

Definition /rtl/rel1/support/fadd/top.lisp::TAU
Definition /rtl/rel1/support/fadd/stick.lisp::TAU
Definition /rtl/rel1/lib3/fadd.lisp::tau

Cluster 37

Definition /coi/maps/maps-definitions.lisp::typed-mapp
Definition /coi/maps/typed-maps.lisp::typed-mapp

Cluster 35

Definition /rtl/rel1/support/float.lisp::exactp
Definition /rtl/rel1/lib1/round.lisp::exactp
Definition /rtl/rel1/lib1/float.lisp::exactp
Definition /rtl/rel1/lib3/round.lisp::exactp
Definition /rtl/rel1/lib3/float.lisp::exactp

Cluster 26

Definition /rtl/rel1/support/float.lisp::sig
Definition /rtl/rel1/lib1/round.lisp::sig
Definition /rtl/rel1/lib1/float.lisp::sig
Definition /rtl/rel1/lib3/round.lisp::sig
Definition /rtl/rel1/lib3/float.lisp::sig

Cluster 27

Definition /rtl/rel8/support/lib2.delta1/rep8-new-proofs.lisp::isigf_alt

Definition /rtl/rel8/support/lib2.delta1/float-new-proofs.lisp::isigf_alt
Definition /rtl/rel8/support/lib2.delta1/rep-new.lisp::isigf_alt
Definition /rtl/rel8/support/lib2.delta1/float-new.lisp::isigf_alt

Cluster 15
Definition /rtl/rel8/support/lib2.delta1/rep-new-proofs.lisp::iexpof_alt
Definition /rtl/rel8/support/lib2.delta1/float-new-proofs.lisp::iexpof_alt
Definition /rtl/rel8/support/lib2.delta1/rep-new.lisp::iexpof_alt
Definition /rtl/rel8/support/lib2.delta1/float-new.lisp::iexpof_alt

Cluster 8
Definition /rtl/rel1/support/logdefs.lisp::DEC1
Definition /rtl/rel1/support/logxor-def.lisp::DEC1

Cluster 4
Definition /rtl/rel1/support/near.lisp::near
Definition /rtl/rel1/lib1/round.lisp::near
Definition /rtl/rel1/lib3/round.lisp::near

2 C.2. Functions re-defined in several versions of a library

18% of the clusters are related to a function that has been re-defined in different versions of a library.

Cluster 6
Definition /rtl/rel7/arithmetic/induct.lisp::logand-three-args-induct
Definition /rtl/rel8/arithmetic/induct.lisp::logand-three-args-induct
Definition /rtl/rel5/arithmetic/induct.lisp::logand-three-args-induct
Definition /rtl/rel4/arithmetic/induct.lisp::logand-three-args-induct

Cluster 11
Definition /rtl/rel7/support/support/logs.lisp::comp2<
Definition /rtl/rel8/support/support/logs.lisp::comp2<
Definition /rtl/rel5/support/logs.lisp::comp2<
Definition /rtl/rel4/support/logs.lisp::comp2<

Cluster 14
Definition /rtl/rel1/lib1/brat.lisp::bsym
Definition /rtl/rel1/lib3/brat.lisp::bsym
Definition /rtl/rel7/user/brat.lisp::bsym
Definition /rtl/rel5/user/brat.lisp::bsym
Definition /rtl/rel4/user/brat.lisp::bsym

Cluster 16

Definition /misc/records.lisp::acl2->rcd
Definition /rtl/rel7/lib/rtlarr.lisp::acl2->rcd
Definition /rtl/rel7/support/support/rtlarr.lisp::acl2->rcd
Definition /rtl/rel7/support/lib1/rtlarr.lisp::acl2->rcd
Definition /rtl/rel8/lib/rtlarr.lisp::acl2->rcd
Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::acl2->rcd
Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::acl2->rcd
Definition /rtl/rel8/support/support/rtlarr.lisp::acl2->rcd
Definition /rtl/rel8/support/lib1/rtlarr.lisp::acl2->rcd
Definition /rtl/rel8/support/lib2/rtlarr.lisp::acl2->rcd
Definition /rtl/rel5/lib/rtlarr.lisp::acl2->rcd
Definition /rtl/rel5/support/rtlarr.lisp::acl2->rcd
Definition /rtl/rel4/lib/rtlarr.lisp::acl2->rcd
Definition /rtl/rel4/support/rtlarr.lisp::acl2->rcd

Cluster 22

Definition /rtl/rel1/support/rewrite-theory.lisp::rewrite-theory-fn
Definition /rtl/rel7/support/support/rewrite-theory.lisp::rewrite-theory-fn
Definition /rtl/rel8/support/support/rewrite-theory.lisp::rewrite-theory-fn
Definition /rtl/rel5/support/rewrite-theory.lisp::rewrite-theory-fn
Definition /rtl/rel4/support/rewrite-theory.lisp::rewrite-theory-fn

Cluster 32

Definition /rtl/rel7/arithmetic/induct.lisp::op-dist-induct
Definition /rtl/rel8/arithmetic/induct.lisp::op-dist-induct
Definition /rtl/rel5/arithmetic/induct.lisp::op-dist-induct
Definition /rtl/rel4/arithmetic/induct.lisp::op-dist-induct

Cluster 45

Definition /rtl/rel7/support/support/logs.lisp::comp2<=
Definition /rtl/rel8/support/support/logs.lisp::comp2<=
Definition /rtl/rel5/support/logs.lisp::comp2<=
Definition /rtl/rel4/support/logs.lisp::comp2<=

Cluster 49

Definition /rtl/rel7/support/support/lnot-proofs.lisp::bits
Definition /rtl/rel7/support/support/lnot.lisp::bits
Definition /rtl/rel8/support/support/lnot-proofs.lisp::bits
Definition /rtl/rel8/support/support/lnot.lisp::bits
Definition /rtl/rel5/support/lnot-proofs.lisp::bits
Definition /rtl/rel5/support/lnot.lisp::bits
Definition /rtl/rel4/support/lnot-proofs.lisp::bits
Definition /rtl/rel4/support/lnot.lisp::bits

Cluster 50

Definition /rtl/rel7/support/support/lop3.lisp::lamz-0
Definition /rtl/rel7/support/support/fadd.lisp::lamz-0
Definition /rtl/rel7/support/support/lop3-proofs.lisp::lamz-0
Definition /rtl/rel8/support/support/lop3.lisp::lamz-0

Definition /rtl/rel8/support/support/fadd.lisp::lamz-0
 Definition /rtl/rel8/support/support/lop3-proofs.lisp::lamz-0
 Definition /rtl/rel5/support/lop3.lisp::lamz-0
 Definition /rtl/rel5/support/fadd.lisp::lamz-0
 Definition /rtl/rel5/support/lop3-proofs.lisp::lamz-0

Cluster 60

Definition /rtl/rel7/arithmetic/predicate.lisp::predicatep
 Definition /rtl/rel8/arithmetic/predicate.lisp::predicatep
 Definition /rtl/rel5/arithmetic/predicate.lisp::predicatep
 Definition /rtl/rel4/arithmetic/predicate.lisp::predicatep

Cluster 61

Definition /rtl/rel7/arithmetic/even-odd2-proofs.lisp::induct-scheme
 Definition /rtl/rel8/arithmetic/even-odd2-proofs.lisp::induct-scheme
 Definition /rtl/rel5/arithmetic/even-odd2-proofs.lisp::induct-scheme
 Definition /rtl/rel4/arithmetic/even-odd2-proofs.lisp::induct-scheme

Cluster 65

Definition /rtl/rel7/support/support/mulcat.lisp::mulcat-induct
 Definition /rtl/rel7/user/mulcat.lisp::mulcat-induct
 Definition /rtl/rel8/support/support/mulcat.lisp::mulcat-induct
 Definition /rtl/rel5/support/mulcat.lisp::mulcat-induct
 Definition /rtl/rel5/user/mulcat.lisp::mulcat-induct
 Definition /rtl/rel4/support/mulcat.lisp::mulcat-induct
 Definition /rtl/rel4/user/mulcat.lisp::mulcat-induct

Cluster 72

Definition /rtl/rel7/support/support/lop3.lisp::lamt-0
 Definition /rtl/rel7/support/support/fadd.lisp::lamt-0
 Definition /rtl/rel7/support/support/lop3-proofs.lisp::lamt-0
 Definition /rtl/rel8/support/support/lop3.lisp::lamt-0
 Definition /rtl/rel8/support/support/fadd.lisp::lamt-0
 Definition /rtl/rel8/support/support/lop3-proofs.lisp::lamt-0
 Definition /rtl/rel5/support/lop3.lisp::lamt-0
 Definition /rtl/rel5/support/fadd.lisp::lamt-0
 Definition /rtl/rel5/support/lop3-proofs.lisp::lamt-0

Cluster 78

Definition /rtl/rel7/support/support/lop3.lisp::lamg-0
 Definition /rtl/rel7/support/support/fadd.lisp::lamg-0
 Definition /rtl/rel7/support/support/lop3-proofs.lisp::lamg-0
 Definition /rtl/rel8/support/support/lop3.lisp::lamg-0
 Definition /rtl/rel8/support/support/fadd.lisp::lamg-0
 Definition /rtl/rel8/support/support/lop3-proofs.lisp::lamg-0
 Definition /rtl/rel5/support/lop3.lisp::lamg-0
 Definition /rtl/rel5/support/fadd.lisp::lamg-0
 Definition /rtl/rel5/support/lop3-proofs.lisp::lamg-0

Cluster 92

Definition /rtl/rel7/support/support/rtl.lisp::shft
Definition /rtl/rel8/support/support/rtl.lisp::shft
Definition /rtl/rel5/support/rtl.lisp::shft
Definition /rtl/rel4/support/rtl.lisp::shft

Cluster 123

Definition /rtl/rel7/support/support/rtl.lisp::bits
Definition /rtl/rel8/support/support/rtl.lisp::bits
Definition /rtl/rel5/support/rtl.lisp::bits
Definition /rtl/rel4/support/rtl.lisp::bits

Cluster 141

Definition /rtl/rel7/lib/mult.lisp::pp4
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::pp4
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::pp4
Definition /rtl/rel8/support/lib2/mult.lisp::pp4

Cluster 147

Definition /rtl/rel7/user/ereps.lisp::eencodingp
Definition /rtl/rel5/user/ereps.lisp::eencodingp
Definition /rtl/rel4/user/ereps.lisp::eencodingp

Cluster 153

Definition /rtl/rel7/arithmetic/induct.lisp::LOG-INDUCT-allows-negatives
Definition /rtl/rel8/arithmetic/induct.lisp::LOG-INDUCT-allows-negatives
Definition /rtl/rel5/arithmetic/induct.lisp::LOG-INDUCT-allows-negatives
Definition /rtl/rel4/arithmetic/induct.lisp::LOG-INDUCT-allows-negatives

Cluster 154

Definition /rtl/rel7/support/support/logs.lisp::log<=
Definition /rtl/rel8/support/support/logs.lisp::log<=
Definition /rtl/rel5/support/logs.lisp::log<=
Definition /rtl/rel4/support/logs.lisp::log<=
Definition /rtl/rel4/support/logs.lisp::log<=

Cluster 156

Definition /rtl/rel7/arithmetic/induct.lisp::log-induct
Definition /rtl/rel8/arithmetic/induct.lisp::log-induct
Definition /rtl/rel5/arithmetic/induct.lisp::log-induct
Definition /rtl/rel4/arithmetic/induct.lisp::log-induct

Cluster 161

Definition /rtl/rel7/user/ereps.lisp::edecode
Definition /rtl/rel5/user/ereps.lisp::edecode

Definition /rtl/rel4/user/ereps.lisp::edecode

Cluster 175

Definition /rtl/rel7/user/ereps.lisp::erepp

Definition /rtl/rel5/user/ereps.lisp::erepp

Definition /rtl/rel4/user/ereps.lisp::erepp

Cluster 181

Definition /rtl/rel8/arithmetic/expt-proofs.lisp::natp

Definition /rtl/rel5/arithmetic/expt-proofs.lisp::natp

Cluster 182

Definition /rtl/rel1/lib1/brat.lisp::log2

Definition /rtl/rel1/lib3/brat.lisp::log2

Definition /rtl/rel7/user/brat.lisp::log2

Definition /rtl/rel5/user/brat.lisp::log2

Definition /rtl/rel4/user/brat.lisp::log2

Cluster 185

Definition /rtl/rel1/lib1/brat.lisp::brat

Definition /rtl/rel1/lib3/brat.lisp::brat

Definition /rtl/rel7/user/brat.lisp::brat

Definition /rtl/rel5/user/brat.lisp::brat

Definition /rtl/rel4/user/brat.lisp::brat

Cluster 188

Definition /rtl/rel7/support/support/lior.lisp::binary-lior

Definition /rtl/rel8/support/support/lior.lisp::binary-lior

Definition /rtl/rel5/support/lior.lisp::binary-lior

Cluster 192

Definition /rtl/rel7/arithmetic/expt-proofs.lisp::expt-execute

Definition /rtl/rel7/arithmetic/expt.lisp::expt-execute

Definition /rtl/rel8/arithmetic/expt-proofs.lisp::expt-execute

Definition /rtl/rel8/arithmetic/expt.lisp::expt-execute

Definition /rtl/rel5/arithmetic/expt-proofs.lisp::expt-execute

Definition /rtl/rel5/arithmetic/expt.lisp::expt-execute

Definition /rtl/rel4/arithmetic/expt-proofs.lisp::expt-execute

Definition /rtl/rel4/arithmetic/expt.lisp::expt-execute

Cluster 196

Definition /rtl/rel7/support/support/logs.lisp::comp2

Definition /rtl/rel8/support/support/logs.lisp::comp2

Definition /rtl/rel5/support/logs.lisp::comp2

Definition /rtl/rel4/support/logs.lisp::comp2

Cluster 210

Definition /rtl/rel7/arithmetic/common-factor.lisp::find-common-factors-to-cancel-1
 Definition /rtl/rel8/arithmetic/common-factor.lisp::find-common-factors-to-cancel-1
 Definition /rtl/rel5/arithmetic/common-factor.lisp::find-common-factors-to-cancel-1
 Definition /rtl/rel4/arithmetic/common-factor.lisp::find-common-factors-to-cancel-1

Cluster 211

Definition /rtl/rel7/lib/mult.lisp::pp4-psi
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::pp4-psi
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::pp4-psi
 Definition /rtl/rel8/support/lib2/mult.lisp::pp4-psi

Cluster 231

Definition /rtl/rel7/lib/mult.lisp::sum-eta
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-eta
 Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-eta
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-eta
 Definition /rtl/rel8/support/lib2/mult.lisp::sum-eta

Cluster 236

Definition /rtl/rel7/support/support/logs.lisp::log=
 Definition /rtl/rel8/support/support/logs.lisp::log=
 Definition /rtl/rel5/support/logs.lisp::log=
 Definition /rtl/rel4/support/logs.lisp::log=
 Definition /rtl/rel4/support/logs.lisp::log=

Cluster 244

Definition /rtl/rel7/lib/mult.lisp::bmutex4
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::bmutex4
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::bmutex4
 Definition /rtl/rel8/support/lib2/mult.lisp::bmutex4

Cluster 245

Definition /rtl/rel7/arithmetic/expo-proofs.lisp::get-expt-factors
 Definition /rtl/rel8/arithmetic/expo-proofs.lisp::get-expt-factors
 Definition /rtl/rel5/arithmetic/expo-proofs.lisp::get-expt-factors
 Definition /rtl/rel4/arithmetic/expo-proofs.lisp::get-expt-factors

Cluster 258

Definition /rtl/rel7/lib/mult.lisp::bmutex8
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::bmutex8
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::bmutex8
 Definition /rtl/rel8/support/lib2/mult.lisp::bmutex8

Cluster 263

Definition /rtl/rel7/support/support/mulcat-proofs.lisp::mulcat-induct
 Definition /rtl/rel8/support/support/mulcat-proofs.lisp::mulcat-induct
 Definition /rtl/rel5/support/mulcat-proofs.lisp::mulcat-induct
 Definition /rtl/rel4/support/mulcat-proofs.lisp::mulcat-induct

Cluster 270

Definition /rtl/rel7/support/support/logs.lisp::log<>
Definition /rtl/rel8/support/support/logs.lisp::log<>
Definition /rtl/rel5/support/logs.lisp::log<>
Definition /rtl/rel4/support/logs.lisp::log<>
Definition /rtl/rel4/support/logs.lisp::log<>

Cluster 271

Definition /rtl/rel7/support/support/logs.lisp::log>
Definition /rtl/rel8/support/support/logs.lisp::log>
Definition /rtl/rel5/support/logs.lisp::log>
Definition /rtl/rel4/support/logs.lisp::log>
Definition /rtl/rel4/support/logs.lisp::log>

Cluster 282

Definition /rtl/rel7/support/support/logs.lisp::comp2>
Definition /rtl/rel8/support/support/logs.lisp::comp2>
Definition /rtl/rel5/support/logs.lisp::comp2>
Definition /rtl/rel4/support/logs.lisp::comp2>

Cluster 291

Definition /rtl/rel7/lib/mult.lisp::phi
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::phi
Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::phi
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::phi
Definition /rtl/rel8/support/lib2/mult.lisp::phi

Cluster 292

Definition /rtl/rel7/support/support/logs.lisp::log>=
Definition /rtl/rel8/support/support/logs.lisp::log>=
Definition /rtl/rel5/support/logs.lisp::log>=
Definition /rtl/rel4/support/logs.lisp::log>=
Definition /rtl/rel4/support/logs.lisp::log>=

Cluster 313

Definition /rtl/rel7/arithmetic/induct.lisp::or-dist-induct
Definition /rtl/rel8/arithmetic/induct.lisp::or-dist-induct
Definition /rtl/rel5/arithmetic/induct.lisp::or-dist-induct
Definition /rtl/rel4/arithmetic/induct.lisp::or-dist-induct

Cluster 341

Definition /rtl/rel7/lib/mult.lisp::gamma
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::gamma

Definition /rtl/rel8/support/lib1.delta1/mult.lisp::gamma

Definition /rtl/rel8/support/lib2/mult.lisp::gamma

Cluster 364

Definition /rtl/rel7/arithmetic/expo-proofs.lisp::find-common-expt-factors-to-cancel

Definition /rtl/rel8/arithmetic/expo-proofs.lisp::find-common-expt-factors-to-cancel

Definition /rtl/rel5/arithmetic/expo-proofs.lisp::find-common-expt-factors-to-cancel

Definition /rtl/rel4/arithmetic/expo-proofs.lisp::find-common-expt-factors-to-cancel

Cluster 367

Definition /rtl/rel7/support/support/logs.lisp::logxor1

Definition /rtl/rel8/support/support/logs.lisp::logxor1

Definition /rtl/rel5/support/logs.lisp::logxor1

Definition /rtl/rel4/support/logs.lisp::logxor1

Cluster 338

Definition /rtl/rel7/support/support/rtl.lisp::bits

Definition /rtl/rel8/support/support/rtl.lisp::bits

Definition /rtl/rel5/support/rtl.lisp::bits

Definition /rtl/rel4/support/rtl.lisp::bits

Cluster 302

Definition /rtl/rel7/lib/mult.lisp::pp8

Definition /rtl/rel7/support/lib1.delta1/mult.lisp::pp8

Definition /rtl/rel8/support/lib1.delta1/mult.lisp::pp8

Definition /rtl/rel8/support/lib2/mult.lisp::pp8

Cluster 276

Definition /rtl/rel7/support/support/add3-proofs.lisp::ADD3-INDUCT-allow-negatives

Definition /rtl/rel8/support/support/add3-proofs.lisp::ADD3-INDUCT-allow-negatives

Definition /rtl/rel5/support/add3-proofs.lisp::ADD3-INDUCT-allow-negatives

Definition /rtl/rel4/support/add3-proofs.lisp::ADD3-INDUCT-allow-negatives

Cluster 257

Definition /rtl/rel7/support/support/logs.lisp::logand1

Definition /rtl/rel8/support/support/logs.lisp::logand1

Definition /rtl/rel5/support/logs.lisp::logand1

Definition /rtl/rel4/support/logs.lisp::logand1

Cluster 224

Definition /rtl/rel7/support/support/lxor.lisp::binary-lxor

Definition /rtl/rel8/support/support/lxor.lisp::binary-lxor

Definition /rtl/rel5/support/lxor.lisp::binary-lxor

Cluster 222

Definition /rtl/rel7/support/support/rtlarr.lisp::bvecp

Definition /rtl/rel8/support/support/rtlarr.lisp::bvecp

Definition /rtl/rel5/support/rtlarr.lisp::bvecp

Definition /rtl/rel4/support/rtlarr.lisp::bvecp

Cluster 203

Definition /rtl/rel1/support/fadd/add3.lisp::add3-induct

Definition /rtl/rel7/support/support/add3-proofs.lisp::add3-induct

Definition /rtl/rel8/support/support/add3-proofs.lisp::add3-induct

Definition /rtl/rel5/support/add3-proofs.lisp::add3-induct

Definition /rtl/rel4/support/add3-proofs.lisp::add3-induct

Cluster 193

Definition /rtl/rel1/support/fadd/add3.lisp::add3-measure

Definition /rtl/rel7/support/support/add3-proofs.lisp::add3-measure

Definition /rtl/rel8/support/support/add3-proofs.lisp::add3-measure

Definition /rtl/rel5/support/add3-proofs.lisp::add3-measure

Definition /rtl/rel4/support/add3-proofs.lisp::add3-measure

Cluster 173

Definition /rtl/rel7/support/support/setbits-proofs.lisp::setbits

Definition /rtl/rel7/support/support/setbits-proofs.lisp::oldsetbits

Definition /rtl/rel8/support/support/setbits-proofs.lisp::setbits

Definition /rtl/rel8/support/support/setbits-proofs.lisp::oldsetbits

Definition /rtl/rel5/support/setbits-proofs.lisp::setbits

Definition /rtl/rel5/support/setbits-proofs.lisp::oldsetbits

Definition /rtl/rel4/support/setbits-proofs.lisp::setbits

Definition /rtl/rel4/support/setbits-proofs.lisp::oldsetbits

Cluster 167

Definition /rtl/rel7/user/ereps.lisp::eencode

Definition /rtl/rel5/user/ereps.lisp::eencode

Definition /rtl/rel4/user/ereps.lisp::eencode

Cluster 151

Definition /rtl/rel7/arithmetic/induct.lisp::op-dist-induct-negative

Definition /rtl/rel8/arithmetic/induct.lisp::op-dist-induct-negative

Definition /rtl/rel5/arithmetic/induct.lisp::op-dist-induct-negative

Definition /rtl/rel4/arithmetic/induct.lisp::op-dist-induct-negative

Cluster 131

Definition /rtl/rel7/support/support/bitn.lisp::not-eric

Definition /rtl/rel7/user/bitn.lisp::not-eric

Definition /rtl/rel8/support/support/bitn.lisp::not-eric

Definition /rtl/rel5/support/bitn.lisp::not-eric

Definition /rtl/rel5/user/bitn.lisp::not-eric

Definition /rtl/rel4/support/bitn.lisp::not-eric

Definition /rtl/rel4/user/bitn.lisp::not-eric

Cluster 119

Definition /rtl/rel7/support/support/decode-proofs.lisp::decode

Definition /rtl/rel8/support/support/decode-proofs.lisp::decode
 Definition /rtl/rel5/support/decode-proofs.lisp::decode
 Definition /rtl/rel4/support/decode-proofs.lisp::decode

Cluster 99

Definition /rtl/rel7/support/support/rtl.lisp::natp1
 Definition /rtl/rel8/support/support/rtl.lisp::natp1
 Definition /rtl/rel5/support/rtl.lisp::natp1
 Definition /rtl/rel4/support/rtl.lisp::natp1

Cluster 95

Definition /rtl/rel7/support/support/logs.lisp::logior1
 Definition /rtl/rel8/support/support/logs.lisp::logior1
 Definition /rtl/rel5/support/logs.lisp::logior1
 Definition /rtl/rel4/support/logs.lisp::logior1

Cluster 101

Definition /rtl/rel7/support/support/logs.lisp::comp2>=
 Definition /rtl/rel8/support/support/logs.lisp::comp2>=
 Definition /rtl/rel5/support/logs.lisp::comp2>=
 Definition /rtl/rel4/support/logs.lisp::comp2>=

Cluster 40

Definition /rtl/rel7/support/support/ash.lisp::ash
 Definition /rtl/rel8/support/support/ash.lisp::ash
 Definition /rtl/rel5/support/ash.lisp::ash
 Definition /rtl/rel4/support/ash.lisp::ash

Cluster 105

Definition /rtl/rel1/support/rep.s.lisp::sigf
 Definition /rtl/rel1/lib1/rep.s.lisp::sigf
 Definition /rtl/rel1/lib3/rep.s.lisp::sigf

Cluster 229

Definition /rtl/rel1/support/rewrite-theory.lisp::collect-rewrites
 Definition /rtl/rel7/support/support/rewrite-theory.lisp::collect-rewrites
 Definition /rtl/rel8/support/support/rewrite-theory.lisp::collect-rewrites
 Definition /rtl/rel5/support/rewrite-theory.lisp::collect-rewrites
 Definition /rtl/rel4/support/rewrite-theory.lisp::collect-rewrites

Cluster 274

Definition /rtl/rel7/lib/mult.lisp::pp4-theta
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::pp4-theta
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::pp4-theta

Definition /rtl/rel8/support/lib2/mult.lisp::pp4-theta

Cluster 318

Definition /rtl/rel7/lib/mult.lisp::theta

Definition /rtl/rel7/support/lib1.delta1/mult.lisp::theta

Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::theta

Definition /rtl/rel8/support/lib1.delta1/mult.lisp::theta

Definition /rtl/rel8/support/lib2/mult.lisp::theta

Cluster 342

Definition /rtl/rel7/lib/mult.lisp::sum-pp4

Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-pp4

Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-pp4

Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-pp4

Definition /rtl/rel8/support/lib2/mult.lisp::sum-pp4

Cluster 104

Definition /rtl/rel7/support/support/add3-proofs.lisp::add3-measure-neg

Definition /rtl/rel8/support/support/add3-proofs.lisp::add3-measure-neg

Definition /rtl/rel5/support/add3-proofs.lisp::add3-measure-neg

Definition /rtl/rel4/support/add3-proofs.lisp::add3-measure-neg

3 C.3. Functions re-defined in several books and several versions of a same library

22% of the clusters are related to a function that has been defined not only in different versions of a library, but also in different books of the same version of the library.

Cluster 1

Definition /rtl/rel7/lib/bits.lisp::sumbits

Definition /rtl/rel7/support/support/sumbits.lisp::sumbits

Definition /rtl/rel7/support/lib1/bits.lisp::sumbits

Definition /rtl/rel7/user/sumbits.lisp::sumbits

Definition /rtl/rel8/lib/bits.lisp::sumbits

Definition /rtl/rel8/support/lib2.delta1/bits-proofs.lisp::sumbits

Definition /rtl/rel8/support/lib2.delta1/bits.lisp::sumbits

Definition /rtl/rel8/support/lib1.delta1/bits.lisp::sumbits

Definition /rtl/rel8/support/support/sumbits.lisp::sumbits

Definition /rtl/rel8/support/lib1/bits.lisp::sumbits

Definition /rtl/rel8/support/lib2.delta2/bits.lisp::sumbits

Definition /rtl/rel8/support/lib2/bits.lisp::sumbits

Definition /rtl/rel5/lib/bits.lisp::sumbits

Definition /rtl/rel5/support/sumbits.lisp::sumbits

Definition /rtl/rel5/user/sumbits.lisp::sumbits

Definition /rtl/rel4/lib/bits.lisp::sumbits
 Definition /rtl/rel4/support/sumbits.lisp::sumbits
 Definition /rtl/rel4/user/sumbits.lisp::sumbits

Cluster 2

Definition /rtl/rel1/support/odd.lisp::kp
 Definition /rtl/rel1/lib1/round.lisp::kp
 Definition /rtl/rel1/lib3/round.lisp::kp
 Definition /rtl/rel7/support/support/oddr.lisp::kp
 Definition /rtl/rel7/support/support/oddr-proofs.lisp::kp
 Definition /rtl/rel8/support/support/oddr.lisp::kp
 Definition /rtl/rel8/support/support/oddr-proofs.lisp::kp
 Definition /rtl/rel5/lib/round.lisp::kp
 Definition /rtl/rel5/support/oddr.lisp::kp
 Definition /rtl/rel5/support/oddr-proofs.lisp::kp
 Definition /rtl/rel4/lib/round.lisp::kp
 Definition /rtl/rel4/support/oddr.lisp::kp
 Definition /rtl/rel4/support/oddr-proofs.lisp::kp

Cluster 3

Definition /rtl/rel7/lib/bits.lisp::all-bits-p
 Definition /rtl/rel7/support/support/bitn.lisp::all-bits-p
 Definition /rtl/rel7/support/lib1/bits.lisp::all-bits-p
 Definition /rtl/rel8/lib/bits.lisp::all-bits-p
 Definition /rtl/rel8/support/lib2.delta1/bits-new.lisp::all-bits-p
 Definition /rtl/rel8/support/lib2.delta1/bits-proofs.lisp::all-bits-p
 Definition /rtl/rel8/support/lib2.delta1/bits.lisp::all-bits-p
 Definition /rtl/rel8/support/lib2.delta1/bits-new-proofs.lisp::all-bits-p
 Definition /rtl/rel8/support/lib1.delta1/bits.lisp::all-bits-p
 Definition /rtl/rel8/support/support/bitn.lisp::all-bits-p
 Definition /rtl/rel8/support/lib1/bits.lisp::all-bits-p
 Definition /rtl/rel8/support/lib2.delta2/bits.lisp::all-bits-p
 Definition /rtl/rel8/support/lib2/bits.lisp::all-bits-p
 Definition /rtl/rel5/lib/bits.lisp::all-bits-p
 Definition /rtl/rel5/support/bitn.lisp::all-bits-p

Cluster 5

Definition /rtl/rel7/lib/float.lisp::iexpof
 Definition /rtl/rel7/lib/reprs.lisp::iexpof
 Definition /rtl/rel7/support/lib1.delta1/float.lisp::iexpof
 Definition /rtl/rel7/support/lib1/reprs.lisp::iexpof
 Definition /rtl/rel8/lib/float.lisp::iexpof
 Definition /rtl/rel8/lib/reprs.lisp::iexpof
 Definition /rtl/rel8/support/lib2.delta1/reprs-proofs.lisp::iexpof

Definition /rtl/rel8/support/lib2.delta1/float.lisp::iexpof
 Definition /rtl/rel8/support/lib2.delta1/reps.lisp::iexpof
 Definition /rtl/rel8/support/lib2.delta1/float-proofs.lisp::iexpof
 Definition /rtl/rel8/support/lib1.delta1/float.lisp::iexpof
 Definition /rtl/rel8/support/lib1/reps.lisp::iexpof
 Definition /rtl/rel8/support/lib1.delta2/float.lisp::iexpof
 Definition /rtl/rel8/support/lib2/float.lisp::iexpof
 Definition /rtl/rel8/support/lib2/reps.lisp::iexpof
 Definition /rtl/rel5/lib/reps.lisp::iexpof
 Definition /rtl/rel4/lib/reps.lisp::iexpof

Cluster 7

Definition /rtl/rel7/lib/bits.lisp::sum-b
 Definition /rtl/rel7/support/support/bitn.lisp::sum-b
 Definition /rtl/rel7/support/lib1/bits.lisp::sum-b
 Definition /rtl/rel8/lib/bits.lisp::sum-b
 Definition /rtl/rel8/support/lib2.delta1/bits-new.lisp::sum-b
 Definition /rtl/rel8/support/lib2.delta1/bits-proofs.lisp::sum-b
 Definition /rtl/rel8/support/lib2.delta1/bits.lisp::sum-b
 Definition /rtl/rel8/support/lib2.delta1/bits-new-proofs.lisp::sum-b
 Definition /rtl/rel8/support/lib1.delta1/bits.lisp::sum-b
 Definition /rtl/rel8/support/support/bitn.lisp::sum-b
 Definition /rtl/rel8/support/lib1/bits.lisp::sum-b
 Definition /rtl/rel8/support/lib2.delta2/bits.lisp::sum-b
 Definition /rtl/rel8/support/lib2/bits.lisp::sum-b
 Definition /rtl/rel5/lib/bits.lisp::sum-b
 Definition /rtl/rel5/support/bitn.lisp::sum-b

Cluster 10

Definition /rtl/rel7/lib/float.lisp::isigf
 Definition /rtl/rel7/lib/reps.lisp::isigf
 Definition /rtl/rel7/support/lib1.delta1/float.lisp::isigf
 Definition /rtl/rel7/support/lib1/reps.lisp::isigf
 Definition /rtl/rel8/lib/float.lisp::isigf
 Definition /rtl/rel8/lib/reps.lisp::isigf
 Definition /rtl/rel8/support/lib2.delta1/reps-proofs.lisp::isigf
 Definition /rtl/rel8/support/lib2.delta1/float.lisp::isigf
 Definition /rtl/rel8/support/lib2.delta1/reps.lisp::isigf
 Definition /rtl/rel8/support/lib2.delta1/float-proofs.lisp::isigf
 Definition /rtl/rel8/support/lib1.delta1/float.lisp::isigf
 Definition /rtl/rel8/support/lib1/reps.lisp::isigf
 Definition /rtl/rel8/support/lib1.delta2/float.lisp::isigf
 Definition /rtl/rel8/support/lib2/float.lisp::isigf
 Definition /rtl/rel8/support/lib2/reps.lisp::isigf
 Definition /rtl/rel5/lib/reps.lisp::isigf

Definition /rtl/rel4/lib/rebs.lisp::isigf

Cluster 12

Definition /rtl/rel7/lib/mult.lisp::psi
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::psi
Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::psi
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::psi
Definition /rtl/rel8/support/lib2/mult.lisp::psi

Cluster 13

Definition /rtl/rel7/lib/add.lisp::lamg
Definition /rtl/rel7/support/support/lextra.lisp::lamg
Definition /rtl/rel7/support/lib1/add.lisp::lamg
Definition /rtl/rel8/support/support/lextra.lisp::lamg
Definition /rtl/rel8/support/lib1/add.lisp::lamg
Definition /rtl/rel8/support/lib2/add.lisp::lamg
Definition /rtl/rel5/lib/add.lisp::lamg
Definition /rtl/rel5/support/lextra.lisp::lamg
Definition /rtl/rel4/lib/fadd.lisp::lamg
Definition /rtl/rel4/support/lop3.lisp::lamg
Definition /rtl/rel4/support/fadd.lisp::lamg
Definition /rtl/rel4/support/lop3-proofs.lisp::lamg

Cluster 17

Definition /rtl/rel7/lib/rtl.lisp::if1
Definition /rtl/rel7/support/support/rtl.lisp::if1
Definition /rtl/rel7/support/support/rtlarr.lisp::if1
Definition /rtl/rel7/support/lib1/rtl.lisp::if1
Definition /rtl/rel8/lib/rtl.lisp::if1
Definition /rtl/rel8/support/lib2.delta1/rtl.lisp::if1
Definition /rtl/rel8/support/lib2.delta1/rtl-new.lisp::if1
Definition /rtl/rel8/support/lib2.delta1/rtl-new-proofs.lisp::if1
Definition /rtl/rel8/support/lib2.delta1/rtl-proofs.lisp::if1
Definition /rtl/rel8/support/support/rtl.lisp::if1
Definition /rtl/rel8/support/support/rtlarr.lisp::if1
Definition /rtl/rel8/support/lib1/rtl.lisp::if1
Definition /rtl/rel8/support/lib2/rtl.lisp::if1
Definition /rtl/rel5/lib/rtl.lisp::if1
Definition /rtl/rel5/support/rtl.lisp::if1
Definition /rtl/rel5/support/rtlarr.lisp::if1
Definition /rtl/rel4/lib/rtl.lisp::if1
Definition /rtl/rel4/support/rtl.lisp::if1
Definition /rtl/rel4/support/rtlarr.lisp::if1

Cluster 18

Definition /rtl/rel7/lib/util.lisp::fast-and-fn
Definition /rtl/rel7/support/support/fast-and.lisp::fast-and-fn
Definition /rtl/rel7/support/support/util.lisp::fast-and-fn
Definition /rtl/rel7/support/lib1/util.lisp::fast-and-fn
Definition /rtl/rel8/lib/util.lisp::fast-and-fn
Definition /rtl/rel8/support/lib2.delta1/util.lisp::fast-and-fn
Definition /rtl/rel8/support/support/fast-and.lisp::fast-and-fn
Definition /rtl/rel8/support/support/util.lisp::fast-and-fn
Definition /rtl/rel8/support/lib1/util.lisp::fast-and-fn
Definition /rtl/rel8/support/lib2/util.lisp::fast-and-fn
Definition /rtl/rel5/lib/util.lisp::fast-and-fn
Definition /rtl/rel5/support/fast-and.lisp::fast-and-fn
Definition /rtl/rel5/support/util.lisp::fast-and-fn
Definition /rtl/rel4/lib/util.lisp::fast-and-fn
Definition /rtl/rel4/support/fast-and.lisp::fast-and-fn
Definition /rtl/rel4/support/util.lisp::fast-and-fn

Cluster 19

Definition /rtl/rel1/support/float.lisp::fp+
Definition /rtl/rel1/lib1/round.lisp::fp+
Definition /rtl/rel1/lib1/float.lisp::fp+
Definition /rtl/rel1/lib3/round.lisp::fp+
Definition /rtl/rel1/lib3/float.lisp::fp+
Definition /rtl/rel7/lib/float.lisp::fp+
Definition /rtl/rel7/support/lib1.delta1/float.lisp::fp+
Definition /rtl/rel7/support/support/rnd.lisp::fp+
Definition /rtl/rel7/support/support/sticky.lisp::fp+
Definition /rtl/rel7/support/support/sticky-proofs.lisp::fp+
Definition /rtl/rel7/support/support/away-proofs.lisp::fp+
Definition /rtl/rel7/support/support/drnd-original.lisp::fp+
Definition /rtl/rel7/support/support/near+.lisp::fp+
Definition /rtl/rel7/support/support/away.lisp::fp+
Definition /rtl/rel7/support/support/near.lisp::fp+
Definition /rtl/rel7/support/lib1/float.lisp::fp+
Definition /rtl/rel8/lib/float.lisp::fp+
Definition /rtl/rel8/support/lib2.delta1/float-new-proofs.lisp::fp+
Definition /rtl/rel8/support/lib2.delta1/float.lisp::fp+
Definition /rtl/rel8/support/lib2.delta1/float-new.lisp::fp+
Definition /rtl/rel8/support/lib2.delta1/float-proofs.lisp::fp+
Definition /rtl/rel8/support/lib1.delta1/float.lisp::fp+
Definition /rtl/rel8/support/support/rnd.lisp::fp+
Definition /rtl/rel8/support/support/sticky.lisp::fp+
Definition /rtl/rel8/support/support/sticky-proofs.lisp::fp+
Definition /rtl/rel8/support/support/away-proofs.lisp::fp+
Definition /rtl/rel8/support/support/drnd-original.lisp::fp+
Definition /rtl/rel8/support/support/near+.lisp::fp+

Definition /rtl/rel8/support/support/away.lisp::fp+
 Definition /rtl/rel8/support/support/near.lisp::fp+
 Definition /rtl/rel8/support/lib1/float.lisp::fp+
 Definition /rtl/rel8/support/lib1.delta2/float.lisp::fp+
 Definition /rtl/rel8/support/lib2/float.lisp::fp+
 Definition /rtl/rel5/lib/float.lisp::fp+
 Definition /rtl/rel5/support/rnd.lisp::fp+
 Definition /rtl/rel5/support/sticky.lisp::fp+
 Definition /rtl/rel5/support/sticky-proofs.lisp::fp+
 Definition /rtl/rel5/support/near-proofs.lisp::fp+
 Definition /rtl/rel5/support/away-proofs.lisp::fp+
 Definition /rtl/rel5/support/near+-proofs.lisp::fp+
 Definition /rtl/rel5/support/near+.lisp::fp+
 Definition /rtl/rel5/support/away.lisp::fp+
 Definition /rtl/rel5/support/drnd.lisp::fp+
 Definition /rtl/rel5/support/near.lisp::fp+
 Definition /rtl/rel5/user/near.lisp::fp+
 Definition /rtl/rel4/lib/float.lisp::fp+
 Definition /rtl/rel4/support/rnd.lisp::fp+
 Definition /rtl/rel4/support/sticky.lisp::fp+
 Definition /rtl/rel4/support/sticky-proofs.lisp::fp+
 Definition /rtl/rel4/support/near-proofs.lisp::fp+
 Definition /rtl/rel4/support/away-proofs.lisp::fp+
 Definition /rtl/rel4/support/near+-proofs.lisp::fp+
 Definition /rtl/rel4/support/near+.lisp::fp+
 Definition /rtl/rel4/support/away.lisp::fp+
 Definition /rtl/rel4/support/drnd.lisp::fp+
 Definition /rtl/rel4/support/near.lisp::fp+
 Definition /rtl/rel4/user/near.lisp::fp+

Cluster 20

Definition /rtl/rel7/lib/rtlarr.lisp::as-aux
 Definition /rtl/rel7/support/support/rtlarr.lisp::as-aux
 Definition /rtl/rel7/support/lib1/rtlarr.lisp::as-aux
 Definition /rtl/rel8/lib/rtlarr.lisp::as-aux
 Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::as-aux
 Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::as-aux
 Definition /rtl/rel8/support/support/rtlarr.lisp::as-aux
 Definition /rtl/rel8/support/lib1/rtlarr.lisp::as-aux
 Definition /rtl/rel8/support/lib2/rtlarr.lisp::as-aux
 Definition /rtl/rel5/lib/rtlarr.lisp::as-aux
 Definition /rtl/rel5/support/rtlarr.lisp::as-aux
 Definition /rtl/rel4/lib/rtlarr.lisp::as-aux
 Definition /rtl/rel4/support/rtlarr.lisp::as-aux

Cluster 21

Definition /rtl/rel7/lib/rtl.lisp::cat-size
 Definition /rtl/rel7/lib/bits.lisp::cat-size

Definition /rtl/rel7/support/lib1/rtl.lisp::cat-size
 Definition /rtl/rel7/support/lib1/bits.lisp::cat-size
 Definition /rtl/rel7/user/setbitn.lisp::cat-size
 Definition /rtl/rel7/user/ereps.lisp::cat-size
 Definition /rtl/rel7/user/mulcat.lisp::cat-size
 Definition /rtl/rel7/user/setbits.lisp::cat-size
 Definition /rtl/rel7/user/cat.lisp::cat-size
 Definition /rtl/rel8/lib/rtl.lisp::cat-size
 Definition /rtl/rel8/lib/bits.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta1/bits-new.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta1/rtl.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta1/bits-proofs.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta1/bits.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta1/rtl-new.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta1/bits-new-proofs.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta1/rtl-new-proofs.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta1/rtl-proofs.lisp::cat-size
 Definition /rtl/rel8/support/lib1.delta1/bits.lisp::cat-size
 Definition /rtl/rel8/support/lib1/rtl.lisp::cat-size
 Definition /rtl/rel8/support/lib1/bits.lisp::cat-size
 Definition /rtl/rel8/support/lib2.delta2/bits.lisp::cat-size
 Definition /rtl/rel8/support/lib2/rtl.lisp::cat-size
 Definition /rtl/rel8/support/lib2/bits.lisp::cat-size
 Definition /rtl/rel5/lib/rtl.lisp::cat-size
 Definition /rtl/rel5/lib/bits.lisp::cat-size
 Definition /rtl/rel5/user/setbitn.lisp::cat-size
 Definition /rtl/rel5/user/ereps.lisp::cat-size
 Definition /rtl/rel5/user/mulcat.lisp::cat-size
 Definition /rtl/rel5/user/setbits.lisp::cat-size
 Definition /rtl/rel5/user/cat.lisp::cat-size
 Definition /rtl/rel4/lib/rtl.lisp::cat-size
 Definition /rtl/rel4/lib/bits.lisp::cat-size
 Definition /rtl/rel4/user/setbitn.lisp::cat-size
 Definition /rtl/rel4/user/ereps.lisp::cat-size
 Definition /rtl/rel4/user/mulcat.lisp::cat-size
 Definition /rtl/rel4/user/setbits.lisp::cat-size
 Definition /rtl/rel4/user/cat.lisp::cat-size

Cluster 24

Definition /rtl/rel7/lib/mult.lisp::sum-pp8
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-pp8
 Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-pp8
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-pp8
 Definition /rtl/rel8/support/lib2/mult.lisp::sum-pp8

Cluster 25

Definition /rtl/rel7/support/support/rnd.lisp::sgn
 Definition /rtl/rel7/support/support/sticky.lisp::sgn

Definition /rtl/rel7/support/support/sticky-proofs.lisp::sgn
 Definition /rtl/rel7/support/support/away-proofs.lisp::sgn
 Definition /rtl/rel7/support/support/trunc-proofs.lisp::sgn
 Definition /rtl/rel7/support/support/sgn.lisp::sgn
 Definition /rtl/rel7/support/support/drnd-original.lisp::sgn
 Definition /rtl/rel7/support/support/oddr.lisp::sgn
 Definition /rtl/rel7/support/support/near+.lisp::sgn
 Definition /rtl/rel7/support/support/trunc.lisp::sgn
 Definition /rtl/rel7/support/support/away.lisp::sgn
 Definition /rtl/rel7/support/support/near.lisp::sgn
 Definition /rtl/rel7/support/support/oddr-proofs.lisp::sgn
 Definition /rtl/rel7/user/bits-trunc.lisp::sgn
 Definition /rtl/rel7/user/ereps.lisp::sgn
 Definition /rtl/rel7/user/trunc.lisp::sgn
 Definition /rtl/rel7/user/away.lisp::sgn
 Definition /rtl/rel8/support/support/rnd.lisp::sgn
 Definition /rtl/rel8/support/support/sticky.lisp::sgn
 Definition /rtl/rel8/support/support/sticky-proofs.lisp::sgn
 Definition /rtl/rel8/support/support/away-proofs.lisp::sgn
 Definition /rtl/rel8/support/support/trunc-proofs.lisp::sgn
 Definition /rtl/rel8/support/support/sgn.lisp::sgn
 Definition /rtl/rel8/support/support/drnd-original.lisp::sgn
 Definition /rtl/rel8/support/support/oddr.lisp::sgn
 Definition /rtl/rel8/support/support/near+.lisp::sgn
 Definition /rtl/rel8/support/support/trunc.lisp::sgn
 Definition /rtl/rel8/support/support/away.lisp::sgn
 Definition /rtl/rel8/support/support/near.lisp::sgn
 Definition /rtl/rel8/support/support/oddr-proofs.lisp::sgn
 Definition /rtl/rel5/support/rnd.lisp::sgn
 Definition /rtl/rel5/support/sticky.lisp::sgn
 Definition /rtl/rel5/support/sticky-proofs.lisp::sgn
 Definition /rtl/rel5/support/near-proofs.lisp::sgn
 Definition /rtl/rel5/support/away-proofs.lisp::sgn
 Definition /rtl/rel5/support/near+-proofs.lisp::sgn
 Definition /rtl/rel5/support/trunc-proofs.lisp::sgn
 Definition /rtl/rel5/support/sgn.lisp::sgn
 Definition /rtl/rel5/support/oddr.lisp::sgn
 Definition /rtl/rel5/support/near+.lisp::sgn
 Definition /rtl/rel5/support/trunc.lisp::sgn
 Definition /rtl/rel5/support/away.lisp::sgn
 Definition /rtl/rel5/support/drnd.lisp::sgn
 Definition /rtl/rel5/support/near.lisp::sgn
 Definition /rtl/rel5/support/oddr-proofs.lisp::sgn
 Definition /rtl/rel5/user/bits-trunc.lisp::sgn
 Definition /rtl/rel5/user/ereps.lisp::sgn
 Definition /rtl/rel5/user/trunc.lisp::sgn
 Definition /rtl/rel5/user/away.lisp::sgn
 Definition /rtl/rel5/user/near.lisp::sgn
 Definition /rtl/rel4/support/rnd.lisp::sgn
 Definition /rtl/rel4/support/sticky.lisp::sgn

Definition /rtl/rel4/support/sticky-proofs.lisp::sgn
 Definition /rtl/rel4/support/near-proofs.lisp::sgn
 Definition /rtl/rel4/support/away-proofs.lisp::sgn
 Definition /rtl/rel4/support/near+-proofs.lisp::sgn
 Definition /rtl/rel4/support/trunc-proofs.lisp::sgn
 Definition /rtl/rel4/support/sgn.lisp::sgn
 Definition /rtl/rel4/support/oddr.lisp::sgn
 Definition /rtl/rel4/support/near+.lisp::sgn
 Definition /rtl/rel4/support/trunc.lisp::sgn
 Definition /rtl/rel4/support/away.lisp::sgn
 Definition /rtl/rel4/support/drnd.lisp::sgn
 Definition /rtl/rel4/support/near.lisp::sgn
 Definition /rtl/rel4/support/oddr-proofs.lisp::sgn
 Definition /rtl/rel4/user/bits-trunc.lisp::sgn
 Definition /rtl/rel4/user/ereps.lisp::sgn
 Definition /rtl/rel4/user/trunc.lisp::sgn
 Definition /rtl/rel4/user/away.lisp::sgn
 Definition /rtl/rel4/user/near.lisp::sgn

Cluster 28

Definition /rtl/rel7/lib/rebs.lisp::rebias-expo
 Definition /rtl/rel7/support/lib1/rebs.lisp::rebias-expo
 Definition /rtl/rel7/user/ereps.lisp::rebias-expo
 Definition /rtl/rel8/lib/rebs.lisp::rebias-expo
 Definition /rtl/rel8/support/lib2.delta1/rebs-new-proofs.lisp::rebias-expo
 Definition /rtl/rel8/support/lib2.delta1/rebs-proofs.lisp::rebias-expo
 Definition /rtl/rel8/support/lib2.delta1/rebs-new.lisp::rebias-expo
 Definition /rtl/rel8/support/lib2.delta1/rebs.lisp::rebias-expo
 Definition /rtl/rel8/support/lib1/rebs.lisp::rebias-expo
 Definition /rtl/rel8/support/lib2/rebs.lisp::rebias-expo
 Definition /rtl/rel5/lib/rebs.lisp::rebias-expo
 Definition /rtl/rel5/user/ereps.lisp::rebias-expo
 Definition /rtl/rel4/lib/rebs.lisp::rebias-expo
 Definition /rtl/rel4/user/ereps.lisp::rebias-expo

Cluster 29

Definition /rtl/rel7/lib/rtl.lisp::formal-+
 Definition /rtl/rel7/lib/bits.lisp::formal-+
 Definition /rtl/rel7/support/support/lior0-proofs.lisp::formal-+
 Definition /rtl/rel7/support/support/land0.lisp::formal-+
 Definition /rtl/rel7/support/support/rtl.lisp::formal-+
 Definition /rtl/rel7/support/support/lior0.lisp::formal-+
 Definition /rtl/rel7/support/support/cat-def.lisp::formal-+
 Definition /rtl/rel7/support/support/lxor0-proofs.lisp::formal-+
 Definition /rtl/rel7/support/support/land0-proofs.lisp::formal-+
 Definition /rtl/rel7/support/support/lxor0.lisp::formal-+
 Definition /rtl/rel7/support/lib1/rtl.lisp::formal-+

```

Definition /rtl/rel7/support/lib1/bits.lisp::formal-+
Definition /rtl/rel7/user/setbitn.lisp::formal-+
Definition /rtl/rel7/user/land.lisp::formal-+
Definition /rtl/rel7/user/lxor.lisp::formal-+
Definition /rtl/rel7/user/ereps.lisp::formal-+
Definition /rtl/rel7/user/lior.lisp::formal-+
Definition /rtl/rel7/user/mulcat.lisp::formal-+
Definition /rtl/rel7/user/setbits.lisp::formal-+
Definition /rtl/rel7/user/cat.lisp::formal-+
Definition /rtl/rel8/lib/rtl.lisp::formal-+
Definition /rtl/rel8/lib/bits.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta1/bits-new.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta1/rtl.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta1/bits-proofs.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta1/bits.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta1/rtl-new.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta1/bits-new-proofs.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta1/rtl-new-proofs.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta1/rtl-proofs.lisp::formal-+
Definition /rtl/rel8/support/lib1.delta1/bits.lisp::formal-+
Definition /rtl/rel8/support/support/lior0-proofs.lisp::formal-+
Definition /rtl/rel8/support/support/land0.lisp::formal-+
Definition /rtl/rel8/support/support/rtl.lisp::formal-+
Definition /rtl/rel8/support/support/lior0.lisp::formal-+
Definition /rtl/rel8/support/support/cat-def.lisp::formal-+
Definition /rtl/rel8/support/support/lxor0-proofs.lisp::formal-+
Definition /rtl/rel8/support/support/land0-proofs.lisp::formal-+
Definition /rtl/rel8/support/support/lxor0.lisp::formal-+
Definition /rtl/rel8/support/lib1/rtl.lisp::formal-+
Definition /rtl/rel8/support/lib1/bits.lisp::formal-+
Definition /rtl/rel8/support/lib2.delta2/bits.lisp::formal-+
Definition /rtl/rel8/support/lib2/rtl.lisp::formal-+
Definition /rtl/rel8/support/lib2/bits.lisp::formal-+
Definition /rtl/rel5/lib/rtl.lisp::formal-+
Definition /rtl/rel5/lib/bits.lisp::formal-+
Definition /rtl/rel5/support/lior0-proofs.lisp::formal-+
Definition /rtl/rel5/support/land0.lisp::formal-+
Definition /rtl/rel5/support/rtl.lisp::formal-+
Definition /rtl/rel5/support/lior0.lisp::formal-+
Definition /rtl/rel5/support/cat-def.lisp::formal-+
Definition /rtl/rel5/support/lxor0-proofs.lisp::formal-+
Definition /rtl/rel5/support/land0-proofs.lisp::formal-+
Definition /rtl/rel5/support/lxor0.lisp::formal-+
Definition /rtl/rel5/user/setbitn.lisp::formal-+
Definition /rtl/rel5/user/land.lisp::formal-+
Definition /rtl/rel5/user/lxor.lisp::formal-+
Definition /rtl/rel5/user/ereps.lisp::formal-+
Definition /rtl/rel5/user/lior.lisp::formal-+
Definition /rtl/rel5/user/mulcat.lisp::formal-+
Definition /rtl/rel5/user/setbits.lisp::formal-+

```

```

Definition /rtl/rel5/user/cat.lisp::formal-+
Definition /rtl/rel4/lib/rtl.lisp::formal-+
Definition /rtl/rel4/lib/bits.lisp::formal-+
Definition /rtl/rel4/support/land.lisp::formal-+
Definition /rtl/rel4/support/lxor.lisp::formal-+
Definition /rtl/rel4/support/lxor-proofs.lisp::formal-+
Definition /rtl/rel4/support/land-proofs.lisp::formal-+
Definition /rtl/rel4/support/lior.lisp::formal-+
Definition /rtl/rel4/support/rtl.lisp::formal-+
Definition /rtl/rel4/support/cat-def.lisp::formal-+
Definition /rtl/rel4/support/lior-proofs.lisp::formal-+
Definition /rtl/rel4/user/setbitn.lisp::formal-+
Definition /rtl/rel4/user/land.lisp::formal-+
Definition /rtl/rel4/user/lxor.lisp::formal-+
Definition /rtl/rel4/user/ereps.lisp::formal-+
Definition /rtl/rel4/user/lior.lisp::formal-+
Definition /rtl/rel4/user/mulcat.lisp::formal-+
Definition /rtl/rel4/user/setbits.lisp::formal-+
Definition /rtl/rel4/user/cat.lisp::formal-+

```

Cluster 30

```

Definition /rtl/rel7/lib/mult.lisp::sum-psi
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-psi
Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-psi
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-psi
Definition /rtl/rel8/support/lib2/mult.lisp::sum-psi

```

Cluster 31

```

Definition /rtl/rel7/lib/mult.lisp::pp8-eta
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::pp8-eta
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::pp8-eta
Definition /rtl/rel8/support/lib2/mult.lisp::pp8-eta

```

Cluster 33

```

Definition /rtl/rel7/lib/bits.lisp::sumbits-badguy
Definition /rtl/rel7/support/support/badguys.lisp::sumbits-badguy
Definition /rtl/rel7/support/support/sumbits.lisp::sumbits-badguy
Definition /rtl/rel7/support/lib1/bits.lisp::sumbits-badguy
Definition /rtl/rel7/user/sumbits.lisp::sumbits-badguy
Definition /rtl/rel8/lib/bits.lisp::sumbits-badguy
Definition /rtl/rel8/support/lib2.delta1/bits-proofs.lisp::sumbits-badguy
Definition /rtl/rel8/support/lib2.delta1/bits.lisp::sumbits-badguy

```

Definition /rtl/rel8/support/lib1.delta1/bits.lisp::sumbits-badguy
 Definition /rtl/rel8/support/support/badguys.lisp::sumbits-badguy
 Definition /rtl/rel8/support/support/sumbits.lisp::sumbits-badguy
 Definition /rtl/rel8/support/lib1/bits.lisp::sumbits-badguy
 Definition /rtl/rel8/support/lib2.delta2/bits.lisp::sumbits-badguy
 Definition /rtl/rel8/support/lib2/bits.lisp::sumbits-badguy
 Definition /rtl/rel5/lib/bits.lisp::sumbits-badguy
 Definition /rtl/rel5/support/badguys.lisp::sumbits-badguy
 Definition /rtl/rel5/support/sumbits.lisp::sumbits-badguy
 Definition /rtl/rel5/user/sumbits.lisp::sumbits-badguy
 Definition /rtl/rel4/support/badguys.lisp::sumbits-badguy
 Definition /rtl/rel4/support/sumbits.lisp::sumbits-badguy
 Definition /rtl/rel4/user/sumbits.lisp::sumbits-badguy

Cluster 34

Definition /rtl/rel1/support/fp.lisp::fl
 Definition /rtl/rel1/lib1/brat.lisp::fl
 Definition /rtl/rel1/lib1/round.lisp::fl
 Definition /rtl/rel1/lib1/basic.lisp::fl
 Definition /rtl/rel1/lib1/float.lisp::fl
 Definition /rtl/rel1/lib1/bits.lisp::fl
 Definition /rtl/rel1/lib3/brat.lisp::fl
 Definition /rtl/rel1/lib3/round.lisp::fl
 Definition /rtl/rel1/lib3/basic.lisp::fl
 Definition /rtl/rel1/lib3/basic.lisp::fl
 Definition /rtl/rel1/lib3/float.lisp::fl
 Definition /rtl/rel1/lib3/bits.lisp::fl
 Definition /rtl/rel7/lib/arith.lisp::fl
 Definition /rtl/rel7/lib/bvecp-raw-helpers.lisp::fl
 Definition /rtl/rel7/support/lib1.delta1/arith.lisp::fl
 Definition /rtl/rel7/support/support/bits-proofs.lisp::fl
 Definition /rtl/rel7/support/support/bvecp-lemmas.lisp::fl
 Definition /rtl/rel7/support/lib1/arith.lisp::fl
 Definition /rtl/rel7/support/lib1/bvecp-raw-helpers.lisp::fl
 Definition /rtl/rel7/arithmetical/mod-expt.lisp::fl
 Definition /rtl/rel7/arithmetical/fl-expt.lisp::fl
 Definition /rtl/rel7/user/brat.lisp::fl
 Definition /rtl/rel8/lib/arith.lisp::fl
 Definition /rtl/rel8/lib/bvecp-raw-helpers.lisp::fl
 Definition /rtl/rel8/support/lib2.delta1/arith.lisp::fl
 Definition /rtl/rel8/support/lib2.delta1/bvecp-raw-helpers-proofs.lisp::fl
 Definition /rtl/rel8/support/lib2.delta1/bvecp-raw-helpers.lisp::fl
 Definition /rtl/rel8/support/lib1.delta1/arith.lisp::fl
 Definition /rtl/rel8/support/lib1.delta1/bvecp-raw-helpers.lisp::fl
 Definition /rtl/rel8/support/support/bits-proofs.lisp::fl
 Definition /rtl/rel8/support/support/bvecp-lemmas.lisp::fl
 Definition /rtl/rel8/support/lib1/arith.lisp::fl
 Definition /rtl/rel8/support/lib1/bvecp-raw-helpers.lisp::fl
 Definition /rtl/rel8/support/lib2/arith.lisp::fl

```

Definition /rtl/rel8/support/lib2/bvecp-raw-helpers.lisp::fl
Definition /rtl/rel8/arithmetic/mod-expt.lisp::fl
Definition /rtl/rel8/arithmetic/fl-expt.lisp::fl
Definition /rtl/rel5/lib/arith.lisp::fl
Definition /rtl/rel5/lib/bvecp-raw-helpers.lisp::fl
Definition /rtl/rel5/support/bits-proofs.lisp::fl
Definition /rtl/rel5/support/bvecp-lemmas.lisp::fl
Definition /rtl/rel5/arithmetic/mod-expt.lisp::fl
Definition /rtl/rel5/arithmetic/fl-expt.lisp::fl
Definition /rtl/rel5/user/brat.lisp::fl
Definition /rtl/rel4/lib/arith.lisp::fl
Definition /rtl/rel4/lib/bvecp-raw-helpers.lisp::fl
Definition /rtl/rel4/support/bits-proofs.lisp::fl
Definition /rtl/rel4/support/bvecp-lemmas.lisp::fl
Definition /rtl/rel4/arithmetic/mod-expt.lisp::fl
Definition /rtl/rel4/arithmetic/fl-expt.lisp::fl
Definition /rtl/rel4/user/brat.lisp::fl

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Cluster 44

```

Definition /rtl/rel7/lib/rtlarr.lisp::ag-aux
Definition /rtl/rel7/support/support/rtlarr.lisp::ag-aux
Definition /rtl/rel7/support/lib1/rtlarr.lisp::ag-aux
Definition /rtl/rel8/lib/rtlarr.lisp::ag-aux
Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::ag-aux
Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::ag-aux
Definition /rtl/rel8/support/support/rtlarr.lisp::ag-aux
Definition /rtl/rel8/support/lib1/rtlarr.lisp::ag-aux
Definition /rtl/rel8/support/lib2/rtlarr.lisp::ag-aux
Definition /rtl/rel5/lib/rtlarr.lisp::ag-aux
Definition /rtl/rel5/support/rtlarr.lisp::ag-aux
Definition /rtl/rel4/lib/rtlarr.lisp::ag-aux
Definition /rtl/rel4/support/rtlarr.lisp::ag-aux

```

Cluster 46

```

Definition /rtl/rel7/lib/rtlarr.lisp::rcd->acl2
Definition /rtl/rel7/support/support/rtlarr.lisp::rcd->acl2
Definition /rtl/rel7/support/lib1/rtlarr.lisp::rcd->acl2
Definition /rtl/rel8/lib/rtlarr.lisp::rcd->acl2
Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::rcd->acl2
Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::rcd->acl2
Definition /rtl/rel8/support/support/rtlarr.lisp::rcd->acl2
Definition /rtl/rel8/support/lib1/rtlarr.lisp::rcd->acl2
Definition /rtl/rel8/support/lib2/rtlarr.lisp::rcd->acl2
Definition /rtl/rel5/lib/rtlarr.lisp::rcd->acl2
Definition /rtl/rel5/support/rtlarr.lisp::rcd->acl2
Definition /rtl/rel4/lib/rtlarr.lisp::rcd->acl2

```

Definition /rtl/rel4/support/rtlarr.lisp::rcd->acl2

Cluster 47

Definition /rtl/rel7/lib/round.lisp::rnd-const
Definition /rtl/rel7/support/lib1.delta1/round.lisp::rnd-const
Definition /rtl/rel7/support/support/rnd.lisp::rnd-const
Definition /rtl/rel8/lib/round.lisp::rnd-const
Definition /rtl/rel8/support/lib2.delta1/round.lisp::rnd-const
Definition /rtl/rel8/support/lib2.delta1/round-proofs.lisp::rnd-const
Definition /rtl/rel8/support/lib2.delta1/round-new-proofs.lisp::rnd-const
Definition /rtl/rel8/support/lib2.delta1/round-new.lisp::rnd-const
Definition /rtl/rel8/support/lib1.delta1/round.lisp::rnd-const
Definition /rtl/rel8/support/support/rnd.lisp::rnd-const
Definition /rtl/rel8/support/lib2/round.lisp::rnd-const
Definition /rtl/rel5/lib/round.lisp::rnd-const
Definition /rtl/rel5/support/rnd.lisp::rnd-const
Definition /rtl/rel4/lib/round.lisp::rnd-const
Definition /rtl/rel4/support/rnd.lisp::rnd-const

Cluster 48

Definition /rtl/rel7/lib/mult.lisp::sum-pp4-theta
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-pp4-theta
Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-pp4-theta
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-pp4-theta
Definition /rtl/rel8/support/lib2/mult.lisp::sum-pp4-theta

Cluster 53

Definition /rtl/rel7/lib/mult.lisp::pp4-phi
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::pp4-phi
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::pp4-phi
Definition /rtl/rel8/support/lib2/mult.lisp::pp4-phi

Cluster 54

Definition /rtl/rel7/lib/float.lisp::fp-
Definition /rtl/rel7/support/lib1.delta1/float.lisp::fp-
Definition /rtl/rel7/support/support/float-extra.lisp::fp-
Definition /rtl/rel7/support/lib1/float.lisp::fp-
Definition /rtl/rel8/lib/float.lisp::fp-
Definition /rtl/rel8/support/lib2.delta1/float-new-proofs.lisp::fp-
Definition /rtl/rel8/support/lib2.delta1/float.lisp::fp-
Definition /rtl/rel8/support/lib2.delta1/float-new.lisp::fp-
Definition /rtl/rel8/support/lib2.delta1/float-proofs.lisp::fp-
Definition /rtl/rel8/support/lib1.delta1/float.lisp::fp-
Definition /rtl/rel8/support/support/float-extra.lisp::fp-
Definition /rtl/rel8/support/lib1/float.lisp::fp-

Definition /rtl/rel8/support/lib1.delta2/float.lisp::fp-
 Definition /rtl/rel8/support/lib2/float.lisp::fp-
 Definition /rtl/rel5/lib/float.lisp::fp-
 Definition /rtl/rel5/support/float-extra.lisp::fp-

Cluster 55

Definition /rtl/rel7/lib/mult.lisp::delta
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::delta
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::delta
 Definition /rtl/rel8/support/lib2/mult.lisp::delta

Cluster 56

Definition /rtl/rel1/support/fadd/lop3.lisp::LAM0
 Definition /rtl/rel1/lib3/fadd.lisp::lam0
 Definition /rtl/rel8/lib/add.lisp::lam0
 Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::lam0
 Definition /rtl/rel8/support/lib2.delta1/add.lisp::lam0
 Definition /rtl/rel8/support/lib2.delta2/add.lisp::lam0

Cluster 57

Definition /rtl/rel7/lib/log.lisp::logop-2-n-induct
 Definition /rtl/rel7/support/lib1/log.lisp::logop-2-n-induct
 Definition /rtl/rel8/lib/logn.lisp::lognop-2-n-induct
 Definition /rtl/rel8/lib/log.lisp::logop-2-n-induct
 Definition /rtl/rel8/support/lib2.delta1/logn.lisp::lognop-2-n-induct
 Definition /rtl/rel8/support/lib2.delta1/log-proofs.lisp::logop-2-n-induct
 Definition /rtl/rel8/support/lib2.delta1/log.lisp::logop-2-n-induct
 Definition /rtl/rel8/support/lib1/log.lisp::logop-2-n-induct
 Definition /rtl/rel8/support/lib2.delta2/log.lisp::logop-2-n-induct
 Definition /rtl/rel8/support/lib2/log.lisp::logop-2-n-induct
 Definition /rtl/rel5/lib/log.lisp::logop-2-n-induct
 Definition /rtl/rel4/lib/bits.lisp::logop-2-n-induct

Cluster 58

Definition /rtl/rel7/support/support/lop3.lisp::lam4-0
 Definition /rtl/rel7/support/support/fadd.lisp::lam4-0
 Definition /rtl/rel7/support/support/lop3-proofs.lisp::lam4-0
 Definition /rtl/rel8/support/support/lop3.lisp::lam4-0
 Definition /rtl/rel8/support/support/fadd.lisp::lam4-0
 Definition /rtl/rel8/support/support/lop3-proofs.lisp::lam4-0
 Definition /rtl/rel5/support/lop3.lisp::lam4-0
 Definition /rtl/rel5/support/fadd.lisp::lam4-0
 Definition /rtl/rel5/support/lop3-proofs.lisp::lam4-0

Cluster 62

Definition /rtl/rel7/lib/round.lisp::roundup
Definition /rtl/rel7/support/lib1.delta1/round.lisp::roundup
Definition /rtl/rel7/support/support/rnd.lisp::roundup
Definition /rtl/rel8/lib/round.lisp::roundup
Definition /rtl/rel8/support/lib2.delta1/round.lisp::roundup
Definition /rtl/rel8/support/lib2.delta1/round-proofs.lisp::roundup
Definition /rtl/rel8/support/lib1.delta1/round.lisp::roundup
Definition /rtl/rel8/support/support/rnd.lisp::roundup
Definition /rtl/rel8/support/lib2/round.lisp::roundup
Definition /rtl/rel5/lib/round.lisp::roundup
Definition /rtl/rel5/support/rnd.lisp::roundup
Definition /rtl/rel4/lib/round.lisp::roundup
Definition /rtl/rel4/support/rnd.lisp::roundup

Cluster 64

Definition /rtl/rel7/lib/rtlarr.lisp::acons-if
Definition /rtl/rel7/support/support/rtlarr.lisp::acons-if
Definition /rtl/rel7/support/lib1/rtlarr.lisp::acons-if
Definition /rtl/rel8/lib/rtlarr.lisp::acons-if
Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::acons-if
Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::acons-if
Definition /rtl/rel8/support/support/rtlarr.lisp::acons-if
Definition /rtl/rel8/support/lib1/rtlarr.lisp::acons-if
Definition /rtl/rel8/support/lib2/rtlarr.lisp::acons-if
Definition /rtl/rel5/lib/rtlarr.lisp::acons-if
Definition /rtl/rel5/support/rtlarr.lisp::acons-if
Definition /rtl/rel4/lib/rtlarr.lisp::acons-if
Definition /rtl/rel4/support/rtlarr.lisp::acons-if

Cluster 66

Definition /rtl/rel1/support/fp.lisp::point-right-measure
Definition /rtl/rel7/lib/arith.lisp::point-right-measure
Definition /rtl/rel7/support/lib1.delta1/arith.lisp::point-right-measure
Definition /rtl/rel7/support/lib1/arith.lisp::point-right-measure
Definition /rtl/rel8/lib/arith.lisp::point-right-measure
Definition /rtl/rel8/support/lib2.delta1/arith.lisp::point-right-measure
Definition /rtl/rel8/support/lib1.delta1/arith.lisp::point-right-measure
Definition /rtl/rel8/support/lib1/arith.lisp::point-right-measure
Definition /rtl/rel8/support/lib2/arith.lisp::point-right-measure
Definition /rtl/rel5/lib/arith.lisp::point-right-measure
Definition /rtl/rel4/lib/arith.lisp::point-right-measure

Cluster 68

Definition /rtl/rel7/lib/rtl.lisp::setbitn
Definition /rtl/rel7/support/lib1/rtl.lisp::setbitn
Definition /rtl/rel8/lib/rtl.lisp::setbitn
Definition /rtl/rel8/support/lib2.delta1/rtl.lisp::setbitn
Definition /rtl/rel8/support/lib2.delta1/rtl-proofs.lisp::setbitn
Definition /rtl/rel8/support/lib1/rtl.lisp::setbitn
Definition /rtl/rel8/support/lib2/rtl.lisp::setbitn
Definition /rtl/rel5/lib/rtl.lisp::setbitn

Cluster 69

Definition /rtl/rel1/support/rnd.lisp::inf
Definition /rtl/rel1/lib1/round.lisp::inf
Definition /rtl/rel1/lib3/round.lisp::inf
Definition /rtl/rel7/lib/round.lisp::inf
Definition /rtl/rel7/support/lib1.delta1/round.lisp::inf
Definition /rtl/rel8/lib/round.lisp::inf
Definition /rtl/rel8/support/lib2.delta1/round.lisp::inf
Definition /rtl/rel8/support/lib2.delta1/round-proofs.lisp::inf
Definition /rtl/rel8/support/lib2.delta1/round-new-proofs.lisp::inf
Definition /rtl/rel8/support/lib2.delta1/round-new.lisp::inf
Definition /rtl/rel8/support/lib1.delta1/round.lisp::inf
Definition /rtl/rel8/support/lib2/round.lisp::inf
Definition /rtl/rel5/lib/round.lisp::inf
Definition /rtl/rel4/lib/round.lisp::inf

Cluster 71

Definition /rtl/rel7/lib/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel7/support/support/bvecp-lemmas.lisp::expo
Definition /rtl/rel7/support/lib1/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel8/lib/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel8/support/lib2.delta1/bvecp-raw-helpers-proofs.lisp::expo
Definition /rtl/rel8/support/lib2.delta1/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel8/support/lib1.delta1/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel8/support/support/bvecp-lemmas.lisp::expo
Definition /rtl/rel8/support/lib1/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel8/support/lib2/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel5/lib/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel5/support/support/bvecp-lemmas.lisp::expo
Definition /rtl/rel4/lib/bvecp-raw-helpers.lisp::expo
Definition /rtl/rel4/support/support/bvecp-lemmas.lisp::expo

Cluster 74

Definition /rtl/rel7/lib/add.lisp::rc-sum
Definition /rtl/rel7/support/support/fadd-extra.lisp::rc-sum
Definition /rtl/rel7/support/lib1/add.lisp::rc-sum
Definition /rtl/rel8/support/support/fadd-extra.lisp::rc-sum
Definition /rtl/rel8/support/lib1/add.lisp::rc-sum
Definition /rtl/rel8/support/lib2/add.lisp::rc-sum
Definition /rtl/rel5/lib/add.lisp::rc-sum
Definition /rtl/rel5/support/fadd-extra.lisp::rc-sum

Cluster 79

Definition /rtl/rel7/support/support/lop3.lisp::lam0-0
Definition /rtl/rel7/support/support/fadd.lisp::lam0-0
Definition /rtl/rel7/support/support/lop3-proofs.lisp::lam0-0
Definition /rtl/rel8/support/support/lop3.lisp::lam0-0
Definition /rtl/rel8/support/support/fadd.lisp::lam0-0
Definition /rtl/rel8/support/support/lop3-proofs.lisp::lam0-0
Definition /rtl/rel5/support/lop3.lisp::lam0-0
Definition /rtl/rel5/support/fadd.lisp::lam0-0
Definition /rtl/rel5/support/lop3-proofs.lisp::lam0-0

Cluster 80

Definition /rtl/rel7/lib/add.lisp::prop
Definition /rtl/rel7/support/support/fadd.lisp::prop
Definition /rtl/rel7/support/lib1/add.lisp::prop
Definition /rtl/rel8/lib/add.lisp::prop
Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::prop
Definition /rtl/rel8/support/lib2.delta1/add.lisp::prop
Definition /rtl/rel8/support/support/fadd.lisp::prop
Definition /rtl/rel8/support/lib1/add.lisp::prop
Definition /rtl/rel8/support/lib2.delta2/add.lisp::prop
Definition /rtl/rel8/support/lib2/add.lisp::prop
Definition /rtl/rel5/lib/add.lisp::prop
Definition /rtl/rel5/support/fadd.lisp::prop
Definition /rtl/rel4/lib/fadd.lisp::prop
Definition /rtl/rel4/support/fadd.lisp::prop

Cluster 81

Definition /rtl/rel7/lib/float.lisp::isgnf
Definition /rtl/rel7/lib/rep.s.lisp::isgnf
Definition /rtl/rel7/support/lib1.delta1/float.lisp::isgnf
Definition /rtl/rel7/support/lib1/rep.s.lisp::isgnf

Definition /rtl/rel8/lib/float.lisp::isgnf
 Definition /rtl/rel8/lib/rep.s.lisp::isgnf
 Definition /rtl/rel8/support/lib2.delta1/rep.s-proofs.lisp::isgnf
 Definition /rtl/rel8/support/lib2.delta1/float.lisp::isgnf
 Definition /rtl/rel8/support/lib2.delta1/rep.s.lisp::isgnf
 Definition /rtl/rel8/support/lib2.delta1/float-proofs.lisp::isgnf
 Definition /rtl/rel8/support/lib1.delta1/float.lisp::isgnf
 Definition /rtl/rel8/support/lib1/rep.s.lisp::isgnf
 Definition /rtl/rel8/support/lib1.delta2/float.lisp::isgnf
 Definition /rtl/rel8/support/lib2/float.lisp::isgnf
 Definition /rtl/rel8/support/lib2/rep.s.lisp::isgnf
 Definition /rtl/rel5/lib/rep.s.lisp::isgnf
 Definition /rtl/rel4/lib/rep.s.lisp::isgnf

Cluster 84

Definition /rtl/rel7/lib/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel7/lib/bvecp-helpers.lisp::expt-exec
 Definition /rtl/rel7/support/lib1/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel7/support/lib1/bvecp-helpers.lisp::expt-exec
 Definition /rtl/rel7/arithmetic/basic.lisp::expt-exec
 Definition /rtl/rel8/lib/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel8/lib/bvecp-helpers.lisp::expt-exec
 Definition /rtl/rel8/support/lib2.delta1/bvecp-raw-helpers-proofs.lisp::expt-exec
 Definition /rtl/rel8/support/lib2.delta1/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel8/support/lib2.delta1/bvecp-helpers.lisp::expt-exec
 Definition /rtl/rel8/support/lib1.delta1/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel8/support/lib1/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel8/support/lib1/bvecp-helpers.lisp::expt-exec
 Definition /rtl/rel8/support/lib2/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel8/support/lib2/bvecp-helpers.lisp::expt-exec
 Definition /rtl/rel8/arithmetic/basic.lisp::expt-exec
 Definition /rtl/rel5/lib/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel5/lib/bvecp-helpers.lisp::expt-exec
 Definition /rtl/rel5/arithmetic/basic.lisp::expt-exec
 Definition /rtl/rel4/lib/bvecp-raw-helpers.lisp::expt-exec
 Definition /rtl/rel4/lib/bvecp-helpers.lisp::expt-exec
 Definition /rtl/rel4/arithmetic/basic.lisp::expt-exec

Cluster 85

Definition /rtl/rel7/lib/mult.lisp::eta
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::eta
 Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::eta
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::eta
 Definition /rtl/rel8/support/lib2/mult.lisp::eta

Cluster 91

```

Definition /rtl/rel7/lib/rtl.lisp::setbits
Definition /rtl/rel7/support/lib1/rtl.lisp::setbits
Definition /rtl/rel8/lib/rtl.lisp::setbits
Definition /rtl/rel8/support/lib2.delta1/rtl.lisp::setbits
Definition /rtl/rel8/support/lib2.delta1/rtl-proofs.lisp::setbits
Definition /rtl/rel8/support/lib1/rtl.lisp::setbits
Definition /rtl/rel8/support/lib2/rtl.lisp::setbits
Definition /rtl/rel5/lib/rtl.lisp::setbits
Definition /rtl/rel4/lib/rtl.lisp::setbits
Definition /rtl/rel4/lib/bits.lisp::setbits

```

Cluster 93

```

Definition /rtl/rel7/lib/add.lisp::lam4
Definition /rtl/rel7/support/support/lextra.lisp::lam4
Definition /rtl/rel7/support/lib1/add.lisp::lam4
Definition /rtl/rel8/support/support/lextra.lisp::lam4
Definition /rtl/rel8/support/lib1/add.lisp::lam4
Definition /rtl/rel8/support/lib2/add.lisp::lam4
Definition /rtl/rel5/lib/add.lisp::lam4
Definition /rtl/rel5/support/lextra.lisp::lam4
Definition /rtl/rel4/lib/fadd.lisp::lam4
Definition /rtl/rel4/support/lop3.lisp::lam4
Definition /rtl/rel4/support/fadd.lisp::lam4
Definition /rtl/rel4/support/lop3-proofs.lisp::lam4

```

Cluster 96

```

Definition /rtl/rel7/lib/rtlarr.lisp::mk-bvarr
Definition /rtl/rel7/support/support/rtlarr.lisp::mk-bvarr
Definition /rtl/rel7/support/lib1/rtlarr.lisp::mk-bvarr
Definition /rtl/rel8/lib/rtlarr.lisp::mk-bvarr
Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::mk-bvarr
Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::mk-bvarr
Definition /rtl/rel8/support/support/rtlarr.lisp::mk-bvarr
Definition /rtl/rel8/support/lib1/rtlarr.lisp::mk-bvarr
Definition /rtl/rel8/support/lib2/rtlarr.lisp::mk-bvarr
Definition /rtl/rel5/lib/rtlarr.lisp::mk-bvarr
Definition /rtl/rel5/support/rtlarr.lisp::mk-bvarr
Definition /rtl/rel4/lib/rtlarr.lisp::mk-bvarr
Definition /rtl/rel4/support/rtlarr.lisp::mk-bvarr

```

Cluster 97

Definition /rtl/rel7/lib/add.lisp::gen
Definition /rtl/rel7/support/support/fadd.lisp::gen
Definition /rtl/rel7/support/lib1/add.lisp::gen
Definition /rtl/rel8/lib/add.lisp::gen
Definition /rtl/rel8/support/lib2.delta1/add-proofs.lisp::gen
Definition /rtl/rel8/support/lib2.delta1/add.lisp::gen
Definition /rtl/rel8/support/support/fadd.lisp::gen
Definition /rtl/rel8/support/lib1/add.lisp::gen
Definition /rtl/rel8/support/lib2.delta2/add.lisp::gen
Definition /rtl/rel8/support/lib2/add.lisp::gen
Definition /rtl/rel5/lib/add.lisp::gen
Definition /rtl/rel5/support/fadd.lisp::gen
Definition /rtl/rel4/lib/fadd.lisp::gen
Definition /rtl/rel4/support/fadd.lisp::gen

Cluster 98

Definition /rtl/rel7/lib/rebs.lisp::esgnf
Definition /rtl/rel7/support/lib1/rebs.lisp::esgnf
Definition /rtl/rel8/lib/rebs.lisp::esgnf
Definition /rtl/rel8/support/lib2.delta1/rebs-proofs.lisp::esgnf
Definition /rtl/rel8/support/lib2.delta1/rebs.lisp::esgnf
Definition /rtl/rel8/support/lib1/rebs.lisp::esgnf
Definition /rtl/rel8/support/lib2/rebs.lisp::esgnf
Definition /rtl/rel5/lib/rebs.lisp::esgnf
Definition /rtl/rel4/lib/rebs.lisp::esgnf

Cluster 103

Definition /misc/mult.lisp::sub1-induction
Definition /rtl/rel7/lib/util.lisp::sub1-induction
Definition /rtl/rel7/support/support/util.lisp::sub1-induction
Definition /rtl/rel7/support/lib1/util.lisp::sub1-induction
Definition /rtl/rel7/arithmetic/induct.lisp::natp-induct
Definition /rtl/rel8/lib/util.lisp::sub1-induction
Definition /rtl/rel8/support/lib2.delta1/util.lisp::sub1-induction
Definition /rtl/rel8/support/support/util.lisp::sub1-induction
Definition /rtl/rel8/support/lib1/util.lisp::sub1-induction
Definition /rtl/rel8/support/lib2/util.lisp::sub1-induction
Definition /rtl/rel8/arithmetic/induct.lisp::natp-induct
Definition /rtl/rel5/lib/util.lisp::sub1-induction
Definition /rtl/rel5/support/util.lisp::sub1-induction
Definition /rtl/rel5/arithmetic/induct.lisp::natp-induct
Definition /rtl/rel4/lib/util.lisp::sub1-induction
Definition /rtl/rel4/support/util.lisp::sub1-induction
Definition /rtl/rel4/arithmetic/induct.lisp::natp-induct

Cluster 106

Definition /rtl/rel7/lib/mult.lisp::sum-pp4-phi
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-pp4-phi
Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-pp4-phi
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-pp4-phi
Definition /rtl/rel8/support/lib2/mult.lisp::sum-pp4-phi

Cluster 107

Definition /rtl/rel7/lib/mult.lisp::m-mu-chi
Definition /rtl/rel7/support/lib1.delta1/mult.lisp::m-mu-chi
Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::m-mu-chi
Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::m-mu-chi
Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::m-mu-chi
Definition /rtl/rel8/support/lib1.delta1/mult.lisp::m-mu-chi
Definition /rtl/rel8/support/lib2/mult.lisp::m-mu-chi

Cluster 109

Definition /rtl/rel7/support/support/lop3.lisp::lamb-0
Definition /rtl/rel7/support/support/fadd.lisp::lamb-0
Definition /rtl/rel7/support/support/lop3-proofs.lisp::lamb-0
Definition /rtl/rel8/support/support/lop3.lisp::lamb-0
Definition /rtl/rel8/support/support/fadd.lisp::lamb-0
Definition /rtl/rel8/support/support/lop3-proofs.lisp::lamb-0
Definition /rtl/rel5/support/lop3.lisp::lamb-0
Definition /rtl/rel5/support/fadd.lisp::lamb-0
Definition /rtl/rel5/support/lop3-proofs.lisp::lamb-0

Cluster 111

Definition /rtl/rel7/lib/log.lisp::logop-2-induct
Definition /rtl/rel7/support/lib1/log.lisp::logop-2-induct
Definition /rtl/rel8/lib/logn.lisp::lognop-2-induct
Definition /rtl/rel8/support/lib2.delta1/logn.lisp::lognop-2-induct
Definition /rtl/rel8/support/lib1/log.lisp::logop-2-induct
Definition /rtl/rel8/support/lib2/log.lisp::logop-2-induct
Definition /rtl/rel5/lib/log.lisp::logop-2-induct
Definition /rtl/rel4/lib/bits.lisp::logop-2-induct

Cluster 114

Definition /rtl/rel7/lib/rtlarr.lisp::as
Definition /rtl/rel7/support/support/rtlarr.lisp::as
Definition /rtl/rel7/support/lib1/rtlarr.lisp::as

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Definition /rtl/rel8/lib/rtlarr.lisp::as
Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::as
Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::as
Definition /rtl/rel8/support/support/rtlarr.lisp::as
Definition /rtl/rel8/support/lib1/rtlarr.lisp::as
Definition /rtl/rel8/support/lib2/rtlarr.lisp::as
Definition /rtl/rel5/lib/rtlarr.lisp::as
Definition /rtl/rel5/support/rtlarr.lisp::as
Definition /rtl/rel4/lib/rtlarr.lisp::as
Definition /rtl/rel4/support/rtlarr.lisp::as

```

Cluster 118

```

Definition /rtl/rel7/lib/rebs.lisp::eexpof
Definition /rtl/rel7/support/lib1/rebs.lisp::eexpof
Definition /rtl/rel8/lib/rebs.lisp::eexpof
Definition /rtl/rel8/support/lib2.delta1/rebs-proofs.lisp::eexpof
Definition /rtl/rel8/support/lib2.delta1/rebs.lisp::eexpof
Definition /rtl/rel8/support/lib1/rebs.lisp::eexpof
Definition /rtl/rel8/support/lib2/rebs.lisp::eexpof
Definition /rtl/rel5/lib/rebs.lisp::eexpof
Definition /rtl/rel4/lib/rebs.lisp::eexpof

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Cluster 121

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Definition /rtl/rel7/lib/add.lisp::lamz
Definition /rtl/rel7/support/support/lextra.lisp::lamz
Definition /rtl/rel7/support/lib1/add.lisp::lamz
Definition /rtl/rel8/support/support/lextra.lisp::lamz
Definition /rtl/rel8/support/lib1/add.lisp::lamz
Definition /rtl/rel8/support/lib2/add.lisp::lamz
Definition /rtl/rel5/lib/add.lisp::lamz
Definition /rtl/rel5/support/lextra.lisp::lamz
Definition /rtl/rel4/lib/fadd.lisp::lamz
Definition /rtl/rel4/support/lop3.lisp::lamz
Definition /rtl/rel4/support/fadd.lisp::lamz
Definition /rtl/rel4/support/lop3-proofs.lisp::lamz

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Cluster 124

Definition /rtl/rel7/lib/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel7/support/support/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel7/support/lib1/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel8/lib/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::positive-integer-listp
Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel8/support/support/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel8/support/lib1/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel8/support/lib2/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel5/lib/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel5/support/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel4/lib/rtlarr.lisp::positive-integer-listp
Definition /rtl/rel4/support/rtlarr.lisp::positive-integer-listp

Cluster 137

Definition /rtl/rel1/support/fp.lisp::point-left-measure
Definition /rtl/rel7/lib/arith.lisp::point-left-measure
Definition /rtl/rel7/support/lib1.delta1/arith.lisp::point-left-measure
Definition /rtl/rel7/support/lib1/arith.lisp::point-left-measure
Definition /rtl/rel8/lib/arith.lisp::point-left-measure
Definition /rtl/rel8/support/lib2.delta1/arith.lisp::point-left-measure
Definition /rtl/rel8/support/lib1.delta1/arith.lisp::point-left-measure
Definition /rtl/rel8/support/lib1/arith.lisp::point-left-measure
Definition /rtl/rel8/support/lib2/arith.lisp::point-left-measure
Definition /rtl/rel5/lib/arith.lisp::point-left-measure
Definition /rtl/rel4/lib/arith.lisp::point-left-measure

Cluster 148

Definition /rtl/rel7/lib/round.lisp::common-rounding-mode-p
Definition /rtl/rel7/support/lib1.delta1/round.lisp::common-rounding-mode-p
Definition /rtl/rel8/lib/round.lisp::common-rounding-mode-p
Definition /rtl/rel8/support/lib2.delta1/round.lisp::common-rounding-mode-p
Definition /rtl/rel8/support/lib2.delta1/round-proofs.lisp::common-rounding-mode-p
Definition /rtl/rel8/support/lib2.delta1/round-new-proofs.lisp::common-rounding-mode-p
Definition /rtl/rel8/support/lib1.delta1/round.lisp::common-rounding-mode-p
Definition /rtl/rel8/support/lib2/round.lisp::common-rounding-mode-p
Definition /rtl/rel5/lib/round.lisp::rounding-mode-p
Definition /rtl/rel4/lib/round.lisp::rounding-mode-p

Cluster 149

Definition /rtl/rel7/lib/rtlarr.lisp::rcdp
Definition /rtl/rel7/support/support/rtlarr.lisp::rcdp
Definition /rtl/rel7/support/lib1/rtlarr.lisp::rcdp
Definition /rtl/rel8/lib/rtlarr.lisp::rcdp

Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::rcdp
 Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::rcdp
 Definition /rtl/rel8/support/support/rtlarr.lisp::rcdp
 Definition /rtl/rel8/support/lib1/rtlarr.lisp::rcdp
 Definition /rtl/rel8/support/lib2/rtlarr.lisp::rcdp
 Definition /rtl/rel5/lib/rtlarr.lisp::rcdp
 Definition /rtl/rel5/support/rtlarr.lisp::rcdp
 Definition /rtl/rel4/lib/rtlarr.lisp::rcdp
 Definition /rtl/rel4/support/rtlarr.lisp::rcdp

Cluster 152

Definition /rtl/rel1/support/logdefs.lisp::BITN
 Definition /rtl/rel1/support/logxor-def.lisp::BITN
 Definition /rtl/rel1/lib1/bits.lisp::bitn
 Definition /rtl/rel1/lib1/rep.s.lisp::bitn
 Definition /rtl/rel1/lib3/bits.lisp::bitn
 Definition /rtl/rel1/lib3/rep.s.lisp::bitn
 Definition /rtl/rel7/support/support/rtl.lisp::bitn
 Definition /rtl/rel8/support/support/rtl.lisp::bitn
 Definition /rtl/rel5/support/rtl.lisp::bitn
 Definition /rtl/rel4/support/rtl.lisp::bitn

Cluster 160

Definition /rtl/rel7/lib/add.lisp::lam1
 Definition /rtl/rel7/support/support/lextra.lisp::lam1
 Definition /rtl/rel7/support/lib1/add.lisp::lam1
 Definition /rtl/rel8/support/support/lextra.lisp::lam1
 Definition /rtl/rel8/support/lib1/add.lisp::lam1
 Definition /rtl/rel8/support/lib2/add.lisp::lam1
 Definition /rtl/rel5/lib/add.lisp::lam1
 Definition /rtl/rel5/support/lextra.lisp::lam1
 Definition /rtl/rel4/lib/fadd.lisp::lam1
 Definition /rtl/rel4/support/lop3.lisp::lam1
 Definition /rtl/rel4/support/fadd.lisp::lam1
 Definition /rtl/rel4/support/lop3-proofs.lisp::lam1

Cluster 163

Definition /rtl/rel7/lib/util.lisp::split-list
 Definition /rtl/rel7/support/support/fast-and.lisp::split-list
 Definition /rtl/rel7/support/support/util.lisp::split-list
 Definition /rtl/rel7/support/lib1/util.lisp::split-list
 Definition /rtl/rel8/lib/util.lisp::split-list
 Definition /rtl/rel8/support/lib2.delta1/util.lisp::split-list

Definition /rtl/rel8/support/support/fast-and.lisp::split-list
 Definition /rtl/rel8/support/support/util.lisp::split-list
 Definition /rtl/rel8/support/lib1/util.lisp::split-list
 Definition /rtl/rel8/support/lib2/util.lisp::split-list
 Definition /rtl/rel5/lib/util.lisp::split-list
 Definition /rtl/rel5/support/fast-and.lisp::split-list
 Definition /rtl/rel5/support/util.lisp::split-list
 Definition /rtl/rel4/lib/util.lisp::split-list
 Definition /rtl/rel4/support/fast-and.lisp::split-list
 Definition /rtl/rel4/support/util.lisp::split-list

Cluster 164

Definition /rtl/rel7/support/support/lop3.lisp::lam3-0
 Definition /rtl/rel7/support/support/fadd.lisp::lam3-0
 Definition /rtl/rel7/support/support/lop3-proofs.lisp::lam3-0
 Definition /rtl/rel8/support/support/lop3.lisp::lam3-0
 Definition /rtl/rel8/support/support/fadd.lisp::lam3-0
 Definition /rtl/rel8/support/support/lop3-proofs.lisp::lam3-0
 Definition /rtl/rel5/support/lop3.lisp::lam3-0
 Definition /rtl/rel5/support/fadd.lisp::lam3-0
 Definition /rtl/rel5/support/lop3-proofs.lisp::lam3-0

Cluster 168

Definition /rtl/rel7/lib/add.lisp::lamb
 Definition /rtl/rel7/support/support/lextra.lisp::lamb
 Definition /rtl/rel7/support/lib1/add.lisp::lamb
 Definition /rtl/rel8/support/support/lextra.lisp::lamb
 Definition /rtl/rel8/support/lib1/add.lisp::lamb
 Definition /rtl/rel8/support/lib2/add.lisp::lamb
 Definition /rtl/rel5/lib/add.lisp::lamb
 Definition /rtl/rel5/support/lextra.lisp::lamb
 Definition /rtl/rel4/lib/fadd.lisp::lamb
 Definition /rtl/rel4/support/lop3.lisp::lamb
 Definition /rtl/rel4/support/fadd.lisp::lamb
 Definition /rtl/rel4/support/lop3-proofs.lisp::lamb

Cluster 171

Definition /rtl/rel7/lib/mult.lisp::sum-theta
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-theta

Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-theta
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-theta
 Definition /rtl/rel8/support/lib2/mult.lisp::sum-theta

Cluster 177

Definition /rtl/rel7/lib/mult.lisp::sum-zeta
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-zeta
 Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-zeta
 Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-zeta
 Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-zeta
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-zeta
 Definition /rtl/rel8/support/lib2/mult.lisp::sum-zeta

Cluster 178

Definition /rtl/rel7/lib/rtl.lisp::cond1-macro
 Definition /rtl/rel7/support/support/rtl.lisp::cond1-macro
 Definition /rtl/rel7/support/lib1/rtl.lisp::cond1-macro
 Definition /rtl/rel8/lib/rtl.lisp::cond1-macro
 Definition /rtl/rel8/support/lib2.delta1/rtl.lisp::cond1-macro
 Definition /rtl/rel8/support/lib2.delta1/rtl-new.lisp::cond1-macro
 Definition /rtl/rel8/support/lib2.delta1/rtl-new-proofs.lisp::cond1-macro
 Definition /rtl/rel8/support/lib2.delta1/rtl-proofs.lisp::cond1-macro
 Definition /rtl/rel8/support/support/rtl.lisp::cond1-macro
 Definition /rtl/rel8/support/lib1/rtl.lisp::cond1-macro
 Definition /rtl/rel8/support/lib2/rtl.lisp::cond1-macro
 Definition /rtl/rel5/lib/rtl.lisp::cond1-macro
 Definition /rtl/rel5/support/rtl.lisp::cond1-macro
 Definition /rtl/rel4/lib/rtl.lisp::cond1-macro
 Definition /rtl/rel4/support/rtl.lisp::cond1-macro

Cluster 189

Definition /rtl/rel7/lib/rtlarr.lisp::bv-arrp
 Definition /rtl/rel7/support/support/rtlarr.lisp::bv-arrp
 Definition /rtl/rel7/support/lib1/rtlarr.lisp::bv-arrp
 Definition /rtl/rel8/lib/rtlarr.lisp::bv-arrp
 Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::bv-arrp
 Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::bv-arrp
 Definition /rtl/rel8/support/support/rtlarr.lisp::bv-arrp
 Definition /rtl/rel8/support/lib1/rtlarr.lisp::bv-arrp

Definition /rtl/rel8/support/lib2/rtlarr.lisp::bv-arrp
 Definition /rtl/rel5/lib/rtlarr.lisp::bv-arrp
 Definition /rtl/rel5/support/rtlarr.lisp::bv-arrp
 Definition /rtl/rel4/lib/rtlarr.lisp::bv-arrp
 Definition /rtl/rel4/support/rtlarr.lisp::bv-arrp

Cluster 194

Definition /rtl/rel7/lib/add.lisp::rc-carry
 Definition /rtl/rel7/support/support/fadd-extra.lisp::rc-carry
 Definition /rtl/rel7/support/lib1/add.lisp::rc-carry
 Definition /rtl/rel8/support/support/fadd-extra.lisp::rc-carry
 Definition /rtl/rel8/support/lib1/add.lisp::rc-carry
 Definition /rtl/rel8/support/lib2/add.lisp::rc-carry
 Definition /rtl/rel5/lib/add.lisp::rc-carry
 Definition /rtl/rel5/support/fadd-extra.lisp::rc-carry

Cluster 195

Definition /rtl/rel7/lib/mult.lisp::neg
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::neg
 Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::neg
 Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::neg
 Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::neg
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::neg
 Definition /rtl/rel8/support/lib2/mult.lisp::neg

Cluster 201

Definition /rtl/rel7/lib/add.lisp::lam2
 Definition /rtl/rel7/support/support/lextra.lisp::lam2
 Definition /rtl/rel7/support/lib1/add.lisp::lam2
 Definition /rtl/rel8/support/support/lextra.lisp::lam2
 Definition /rtl/rel8/support/lib1/add.lisp::lam2
 Definition /rtl/rel8/support/lib2/add.lisp::lam2
 Definition /rtl/rel5/lib/add.lisp::lam2
 Definition /rtl/rel5/support/lextra.lisp::lam2
 Definition /rtl/rel4/lib/fadd.lisp::lam2
 Definition /rtl/rel4/support/lop3.lisp::lam2
 Definition /rtl/rel4/support/fadd.lisp::lam2
 Definition /rtl/rel4/support/lop3-proofs.lisp::lam2

Cluster 205

Definition /rtl/rel7/lib/mult.lisp::sum-xi
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-xi
 Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-xi
 Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-xi

Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-xi
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-xi
 Definition /rtl/rel8/support/lib2/mult.lisp::sum-xi

Cluster 214

Definition /rtl/rel7/support/support/lop3.lisp::lam1-0
 Definition /rtl/rel7/support/support/fadd.lisp::lam1-0
 Definition /rtl/rel7/support/support/lop3-proofs.lisp::lam1-0
 Definition /rtl/rel8/support/support/lop3.lisp::lam1-0
 Definition /rtl/rel8/support/support/fadd.lisp::lam1-0
 Definition /rtl/rel8/support/support/lop3-proofs.lisp::lam1-0
 Definition /rtl/rel5/support/lop3.lisp::lam1-0
 Definition /rtl/rel5/support/fadd.lisp::lam1-0
 Definition /rtl/rel5/support/lop3-proofs.lisp::lam1-0

Cluster 219

Definition /rtl/rel1/support/rnd.lisp::minf
 Definition /rtl/rel1/lib1/round.lisp::minf
 Definition /rtl/rel1/lib3/round.lisp::minf
 Definition /rtl/rel7/lib/round.lisp::minf
 Definition /rtl/rel7/support/lib1.delta1/round.lisp::minf
 Definition /rtl/rel8/lib/round.lisp::minf
 Definition /rtl/rel8/support/lib2.delta1/round.lisp::minf
 Definition /rtl/rel8/support/lib2.delta1/round-proofs.lisp::minf
 Definition /rtl/rel8/support/lib2.delta1/round-new-proofs.lisp::minf
 Definition /rtl/rel8/support/lib2.delta1/round-new.lisp::minf
 Definition /rtl/rel8/support/lib1.delta1/round.lisp::minf
 Definition /rtl/rel8/support/lib2/round.lisp::minf
 Definition /rtl/rel5/lib/round.lisp::minf
 Definition /rtl/rel4/lib/round.lisp::minf

Cluster 226

Definition /rtl/rel7/lib/mult.lisp::sum-odd-powers-of-2
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-odd-powers-of-2
 Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-odd-powers-of-2
 Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-odd-powers-of-2
 Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-odd-powers-of-2
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-odd-powers-of-2
 Definition /rtl/rel8/support/lib2/mult.lisp::sum-odd-powers-of-2

Cluster 227

Definition /rtl/rel7/lib/rom-helpers.lisp::check-array

Definition /rtl/rel7/support/support/rom-helpers.lisp::check-array
 Definition /rtl/rel7/support/lib1/rom-helpers.lisp::check-array
 Definition /rtl/rel8/lib/rom-helpers.lisp::check-array
 Definition /rtl/rel8/support/support/rom-helpers.lisp::check-array
 Definition /rtl/rel8/support/lib1/rom-helpers.lisp::check-array
 Definition /rtl/rel8/support/lib2/rom-helpers.lisp::check-array
 Definition /rtl/rel5/lib/rom-helpers.lisp::check-array
 Definition /rtl/rel5/support/rom-helpers.lisp::check-array
 Definition /rtl/rel4/lib/rom-helpers.lisp::check-array
 Definition /rtl/rel4/support/rom-helpers.lisp::check-array

Cluster 230

Definition /rtl/rel7/lib/rtlarr.lisp::ifrp
 Definition /rtl/rel7/support/support/rtlarr.lisp::ifrp
 Definition /rtl/rel7/support/lib1/rtlarr.lisp::ifrp
 Definition /rtl/rel8/lib/rtlarr.lisp::ifrp
 Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::ifrp
 Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::ifrp
 Definition /rtl/rel8/support/support/rtlarr.lisp::ifrp
 Definition /rtl/rel8/support/lib1/rtlarr.lisp::ifrp
 Definition /rtl/rel8/support/lib2/rtlarr.lisp::ifrp
 Definition /rtl/rel5/lib/rtlarr.lisp::ifrp
 Definition /rtl/rel5/support/rtlarr.lisp::ifrp
 Definition /rtl/rel4/lib/rtlarr.lisp::ifrp
 Definition /rtl/rel4/support/rtlarr.lisp::ifrp

Cluster 273

Definition /rtl/rel7/lib/mult.lisp::sum-pp8-eta
 Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-pp8-eta
 Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-pp8-eta
 Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-pp8-eta
 Definition /rtl/rel8/support/lib2/mult.lisp::sum-pp8-eta

Cluster 279

Definition /rtl/rel7/lib/repairs.lisp::esigf
 Definition /rtl/rel7/support/lib1/repairs.lisp::esigf
 Definition /rtl/rel8/lib/repairs.lisp::esigf
 Definition /rtl/rel8/support/lib2.delta1/repairs-proofs.lisp::esigf
 Definition /rtl/rel8/support/lib2.delta1/repairs.lisp::esigf
 Definition /rtl/rel8/support/lib1/repairs.lisp::esigf
 Definition /rtl/rel8/support/lib2/repairs.lisp::esigf
 Definition /rtl/rel5/lib/repairs.lisp::esigf

Definition /rtl/rel4/lib/rebs.lisp::esigf

Cluster 284

Definition /rtl/rel7/lib/log.lisp::logop-3-induct

Definition /rtl/rel7/support/lib1/log.lisp::logop-3-induct

Definition /rtl/rel8/lib/logn.lisp::lognop-3-induct

Definition /rtl/rel8/support/lib2.delta1/logn.lisp::lognop-3-induct

Definition /rtl/rel8/support/lib1/log.lisp::logop-3-induct

Definition /rtl/rel8/support/lib2/log.lisp::logop-3-induct

Definition /rtl/rel5/lib/log.lisp::logop-3-induct

Definition /rtl/rel4/lib/bits.lisp::logop-3-induct

Cluster 305

Definition /rtl/rel7/lib/add.lisp::lamt

Definition /rtl/rel7/support/support/lextra.lisp::lamt

Definition /rtl/rel7/support/lib1/add.lisp::lamt

Definition /rtl/rel8/support/support/lextra.lisp::lamt

Definition /rtl/rel8/support/lib1/add.lisp::lamt

Definition /rtl/rel8/support/lib2/add.lisp::lamt

Definition /rtl/rel5/lib/add.lisp::lamt

Definition /rtl/rel5/support/lextra.lisp::lamt

Definition /rtl/rel4/lib/fadd.lisp::lamt

Definition /rtl/rel4/support/lop3.lisp::lamt

Definition /rtl/rel4/support/fadd.lisp::lamt

Definition /rtl/rel4/support/lop3-proofs.lisp::lamt

Cluster 306

Definition /rtl/rel7/lib/add.lisp::lam3

Definition /rtl/rel7/support/support/lextra.lisp::lam3

Definition /rtl/rel7/support/lib1/add.lisp::lam3

Definition /rtl/rel8/support/support/lextra.lisp::lam3

Definition /rtl/rel8/support/lib1/add.lisp::lam3

Definition /rtl/rel8/support/lib2/add.lisp::lam3

Definition /rtl/rel5/lib/add.lisp::lam3

Definition /rtl/rel5/support/lextra.lisp::lam3

Definition /rtl/rel4/lib/fadd.lisp::lam3

Definition /rtl/rel4/support/lop3.lisp::lam3

Definition /rtl/rel4/support/fadd.lisp::lam3

Definition /rtl/rel4/support/lop3-proofs.lisp::lam3

Cluster 315

Definition /rtl/rel7/lib/add.lisp::lam0
Definition /rtl/rel7/support/support/lextra.lisp::lam0
Definition /rtl/rel7/support/lib1/add.lisp::lam0
Definition /rtl/rel8/support/support/lextra.lisp::lam0
Definition /rtl/rel8/support/lib1/add.lisp::lam0
Definition /rtl/rel8/support/lib2/add.lisp::lam0
Definition /rtl/rel5/lib/add.lisp::lam0
Definition /rtl/rel5/support/lextra.lisp::lam0
Definition /rtl/rel4/lib/fadd.lisp::lam0
Definition /rtl/rel4/support/lop3.lisp::lam0
Definition /rtl/rel4/support/fadd.lisp::lam0
Definition /rtl/rel4/support/lop3-proofs.lisp::lam0

Cluster 128

Definition /rtl/rel7/lib/rtlarr.lisp::ag
Definition /rtl/rel7/support/support/rtlarr.lisp::ag
Definition /rtl/rel7/support/lib1/rtlarr.lisp::ag
Definition /rtl/rel8/lib/rtlarr.lisp::ag
Definition /rtl/rel8/support/lib2.delta1/rtlarr-new.lisp::ag
Definition /rtl/rel8/support/lib2.delta1/rtlarr.lisp::ag
Definition /rtl/rel8/support/support/rtlarr.lisp::ag
Definition /rtl/rel8/support/lib1/rtlarr.lisp::ag
Definition /rtl/rel8/support/lib2/rtlarr.lisp::ag
Definition /rtl/rel5/lib/rtlarr.lisp::ag
Definition /rtl/rel5/support/rtlarr.lisp::ag
Definition /rtl/rel4/lib/rtlarr.lisp::ag
Definition /rtl/rel4/support/rtlarr.lisp::ag

Cluster 139

Definition /rtl/rel7/support/support/lop3.lisp::lam2-0
Definition /rtl/rel7/support/support/fadd.lisp::lam2-0
Definition /rtl/rel7/support/support/lop3-proofs.lisp::lam2-0
Definition /rtl/rel8/support/support/lop3.lisp::lam2-0
Definition /rtl/rel8/support/support/fadd.lisp::lam2-0
Definition /rtl/rel8/support/support/lop3-proofs.lisp::lam2-0
Definition /rtl/rel5/support/lop3.lisp::lam2-0
Definition /rtl/rel5/support/fadd.lisp::lam2-0
Definition /rtl/rel5/support/lop3-proofs.lisp::lam2-0

4 C.4. Similar Functions defined in the same library

10% of the clusters contain functions that have been defined in the same library and that are closely related.

Cluster 23

Definition /security/jfkr/jfkr.lisp::compute-Ei

Definition /security/jfkr/jfkr.lisp::compute-Er

Cluster 43

Definition /security/jfkr/jfkr.lisp::badly-forged-msg3p-old

Definition /security/jfkr/jfkr.lisp::badly-forged-msg3p

Cluster 51

Definition /rtl/rel7/lib/mult.lisp::sum-pp4-psi

Definition /rtl/rel7/support/lib1.delta1/mult.lisp::sum-pp4-psi

Definition /rtl/rel8/support/lib2.delta1/mult-new-proofs.lisp::sum-pp4_alt-psi_alt

Definition /rtl/rel8/support/lib2.delta1/mult-new.lisp::sum-pp4_alt-psi_alt

Definition /rtl/rel8/support/lib2.delta1/mult-proofs.lisp::sum-pp4-psi

Definition /rtl/rel8/support/lib1.delta1/mult.lisp::sum-pp4-psi

Definition /rtl/rel8/support/lib2/mult.lisp::sum-pp4-psi

Cluster 82

Definition /misc/mult.lisp::line3

Definition /misc/mult.lisp::line6

Definition /misc/mult.lisp::line7

Definition /misc/mult.lisp::line8

Definition /misc/mult.lisp::line9

Cluster 102

Definition /misc/congruent-stobj-test.lisp::update2

Definition /misc/congruent-stobj-test.lisp::update3

Cluster 155

Definition /centaur/misc/tshell.lisp::tshell-start

Definition /centaur/misc/tshell.lisp::tshell-stop

Definition /centaur/misc/tshell.lisp::tshell-ensure

Definition /centaur/misc/tshell.lisp::tshell-run-background

Cluster 162

Definition /security/jfkr/encryption.lisp::encryptable-listp

Definition /security/jfkr/encryption.lisp::decryptable-listp

Cluster 179

Definition /security/jfkr/encryption.lisp::verify-signature-list

Definition /security/jfkr/encryption.lisp::compute-keyed-hash

Cluster 187

Definition /arithmetic-4/lib/basic-ops/simplify.lisp::first-rational-match-in-factor-gathe

Definition /arithmetic-4/lib/basic-ops/simplify.lisp::first-rational-match-in-factor-scatt

Cluster 200

Definition /misc/grcd.lisp::grcd

Definition /misc/grcd.lisp::grcd-lin-1

Definition /misc/grcd.lisp::grcd-lin-2

Definition /misc/grcd.lisp::grcd-quotient-1

Definition /misc/grcd.lisp::grcd-quotient-2

Cluster 202

Definition /security/jfkr/encryption.lisp::encrypt-symmetric-list

Definition /security/jfkr/encryption.lisp::encrypt-asymmetric-list

Definition /security/jfkr/encryption.lisp::decrypt-asymmetric-list

Cluster 206

Definition /misc/oprof.lisp::fib

Definition /misc/oprof.lisp::fib2

Cluster 212

Definition /misc/csort.lisp::max-pair

Definition /misc/csort.lisp::min-pair

Cluster 215

Definition /misc/mult.lisp::line1

Definition /misc/mult.lisp::line2

Definition /misc/mult.lisp::line5

Cluster 221

Definition /coi/adviser/adviser-definitions.lisp::get-thms

Definition /coi/adviser/adviser-definitions.lisp::get-names

Cluster 228

Definition /coi/util/extra-info-test.lisp::goo

Definition /coi/util/extra-info-test.lisp::hoo

Cluster 238

Definition /security/jfkr/jfkr.lisp::initiator-constants

Definition /security/jfkr/jfkr.lisp::responder-constants

Definition /security/jfkr/jfkr.lisp::public-constants

Cluster 246

Definition /leftist-trees/leftist-tree-defuns.lisp::root-lt

Definition /coi/util/rule-sets-support.lisp::include-rules

Definition /coi/util/rule-sets-support.lisp::default-set-version

Definition /coi/util/rule-sets-support.lisp::default-version

Cluster 250

Definition /coi/util/defdoc.lisp::href

Definition /coi/util/defdoc.lisp::docref

Cluster 251

Definition /unicode/read-ints.lisp::read-32ube

Definition /unicode/read-ints.lisp::read-32ule

Definition /unicode/read-ints.lisp::read-32sbe

Definition /unicode/read-ints.lisp::read-32sle

Cluster 255

Definition /coi/util/rule-sets-support.lisp::rule-set-entry

Definition /coi/util/rule-sets-support.lisp::rule-set

Cluster 265

Definition /unicode/read-ints.lisp::read-16ube

Definition /unicode/read-ints.lisp::read-16ule

Cluster 268

Definition /coi/util/defdoc.lisp::verbatim

Definition /coi/util/defdoc.lisp::quoted

Cluster 283

Definition /centaur/misc/equal-sets.lisp::subsetp-equal-witness

Definition /centaur/misc/equal-sets.lisp::intersectp-equal-witness

Cluster 285

Definition /coi/util/rule-sets-support.lisp::add-rules-to-include-set

Definition /coi/util/rule-sets-support.lisp::add-rules-to-omit-set

Cluster 290

Definition /centaur/misc/memory-mgmt-logic.lisp::maybe-wash-memory-fn

Definition /centaur/misc/memory-mgmt-logic.lisp::print-quick-memory-summary

Definition /centaur/misc/memory-mgmt-logic.lisp::set-max-mem

Definition /centaur/misc/memory-mgmt-logic.lisp::print-rwx-size

Cluster 295

Definition /security/des/des.lisp::expand

Definition /security/des/des.lisp::permute

Cluster 308

Definition /arithmetic-4/lib/basic-ops/simplify.lisp::factor-val-gather-exponents1

Definition /arithmetic-4/lib/basic-ops/simplify.lisp::factor-val-scatter-exponents1

Cluster 317

Definition /misc/congruent-stobjs-test.lisp::g

Definition /misc/congruent-stobjs-test.lisp::h

Cluster 319

Definition /security/des/des.lisp::IP

Definition /security/des/des.lisp::IP-inverse

Cluster 325

Definition /misc/sticky-disable.lisp::get-sticky-enables-1

Definition /misc/sticky-disable.lisp::get-sticky-disables-1

Cluster 335

Definition /arithmetic-4/lib/basic-ops/remove-weak-inequalities.lisp::remove-weak-inequali
Definition /arithmetic-4/lib/basic-ops/remove-weak-inequalities.lisp::remove-strict-inequa

Cluster 345

Definition /unicode/read-ints.lisp::read-16sbe
Definition /unicode/read-ints.lisp::read-16sle

Cluster 353

Definition /misc/untranslate-patterns.lisp::untranslate-patterns-functions-btree
Definition /misc/untranslate-patterns.lisp::untranslate-patterns-constants-alist

Cluster 354

Definition /misc/congruent-stobjjs-test.lisp::bar1
Definition /misc/congruent-stobjjs-test.lisp::bar2-tough

Cluster 355

Definition /coi/util/rule-sets-support.lisp::weak-rule-set-entry
Definition /coi/util/rule-sets-support.lisp::weak-rule-set

Cluster 358

Definition /misc/congruent-stobjjs-test.lisp::test1
Definition /misc/congruent-stobjjs-test.lisp::test2

Cluster 359

Definition /centaur/misc/osets-witnessing.lisp::nonsubset-witness
Definition /centaur/misc/osets-witnessing.lisp::intersectp-witness

Cluster 361

Definition /coi/records/fixedpoint.lisp::iff-s-ifrp
Definition /coi/records/fixedpoint.lisp::iff-s-fixedpoint

Cluster 366

Definition /security/jfkr/diffie-helman.lisp::compute-public-dh-value
Definition /security/jfkr/diffie-helman.lisp::compute-dh-key

Cluster 90
 Definition /arithmetic-4/lib/basic-ops/simplify.lisp::find-negative-addend
 Definition /arithmetic-4/lib/basic-ops/simplify.lisp::find-divisive-factor-scatter-exponen
 Definition /arithmetic-4/lib/basic-ops/simplify.lisp::find-rational-divisive-factor-scatte

Cluster 108
 Definition /proofstyles/counterexamples/memory-clearing.lisp::pcnt
 Definition /proofstyles/counterexamples/halt-flg.lisp::program-component

Cluster 311
 Definition /arithmetic-4/lib/basic-ops/simplify.lisp::first-match-in-factor-gather-exponen
 Definition /arithmetic-4/lib/basic-ops/simplify.lisp::first-match-in-factor-scatter-expone

Cluster 351
 Definition /arithmetic-4/lib/basic-ops/simplify.lisp::factor-gather-exponents-intersect-in
 Definition /arithmetic-4/lib/basic-ops/simplify.lisp::factor-scatter-exponents-intersect-i

5 C.5. Functions re-defined in different libraries

5% of the clusters are related to a function that has been defined several times in different libraries. These clusters are difficult to track manually since the same function is usually defined with different names; however, ACL2(ml) finds these clusters based on the structure and background information of the function definitions.

Cluster 9
 Definition /misc/hanoi.lisp::del
 Definition /sorting/perm.lisp::rm

Cluster 36
 Definition /rtl/rel1/support/near.lisp::re
 Definition /rtl/rel1/lib1/round.lisp::re
 Definition /rtl/rel1/lib3/round.lisp::re
 Definition /rtl/rel7/lib/round.lisp::re
 Definition /rtl/rel7/support/lib1.delta1/round.lisp::re
 Definition /rtl/rel7/arithmetic/fl-proofs.lisp::md
 Definition /rtl/rel8/lib/round.lisp::re
 Definition /rtl/rel8/support/lib2.delta1/round.lisp::re
 Definition /rtl/rel8/support/lib2.delta1/round-proofs.lisp::re
 Definition /rtl/rel8/support/lib2.delta1/round-new-proofs.lisp::re
 Definition /rtl/rel8/support/lib2.delta1/round-new.lisp::re
 Definition /rtl/rel8/support/lib1.delta1/round.lisp::re
 Definition /rtl/rel8/support/lib2/round.lisp::re
 Definition /rtl/rel8/arithmetic/fl-proofs.lisp::md
 Definition /rtl/rel5/lib/round.lisp::re
 Definition /rtl/rel5/arithmetic/fl-proofs.lisp::md

Definition /rtl/rel4/lib/round.lisp::re
Definition /rtl/rel4/arithmetic/fl-proofs.lisp::md

Cluster 52

Definition /misc/hanoi.lisp::top
Definition /coi/util/rule-sets-support.lisp::version
Definition /coi/util/rule-sets-support.lisp::set-name
Definition /coi/util/rule-sets-support.lisp::default-library

Cluster 59

Definition /misc/misc2/reverse-by-separation.lisp::wr
Definition /coi/alists/alists-definitions.lisp::setv

Cluster 86

Definition /rtl/rel7/lib/rtl.lisp::mk-bvec
Definition /rtl/rel7/support/lib1/rtl.lisp::mk-bvec
Definition /rtl/rel8/lib/rtl.lisp::mk-bvec
Definition /rtl/rel8/lib/bits.lisp::bitvec
Definition /rtl/rel8/support/lib2.delta1/bits-new.lisp::bitvec
Definition /rtl/rel8/support/lib2.delta1/rtl.lisp::mk-bvec
Definition /rtl/rel8/support/lib2.delta1/bits-proofs.lisp::bitvec
Definition /rtl/rel8/support/lib2.delta1/bits.lisp::bitvec
Definition /rtl/rel8/support/lib2.delta1/rtl-new.lisp::mk-bvec
Definition /rtl/rel8/support/lib2.delta1/rtl-new-proofs.lisp::mk-bvec
Definition /rtl/rel8/support/lib2.delta1/rtl-proofs.lisp::mk-bvec
Definition /rtl/rel8/support/lib1.delta1/bits.lisp::bitvec
Definition /rtl/rel8/support/lib1.delta1/bits-extra.lisp::bitvec
Definition /rtl/rel8/support/lib1/rtl.lisp::mk-bvec
Definition /rtl/rel8/support/lib2.delta2/bits.lisp::bitvec
Definition /rtl/rel8/support/lib2/rtl.lisp::mk-bvec
Definition /rtl/rel8/support/lib2/bits.lisp::bitvec
Definition /rtl/rel5/lib/rtl.lisp::mk-bvec
Definition /rtl/rel4/lib/rtl.lisp::mk-bvec
Definition /rtl/rel4/lib/bits.lisp::bitvec

Cluster 125

Definition /misc/assert.lisp::assert-test2
Definition /misc/untranslate-patterns.lisp::foo\$
Definition /misc/hanoi.lisp::push
Definition /make-event/assert-check.lisp::assert-test2
Definition /make-event/portcullis-expansion.lisp::test1
Definition /make-event/portcullis-expansion.lisp::bar

Cluster 129

Definition /rtl/rel8/lib/rom-helpers.lisp::natp

```

Definition /rtl/rel8/support/lib2/rom-helpers.lisp::natp
Definition /rtl/rel8/arithmetic/expt-proofs.lisp::natp
Definition /rtl/rel8/arithmetic/basic.lisp::natp
Definition /rtl/rel8/arithmetic/expt.lisp::natp
Definition /rtl/rel8/arithmetic/hacks.lisp::natp
Definition /coi/gacc/gacc.lisp::non-negative-integerp

```

Cluster 130

```

Definition /misc/defabsstobj-example-2.lisp::memo$ap
Definition /misc/dijkstra-shortest-path.lisp::infinitep

```

Cluster 184

```

Definition /rtl/rel1/support/logdefs.lisp::COMP1
Definition /rtl/rel1/support/logxor-def.lisp::COMP1
Definition /rtl/rel1/lib1/bits.lisp::comp1
Definition /rtl/rel1/lib3/bits.lisp::comp1
Definition /rtl/rel7/support/support/rtl.lisp::lnot
Definition /rtl/rel7/support/support/lnot-proofs.lisp::LNOT
Definition /rtl/rel7/support/support/lnot.lisp::LNOT
Definition /rtl/rel8/support/support/rtl.lisp::lnot
Definition /rtl/rel8/support/support/lnot-proofs.lisp::LNOT
Definition /rtl/rel8/support/support/lnot.lisp::LNOT
Definition /rtl/rel5/support/rtl.lisp::lnot
Definition /rtl/rel5/support/lnot-proofs.lisp::LNOT
Definition /rtl/rel5/support/lnot.lisp::LNOT
Definition /rtl/rel4/support/rtl.lisp::lnot
Definition /rtl/rel4/support/lnot-proofs.lisp::LNOT
Definition /rtl/rel4/support/lnot.lisp::LNOT

```

Cluster 225

```

Definition /wp-gen/examples/pcode.lisp::int_sless
Definition /rtl/rel7/support/support/logs.lisp::log<
Definition /rtl/rel8/support/support/logs.lisp::log<
Definition /rtl/rel5/support/logs.lisp::log<
Definition /rtl/rel4/support/logs.lisp::log<
Definition /rtl/rel4/support/logs.lisp::log<

```

Cluster 232

```

Definition /make-event/gen-defun.lisp::FN-0
Definition /arithmetic-4/lib/basic-ops/integerp-meta.lisp::intp+
Definition /arithmetic-4/lib/basic-ops/collect.lisp::collect+

```

Cluster 234

```

Definition /misc/records.lisp::record-update-macro
Definition /proofstyles/counterexamples/realistic.lisp::update-macro

```

Cluster 237

Definition /misc/dijkstra-shortest-path.lisp::path

Definition /coi/alists/alists-definitions.lisp::getv

Cluster 299

Definition /leftist-trees/leftist-tree-defuns.lisp::left-lt

Definition /deduction/passmore/general.lisp::extract-clause

Definition /coi/util/rule-sets-support.lisp::omit-rules

Definition /coi/util/rule-sets-support.lisp::version-list

Definition /coi/util/rule-sets-support.lisp::rule-set-list

Cluster 300

Definition /misc/dijkstra-shortest-path.lisp::memp

Definition /coi/osets/sets.lisp::in-list

Definition /coi/osets/sort.lisp::in-list

Cluster 309

Definition /unicode/list-defuns.lisp::binary-append-without-guard

Definition /unicode/flatten.lisp::binary-append-without-guard

Definition /coi/lists/basic.lisp::binary-appendx

Cluster 312

Definition /make-event/gen-defun.lisp::FN-1

Definition /arithmetic-4/lib/basic-ops/integerp-meta.lisp::intp-*

Definition /arithmetic-4/lib/basic-ops/collect.lisp::collect-*

Cluster 321

Definition /misc/mult.lisp::sub1-sub1-induction

Definition /coi/super-ihs/logtail.lisp::sub1-sub1-induction

Cluster 350

Definition /security/jfkr/jfkr.lisp::identityp

Definition /security/jfkr/encryption.lisp::keyp

Cluster 363

Definition /security/util/byte-operations.lisp::bytes-to-multiple-64-byte-blocks

Definition /security/des/des.lisp::bits-to-64bit-blocks

Cluster 356

Definition /security/util/byte-operations.lisp::charlist-to-bytes

Definition /unicode/uchar.lisp::charlist=>ustring

Cluster 369

Definition /leftist-trees/leftist-tree-defuns.lisp::right-lt

Definition /coi/util/rule-sets-support.lisp::include-sets\

6 C.6. Similar functions defined in several libraries

6% of the clusters consist of functions that are similar and are defined across several ACL2 libraries.

Cluster 38

Definition /misc/defabsstobj-example-4.lisp::st\$ap

Definition /coi/gacc/gacc2.lisp::ptr?

Cluster 67

Definition /misc/save-time.lisp::foo

Definition /misc/defabsstobj-example-4.lisp::create-st\$a

Definition /misc/defabsstobj-example-4.lisp::update-fld-nil-bad\$a

Definition /misc/defabsstobj-example-4.lisp::update-fld-nil-good\$a

Definition /misc/disassemble.lisp::disassemble\$-fn

Definition /misc/character-encoding-test.lisp::test-2

Definition /security/jfkr/jfkr.lisp::badly-forged-msg1p

Definition /security/jfkr/jfkr.lisp::badly-forged-msg2p

Definition /coi/util/defdoc.lisp::n

Definition /coi/records/defarray.lisp::default-integer-list-list

Definition /centaur/misc/smm-impl.lisp::smml-create

Definition /centaur/misc/smm.lisp::smml-create

Definition /centaur/misc/memory-mgmt-logic.lisp::last-chance-wash-memory-fn

Definition /centaur/misc/seed-random.lisp::seed-random\$-fn

Definition /centaur/4v-sexpr/sexpr-rewrites.lisp::4v-sexpr-simp-and-eval-output-quiet

Cluster 132

Definition /coi/util/nfixequiv.lisp::nfixequiv

Definition /coi/nary/nth-rules.lisp::nfix-equiv

Definition /centaur/misc/arith-equivs.lisp::nat-equiv

Cluster 207

Definition /coi/adviser/test.lisp::all-not-integerp

Definition /coi/adviser/test.lisp::some-integerp

Definition /coi/adviser/adviser-definitions.lisp::all-not-integerp

Definition /coi/adviser/adviser-definitions.lisp::some-integerp

Cluster 264

Definition /proofstyles/counterexamples/memory-clearing.lisp::halted

Definition /proofstyles/counterexamples/halt-flg.lisp::halting

Definition /proofstyles/counterexamples/realistic.lisp::halted-statep

Cluster 267

Definition /make-event/gen-defun.lisp::F00-0

Definition /coi/gacc/list-ops-common.lisp::INTEGER-LISTP-better

Cluster 289

Definition /coi/util/fixequiv.lisp::fixequiv

Definition /centaur/misc/arith-equivs.lisp::int-equiv

Cluster 339

Definition /misc/congruent-stobjs-test.lisp::update4

Definition /security/jfkr/jfkr.lisp::initiator-state-after-step-1p

Definition /security/jfkr/jfkr.lisp::responder-state-after-step-1p

Definition /arithmetic-4/lib/basic-ops/collect.lisp::bubble-down

Cluster 347

Definition /proofstyles/counterexamples/memory-clearing.lisp::program-component

Definition /proofstyles/counterexamples/halt-flg.lisp::not-halt-flg

References

- [1] J. Heras and E. Komendantskaya. ACL2(ml): downloadable programs, manual, examples, 2013–2014. <http://staff.computing.dundee.ac.uk/jheras/ac12ml>.
- [2] J. Heras and E. Komendantskaya. ACL2(ml): Machine-Learning for ACL2. Technical report, 2014.
- [3] J. Heras, E. Komendantskaya, M. Johansson, and E. Maclean. Proof-Pattern Recognition and Lemma Discovery in ACL2. In *19th Logic for Programming Artificial Intelligence and Reasoning (LPAR-19)*, volume 8312 of *Lecture Notes in Computer Science*, pages 389–406, 2013.