SlowMC

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Contents

3 Modules Index

3.1 Modules List

Here is a list of all modules with brief descriptions:

4 Data Type Index

4.1 Class List

Here are the data types with brief descriptions:

5 File Index

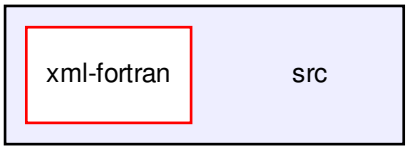
5.1 File List

Here is a list of all files with brief descriptions:

6 Directory Documentation

6.1 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/ Directory Reference

Directory dependency graph for /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/:



Directories

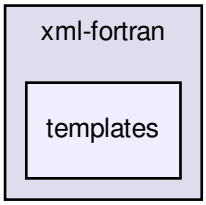
- directory xml-fortran

Files

- file global.f90
- file input.f90
- file main.f90
- file materials.f90
- file output.f90
- file particle.f90
- file physics.f90
- file tally.f90

6.2 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/templates/ Directory Reference

Directory dependency graph for /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/templates/:

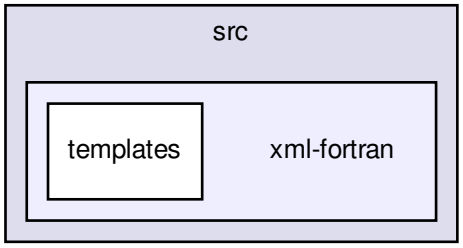


Files

- file input_t.f90

6.3 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/ Directory Reference

Directory dependency graph for /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/:



Directories

- directory templates

Files

- file read_xml_primitives.f90
- file write_xml_primitives.f90
- file xmlparse.f90
- file xmlreader.f90

7 Module Documentation

7.1 global Module Reference

Contains all of the global variables.

Functions/Subroutines

- subroutine allocate_problem ()

  allocates global variables for calculation

- subroutine deallocate_problem ()

  deallocates global variables

Variables

- integer VERSION_MAJOR = 0
- integer VERSION_MINOR = 1
- integer VERSION_RELEASE = 1
- type(material_type) mat
- type(particle_type) neut
- type(tally_type), dimension(:), allocatable tal
- integer nhistories
- integer seed
- integer source_type
- integer eidx
- real(8) emin = 1e-11_8
- real(8) emax = 20.0_8
- real(8) kT = 8.6173324e-5_8∗300∗1.0e-6_8

7.1.1 Detailed Description

Contains all of the global variables.

Author

Bryan Herman

7.1.2 Function/Subroutine Documentation

7.1.2.1 subroutine global::allocate_problem ( )

allocates global variables for calculation

Definition at line 50 of file global.f90.

References tal.

Referenced by initialize().

Here is the caller graph for this function:

7.1.2.2 subroutine global::deallocate_problem ( )

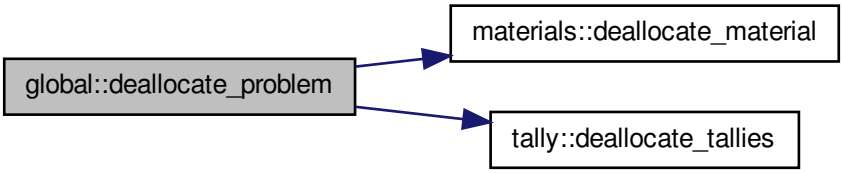
deallocates global variables

Definition at line 62 of file global.f90.

References materials::deallocate_material(), tally::deallocate_tallies(), mat, and tal.

Referenced by finalize().

Here is the call graph for this function:



Here is the caller graph for this function:

7.1.3 Variable Documentation

7.1.3.1 integer global::eidx

Definition at line 34 of file global.f90.

Referenced by run_problem(), physics::sample_isotope(), and physics::sample_reaction().

7.1.3.2 real(8) global::emax = 20.0_8

Definition at line 38 of file global.f90.

Referenced by initialize(), and input::read_input().

7.1.3.3 real(8) global::emin = 1e-11_8

Definition at line 37 of file global.f90.

Referenced by initialize(), input::read_input(), and run_problem().

7.1.3.4 real(8) global::kT = 8.6173324e-5_8∗300∗1.0e-6_8

Definition at line 41 of file global.f90.

Referenced by physics::elastic_scattering().

7.1.3.5 type(material_type) global::mat

Definition at line 24 of file global.f90.

Referenced by deallocate_problem(), physics::elastic_scattering(), physics::get_eidx(), initialize(), input::read_input(), run_problem(), physics::sample_isotope(), physics::sample_-reaction(), and physics::sample_source().

7.1.3.6 type(particle_type) global::neut

Definition at line 25 of file global.f90.

Referenced by physics::elastic_scattering(), physics::perform_physics(), run_problem(), and physics::sample_source().

7.1.3.7 integer global::nhistories

Definition at line 29 of file global.f90.

Referenced by input::read_input(), and run_problem().

7.1.3.8 integer global::seed

Definition at line 30 of file global.f90.

Referenced by initialize(), and input::read_input().

7.1.3.9 integer global::source_type

Definition at line 31 of file global.f90.

Referenced by input::read_input().

7.1.3.10 type(tally_type),dimension(:),allocatable global::tal

Definition at line 26 of file global.f90.

Referenced by allocate_problem(), deallocate_problem(), initialize(), and run_problem().

7.1.3.11 integer global::VERSION_MAJOR = 0

Definition at line 19 of file global.f90.

Referenced by output::print_heading().

7.1.3.12 integer global::VERSION_MINOR = 1

Definition at line 20 of file global.f90.

Referenced by output::print_heading().

7.1.3.13 integer global::VERSION_RELEASE = 1

Definition at line 21 of file global.f90.

Referenced by output::print_heading().

7.2 input Module Reference

Handles reading in the input xml file and intializing global vars.

Functions/Subroutines

- subroutine, public read_input

  Reads the input xml file and sets global variables.

7.2.1 Detailed Description

Handles reading in the input xml file and intializing global vars.

Author

Bryan Herman

7.2.2 Function/Subroutine Documentation

7.2.2.1 subroutine,public input::read_input ( )

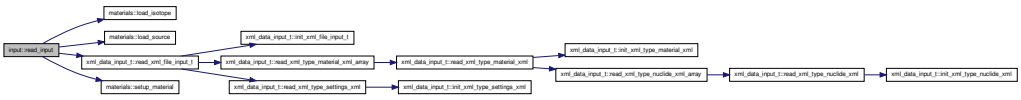
Reads the input xml file and sets global variables.

Definition at line 22 of file input.f90.

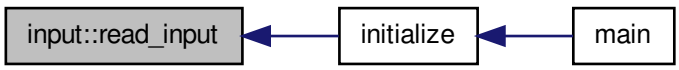
References global::emax, global::emin, materials::load_isotope(), materials::load_source(), global::mat, xml_data_input_t::material_, global::nhistories, xml_data_input_t::read_-xml_file_input_t(), global::seed, xml_data_input_t::settings_, materials::setup_material(), and global::source_type.

Referenced by initialize().

Here is the call graph for this function:



Here is the caller graph for this function:



7.3 materials Module Reference

Contains information about the isotopics of problem.

Data Types

- type **source_type**
- type **thermal_type**

- type **iso_type**
- type **material_type**

Functions/Subroutines

- subroutine, public setup_material (this, emin, emax)
  routine that initializes the materials
- subroutine, public load_isotope (this, N, A, path, thermal)
  routine that loads isotope properties, xs, etc.
- subroutine, public load_source (this, source_type, source_path)
  routine to load fission source into memory
- subroutine, public compute_totxs (this)
  routine to pre-compute macroscopic total xs
- subroutine, public deallocate_material (this)
  routine to deallocate a material

7.3.1 Detailed Description

Contains information about the isotopics of problem.

Author

Bryan Herman

7.3.2 Function/Subroutine Documentation

7.3.2.1 subroutine,public materials::compute_totxs (type(material_type),target *this*)

routine to pre-compute macroscopic total xs

Definition at line 268 of file materials.f90.

Referenced by initialize().

Here is the caller graph for this function:

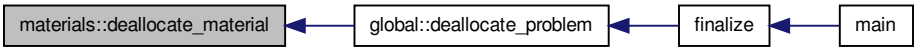
7.3.2.2 subroutine,public materials::deallocate_material (type(material_type) *this*)

routine to deallocate a material

Definition at line 302 of file materials.f90.

Referenced by global::deallocate_problem().

Here is the caller graph for this function:



7.3.2.3 subroutine,public materials::load_isotope (type(material_type),target *this*, real(8) *N*, real(8) *A*, character(len=255) *path*, logical *thermal*)

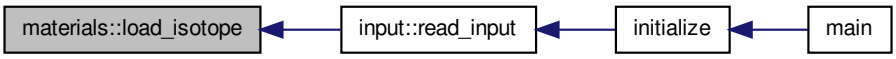
routine that loads isotope properties, xs, etc.

into memory

Definition at line 91 of file materials.f90.

Referenced by input::read_input().

Here is the caller graph for this function:



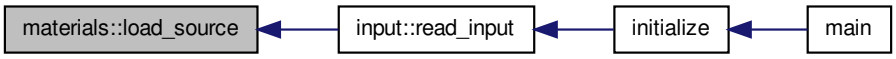
7.3.2.4 subroutine,public materials::load_source (type(material_type) *this*, integer *source_type*, character(len=255) *source_path*)

routine to load fission source into memory

Definition at line 211 of file materials.f90.

Referenced by input::read_input().

Here is the caller graph for this function:



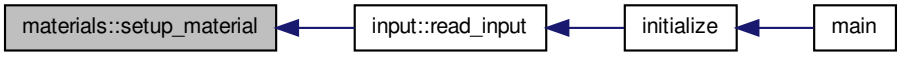
7.3.2.5 subroutine,public materials::setup_material (type(material_type) *this*, real(8) *emin*, real(8) *emax*)

routine that initializes the materials

Definition at line 67 of file materials.f90.

Referenced by input::read_input().

Here is the caller graph for this function:



7.4 output Module Reference

Contains routines for outputtting major info to user.

Functions/Subroutines

- subroutine, public print_heading ()
  prints the code heading and run information
- subroutine get_today (today_date, today_time)
  calculates information about date/time of run

7.4.1 Detailed Description

Contains routines for outputtting major info to user.

Author

Bryan Herman

7.4.2 Function/Subroutine Documentation

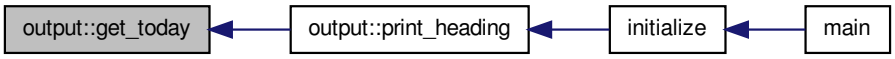
7.4.2.1 subroutine output::get_today (character(10),intent(out) *today_date,* character(8),intent(out) *today_time*)

calculates information about date/time of run

Definition at line 64 of file output.f90.

Referenced by print_heading().

Here is the caller graph for this function:



7.4.2.2 subroutine,public output::print_heading ( )

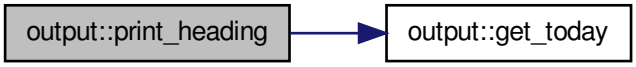
prints the code heading and run information

Definition at line 22 of file output.f90.

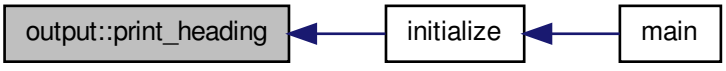
References get_today(), global::VERSION_MAJOR, global::VERSION_MINOR, and global::VERSION_RELEASE.

Referenced by initialize().

Here is the call graph for this function:



Here is the caller graph for this function:



7.5 particle Module Reference

Contains information about the particle that is transporting.

Data Types

- type **particle_type**

Functions/Subroutines

- subroutine, public init_particle (this)
  routine to initialize a particle

7.5.1 Detailed Description

Contains information about the particle that is transporting.

Author

Bryan Herman

7.5.2 Function/Subroutine Documentation

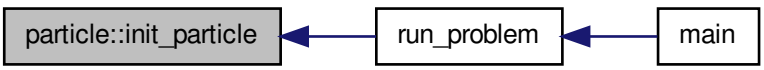
7.5.2.1 subroutine,public particle::init_particle (type(particle_type) *this*)

routine to initialize a particle

Definition at line 29 of file particle.f90.

Referenced by run_problem().

Here is the caller graph for this function:



7.6 physics Module Reference

Contains routines to model the physics of the problem.

Functions/Subroutines

- subroutine, public sample_source ()
  routine to sample source from cdf
- subroutine, public perform_physics ()
  high level routine to perform transport physics
- integer, public get_eidx (E)
  function to compute the index in unionized energy grid
- integer sample_isotope ()
  function to sample interaction isotope
- integer sample_reaction (isoidx)
  function to sample reaction type
- subroutine elastic_scattering (isoidx)
  routine to perform thermal/asymptotic elastic scattering physics

7.6.1 Detailed Description

Contains routines to model the physics of the problem.

Author

Bryan Herman

7.6.2 Function/Subroutine Documentation

7.6.2.1 subroutine physics::elastic_scattering (integer *isoidx*)

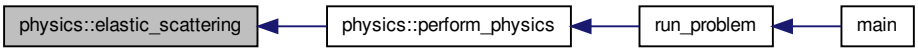
routine to perform thermal/asymptotic elastic scattering physics

Definition at line 210 of file physics.f90.

References global::kT, global::mat, and global::neut.

Referenced by perform_physics().

Here is the caller graph for this function:



7.6.2.2 integer,public physics::get_eidx (real(8) *E*)

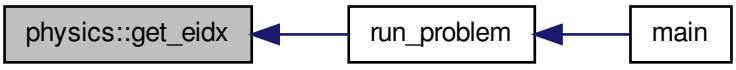
function to compute the index in unionized energy grid

Definition at line 84 of file physics.f90.

References global::mat.

Referenced by run_problem().

Here is the caller graph for this function:



7.6.2.3 subroutine,public physics::perform_physics ( )

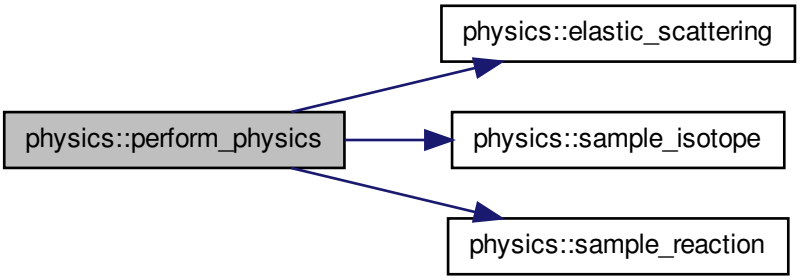
high level routine to perform transport physics

Definition at line 54 of file physics.f90.

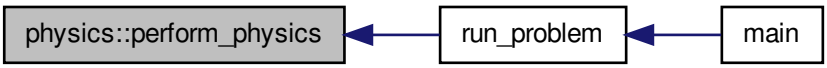
References elastic_scattering(), global::neut, sample_isotope(), and sample_reaction().

Referenced by run_problem().

Here is the call graph for this function:



Here is the caller graph for this function:



7.6.2.4 integer physics::sample_isotope ( )

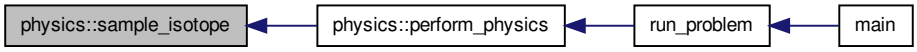
function to sample interaction isotope

Definition at line 110 of file physics.f90.

References global::eidx, and global::mat.

Referenced by perform_physics().

Here is the caller graph for this function:



7.6.2.5 integer physics::sample_reaction (integer *isoidx*)

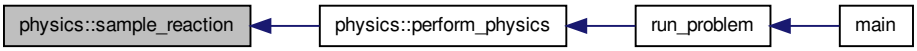
function to sample reaction type

Definition at line 166 of file physics.f90.

References global::eidx, and global::mat.

Referenced by perform_physics().

Here is the caller graph for this function:



7.6.2.6 subroutine,public physics::sample_source ( )

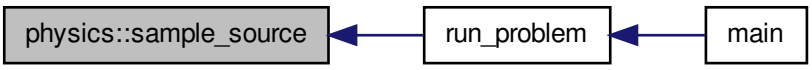
routine to sample source from cdf

Definition at line 22 of file physics.f90.

References global::mat, and global::neut.

Referenced by run_problem().

Here is the caller graph for this function:



7.7 read_xml_primitives Module Reference

Data Types

- interface read_from_buffer

Functions/Subroutines

- subroutine skip_until_endtag (info, tag, attribs, data, error)
- subroutine read_xml_integer (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_line (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_real (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_double (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_logical (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_word (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_integer_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_line_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_real_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_double_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_logical_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_word_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_integer_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)

- subroutine read_xml_real_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_double_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_logical_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_word_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_line_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)

7.7.1 Function/Subroutine Documentation

7.7.1.1 subroutine read_xml_primitives::read_xml_double (info , tag , endtag , attribs , noattribs , data , nodata , real(kind=kind(1.0d00)),intent(inout) *var,* has_var)

Definition at line 160 of file read_xml_primitives.f90.

Referenced by read_xml_double_1dim().

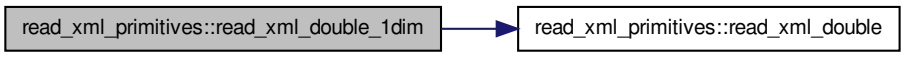
Here is the caller graph for this function:

7.7.1.2 subroutine read_xml_primitives::read_xml_double_-1dim (type(XML_PARSE),intent(inout) *info,* character(len=∗),intent(in) *tag,* logical,intent(inout) *endtag,* character(len=∗),dimension(:,:),intent(in) *attribs,* integer,intent(in) *noattribs,* character(len=∗),dimension(:),intent(in) *data,* integer,intent(in) *nodata,* real(kind=kind(1.0d00)),dimension(:),pointer *var,* logical,intent(inout) *has_var*)

Definition at line 414 of file read_xml_primitives.f90.

References read_xml_double().

Here is the call graph for this function:



7.7.1.3 subroutine read_xml_primitives::read_xml_double_array (info , tag , endtag , attribs , noattribs , data , nodata , real(kind=kind(1.0d00)),dimension(:),pointer *var,* has_var)

Definition at line 280 of file read_xml_primitives.f90.

7.7.1.4 subroutine read_xml_primitives::read_xml_integer (info , tag , endtag , attribs , noattribs , data , nodata , integer,intent(inout) *var,* has_var)

Definition at line 91 of file read_xml_primitives.f90.

Referenced by read_xml_integer_1dim().

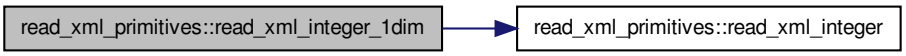
Here is the caller graph for this function:

7.7.1.5 subroutine read_xml_primitives::read_xml_integer_-1dim (type(XML_PARSE),intent(inout) *info,* character(len=∗),intent(in) *tag,* logical,intent(inout) *endtag,* character(len=∗),dimension(:,:),intent(in) *attribs,* integer,intent(in) *noattribs,* character(len=∗),dimension(:),intent(in) *data,* integer,intent(in) *nodata,* integer,dimension(:),pointer *var,* logical,intent(inout) *has_var*)

Definition at line 358 of file read_xml_primitives.f90.

References read_xml_integer().

Here is the call graph for this function:



7.7.1.6 subroutine read_xml_primitives::read_xml_integer_array (info , tag , endtag , attribs , noattribs , data , nodata , integer,dimension(:),pointer *var,* has_var)

Definition at line 199 of file read_xml_primitives.f90.

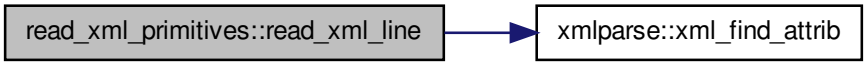
7.7.1.7 subroutine read_xml_primitives::read_xml_line (type(XML_PARSE),intent(inout) *info,* character(len=∗),intent(in) *tag,* logical,intent(inout) *endtag,* character(len=∗),dimension(:,:),intent(in) *attribs,* integer,intent(in) *noattribs,* character(len=∗),dimension(:),intent(in) *data,* integer,intent(in) *nodata,* character(len=∗),intent(inout) *var,* logical,intent(inout) *has_var*)

Definition at line 113 of file read_xml_primitives.f90.

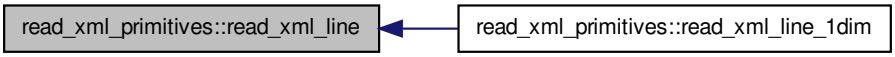
References xmlparse::xml_find_attrib().

Referenced by read_xml_line_1dim().

Here is the call graph for this function:



Here is the caller graph for this function:

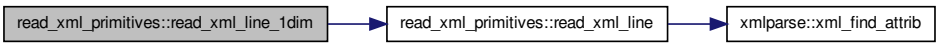


7.7.1.8 subroutine read_xml_primitives::read_xml_line_-1dim (type(XML_PARSE),intent(inout) *info*, character(len=∗),intent(in) *tag*, logical,intent(inout) *endtag*, character(len=∗),dimension(:,:),intent(in) *attribs*, integer,intent(in) *noattribs*, character(len=∗),dimension(:),intent(in) *data*, integer,intent(in) *nodata*, character(len=∗),dimension(:),pointer *var*, logical,intent(inout) *has_var*)

Definition at line 498 of file read_xml_primitives.f90.

References read_xml_line().

Here is the call graph for this function:



7.7.1.9 subroutine read_xml_primitives::read_xml_line_-array (type(XML_PARSE),intent(inout) *info*, character(len=∗),intent(in) *tag*, logical,intent(inout) *endtag*, character(len=∗),dimension(:,:),intent(in) *attribs*, integer,intent(in) *noattribs*, character(len=∗),dimension(:),intent(in) *data*, integer,intent(in) *nodata*, character(len=∗),dimension(:),pointer *var*, logical,intent(inout) *has_var*)

Definition at line 220 of file read_xml_primitives.f90.

References xmlparse::xml_find_attrib().

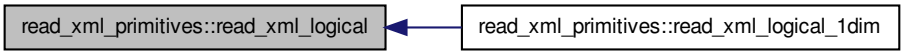
Here is the call graph for this function:

7.7.1.10 subroutine read_xml_primitives::read_xml_logical (info , tag , endtag , attribs , noattribs , data , nodata , logical,intent(inout) *var,* has_var)

Definition at line 168 of file read_xml_primitives.f90.

Referenced by read_xml_logical_1dim().

Here is the caller graph for this function:

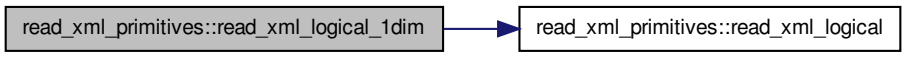


7.7.1.11 subroutine read_xml_primitives::read_xml_logical_-1dim (type(XML_PARSE),intent(inout) *info,* character(len=∗),intent(in) *tag,* logical,intent(inout) *endtag,* character(len=∗),dimension(:,:),intent(in) *attribs,* integer,intent(in) *noattribs,* character(len=∗),dimension(:),intent(in) *data,* integer,intent(in) *nodata,* logical,dimension(:),pointer *var,* logical,intent(inout) *has_var*)

Definition at line 442 of file read_xml_primitives.f90.

References read_xml_logical().

Here is the call graph for this function:



7.7.1.12 subroutine read_xml_primitives::read_xml_logical_array (info , tag , endtag , attribs , noattribs , data , nodata , logical,dimension(:),pointer *var,* has_var)

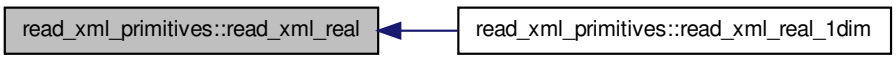
Definition at line 288 of file read_xml_primitives.f90.

7.7.1.13 subroutine read_xml_primitives::read_xml_real (info , tag , endtag , attribs , noattribs , data , nodata , real,intent(inout) *var,* has_var)

Definition at line 152 of file read_xml_primitives.f90.

Referenced by read_xml_real_1dim().

Here is the caller graph for this function:

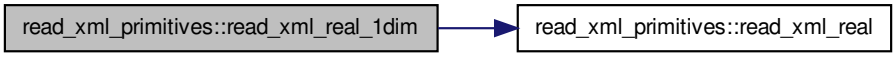


7.7.1.14 subroutine read_xml_primitives::read_xml_real_-1dim (type(XML_PARSE),intent(inout) *info,* character(len=∗),intent(in) *tag,* logical,intent(inout) *endtag,* character(len=∗),dimension(:,:),intent(in) *attribs,* integer,intent(in) *noattribs,* character(len=∗),dimension(:),intent(in) *data,* integer,intent(in) *nodata,* real,dimension(:),pointer *var,* logical,intent(inout) *has_var*)

Definition at line 386 of file read_xml_primitives.f90.

References read_xml_real().

Here is the call graph for this function:



7.7.1.15 subroutine read_xml_primitives::read_xml_real_array (info , tag , endtag , attribs , noattribs , data , nodata , real,dimension(:),pointer *var*, has_var)

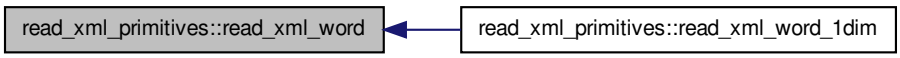
Definition at line 272 of file read_xml_primitives.f90.

7.7.1.16 subroutine read_xml_primitives::read_xml_word (info , tag , endtag , attribs , noattribs , data , nodata , character(len=∗),intent(inout) *var*, has_var)

Definition at line 176 of file read_xml_primitives.f90.

Referenced by read_xml_word_1dim().

Here is the caller graph for this function:

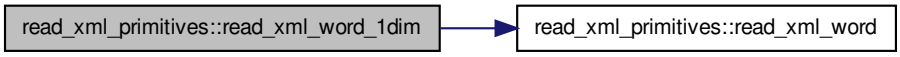


7.7.1.17 subroutine read_xml_primitives::read_xml_word_1dim (type(XML_PARSE),intent(inout) *info,* character(len=∗),intent(in) *tag,* logical,intent(inout) *endtag,* character(len=∗),dimension(:,:),intent(in) *attribs,* integer,intent(in) *noattribs,* character(len=∗),dimension(:),intent(in) *data,* integer,intent(in) *nodata,* character(len=∗),dimension(:),pointer *var,* logical,intent(inout) *has_var*)

Definition at line 470 of file read_xml_primitives.f90.

References read_xml_word().

Here is the call graph for this function:



7.7.1.18 subroutine read_xml_primitives::read_xml_word_array (info , tag , endtag , attribs , noattribs , data , nodata , character(len=∗),dimension(:),pointer *var,* has_var)

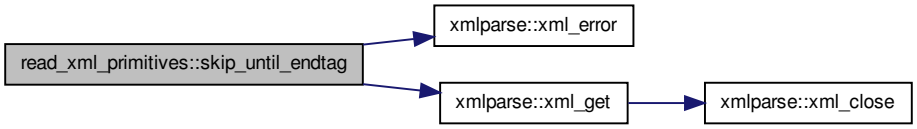
Definition at line 296 of file read_xml_primitives.f90.

7.7.1.19 subroutine read_xml_primitives::skip_until_endtag (type(XML_PARSE),intent(inout) *info,* character(len=∗),intent(in) *tag,* character(len=∗),dimension(:,:),intent(inout) *attribs,* character(len=∗),dimension(:),intent(inout) *data,* logical,intent(out) *error*)

Definition at line 50 of file read_xml_primitives.f90.

References xmlparse::xml_error(), and xmlparse::xml_get().

Here is the call graph for this function:



7.8 tally Module Reference

Contains information about tallying quantities.

Data Types

- type **tally_type**

Functions/Subroutines

- subroutine, public setup_tallies (this, n, emax, emin)
  routine to initialize all tallies
- subroutine, public add_to_tally (this, n, totxs, E)
  routine to add quantities during transport of a particle
- subroutine, public bank_tally (this, n)
  routine to bank a histories tallies
- subroutine, public deallocate_tallies (this, n)
  routine to deallocate tally types

7.8.1 Detailed Description

Contains information about tallying quantities.

Author

Bryan Herman

7.8.2 Function/Subroutine Documentation

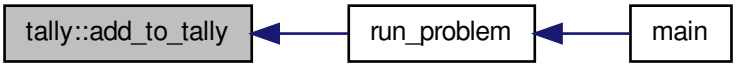
7.8.2.1 subroutine,public tally::add_to_tally (type(tally_type),dimension(n) *this*, integer *n*, real(8) *totxs*, real(8) *E*)

routine to add quantities during transport of a particle

Definition at line 68 of file tally.f90.

Referenced by run_problem().

Here is the caller graph for this function:



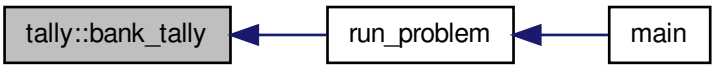
7.8.2.2 subroutine,public tally::bank_tally (type(tally_type),dimension(n) *this*, integer *n*)

routine to bank a histories tallies

Definition at line 106 of file tally.f90.

Referenced by run_problem().

Here is the caller graph for this function:



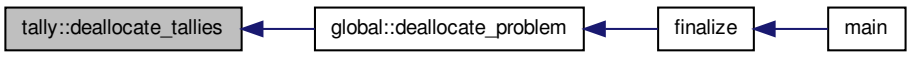
7.8.2.3 subroutine,public tally::deallocate_tallies (type(tally_type),dimension(n) *this*, integer *n*)

routine to deallocate tally types

Definition at line 134 of file tally.f90.

Referenced by global::deallocate_problem().

Here is the caller graph for this function:



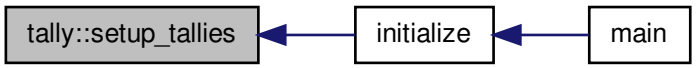
7.8.2.4 subroutine,public tally::setup_tallies (type(tally_type),dimension(n) *this*, integer *n*, real(8) *emax*, real(8) *emin*)

routine to initialize all tallies

Definition at line 36 of file tally.f90.

Referenced by initialize().

Here is the caller graph for this function:



7.9 write_xml_primitives Module Reference

Data Types

- interface write_to_xml_word
- interface write_to_xml_line

Functions/Subroutines

- subroutine write_to_xml_integer (info, tag, indent, value)
- subroutine write_to_xml_integer_1dim (info, tag, indent, values)
- subroutine write_to_xml_real (info, tag, indent, value)
- subroutine write_to_xml_real_1dim (info, tag, indent, values)
- subroutine write_to_xml_double (info, tag, indent, value)
- subroutine write_to_xml_double_1dim (info, tag, indent, values)
- subroutine write_to_xml_string (info, tag, indent, value)
- subroutine write_to_xml_word_1dim (info, tag, indent, values)
- subroutine write_to_xml_string_1dim (info, tag, indent, values)
- subroutine write_to_xml_logical (info, tag, indent, value)
- subroutine write_to_xml_logical_1dim (info, tag, indent, values)
- subroutine write_to_xml_integer_array (info, tag, indent, array)
- subroutine write_to_xml_real_array (info, tag, indent, array)
- subroutine write_to_xml_double_array (info, tag, indent, array)
- subroutine write_to_xml_logical_array (info, tag, indent, array)
- subroutine write_to_xml_word_array (info, tag, indent, array)
- subroutine write_to_xml_line_array (info, tag, indent, array)

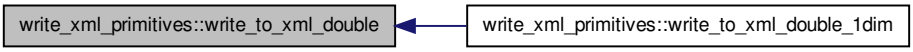
7.9.1 Function/Subroutine Documentation

7.9.1.1 subroutine write_xml_primitives::write_to_xml_double (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* real(kind=kind(1.0d0)),intent(in) *value*)

Definition at line 136 of file write_xml_primitives.f90.

Referenced by write_to_xml_double_1dim().

Here is the caller graph for this function:

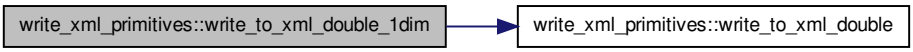


7.9.1.2 subroutine write_xml_primitives::write_to_xml_double_1dim (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* real(kind=kind(1.0d00)),dimension(:),intent(in) *values*)

Definition at line 161 of file write_xml_primitives.f90.

References write_to_xml_double().

Here is the call graph for this function:



7.9.1.3 subroutine write_xml_primitives::write_to_xml_double_array (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* real(kind=kind(1.0d0)),dimension(:),intent(in) *array*)

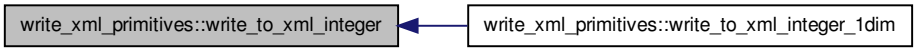
Definition at line 371 of file write_xml_primitives.f90.

7.9.1.4 subroutine write_xml_primitives::write_to_xml_integer (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* integer,intent(in) *value*)

Definition at line 42 of file write_xml_primitives.f90.

Referenced by write_to_xml_integer_1dim().

Here is the caller graph for this function:

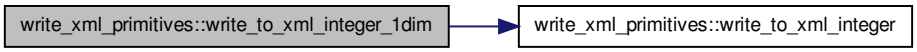


7.9.1.5 subroutine write_xml_primitives::write_to_xml_integer_1dim (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* integer,dimension(:),intent(in) *values*)

Definition at line 65 of file write_xml_primitives.f90.

References write_to_xml_integer().

Here is the call graph for this function:



7.9.1.6 subroutine write_xml_primitives::write_to_xml_integer_array (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* integer,dimension(:),intent(in) *array*)

Definition at line 307 of file write_xml_primitives.f90.

7.9.1.7 subroutine write_xml_primitives::write_to_xml_line_array (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* logical,dimension(:),intent(in) *array*)

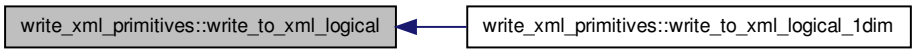
Definition at line 467 of file write_xml_primitives.f90.

7.9.1.8 subroutine write_xml_primitives::write_to_xml_logical (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* logical,intent(in) *value*)

Definition at line 256 of file write_xml_primitives.f90.

Referenced by write_to_xml_logical_1dim().

Here is the caller graph for this function:

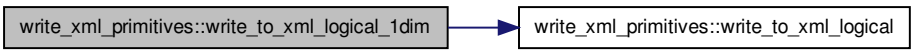


7.9.1.9 subroutine write_xml_primitives::write_to_xml_logical_1dim (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* logical,dimension(:),intent(in) *values*)

Definition at line 284 of file write_xml_primitives.f90.

References write_to_xml_logical().

Here is the call graph for this function:



7.9.1.10 subroutine write_xml_primitives::write_to_xml_logical_array (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* logical,dimension(:),intent(in) *array*)

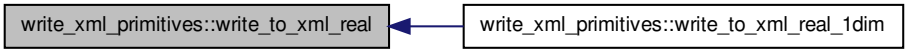
Definition at line 403 of file write_xml_primitives.f90.

7.9.1.11 subroutine write_xml_primitives::write_to_xml_real (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* real,intent(in) *value*)

Definition at line 88 of file write_xml_primitives.f90.

Referenced by write_to_xml_real_1dim().

Here is the caller graph for this function:

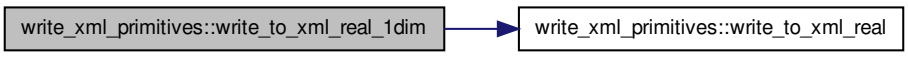


7.9.1.12 subroutine write_xml_primitives::write_to_xml_real_1dim (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* real,dimension(:),intent(in) *values*)

Definition at line 113 of file write_xml_primitives.f90.

References write_to_xml_real().

Here is the call graph for this function:



7.9.1.13 subroutine write_xml_primitives::write_to_xml_real_array (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* real,dimension(:),intent(in) *array*)

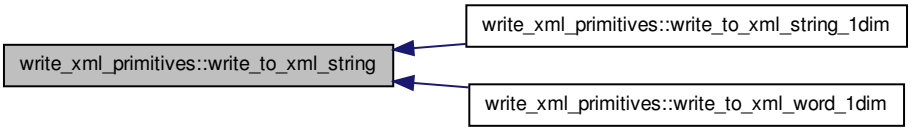
Definition at line 339 of file write_xml_primitives.f90.

7.9.1.14 subroutine write_xml_primitives::write_to_xml_string (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* character(len=∗),intent(in) *value*)

Definition at line 184 of file write_xml_primitives.f90.

Referenced by write_to_xml_string_1dim(), and write_to_xml_word_1dim().

Here is the caller graph for this function:

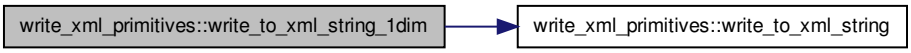


7.9.1.15 subroutine write_xml_primitives::write_to_xml_string_1dim (type(XML_PARSE),intent(in) *info*, character(len=∗),intent(in) *tag*, integer,intent(in) *indent*, character(len=∗),dimension(:),intent(in) *values*)

Definition at line 233 of file write_xml_primitives.f90.

References write_to_xml_string().

Here is the call graph for this function:

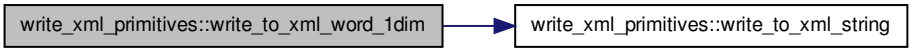


7.9.1.16 subroutine write_xml_primitives::write_to_xml_word_1dim (type(XML_PARSE),intent(in) *info*, character(len=∗),intent(in) *tag*, integer,intent(in) *indent*, character(len=∗),dimension(:),intent(in) *values*)

Definition at line 211 of file write_xml_primitives.f90.

References write_to_xml_string().

Here is the call graph for this function:



7.9.1.17 subroutine write_xml_primitives::write_to_xml_word_array (type(XML_PARSE),intent(in) *info*, character(len=∗),intent(in) *tag*, integer,intent(in) *indent*, character(len=∗),dimension(:),intent(in) *array*)

Definition at line 435 of file write_xml_primitives.f90.

7.10 xml_data_input_t Module Reference

Data Types

- type settings_xml
- type nuclide_xml
- type material_xml

Functions/Subroutines

- subroutine read_xml_type_settings_xml_array (info, tag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine read_xml_type_settings_xml (info, starttag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine init_xml_type_settings_xml_array (dvar)
- subroutine init_xml_type_settings_xml (dvar)
- subroutine write_xml_type_settings_xml_array (info, tag, indent, dvar)
- subroutine write_xml_type_settings_xml (info, tag, indent, dvar)
- subroutine read_xml_type_nuclide_xml_array (info, tag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine read_xml_type_nuclide_xml (info, starttag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine init_xml_type_nuclide_xml_array (dvar)
- subroutine init_xml_type_nuclide_xml (dvar)
- subroutine write_xml_type_nuclide_xml_array (info, tag, indent, dvar)
- subroutine write_xml_type_nuclide_xml (info, tag, indent, dvar)
- subroutine read_xml_type_material_xml_array (info, tag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine read_xml_type_material_xml (info, starttag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine init_xml_type_material_xml_array (dvar)
- subroutine init_xml_type_material_xml (dvar)
- subroutine write_xml_type_material_xml_array (info, tag, indent, dvar)
- subroutine write_xml_type_material_xml (info, tag, indent, dvar)
- subroutine read_xml_file_input_t (fname, lurep, errout)
- subroutine write_xml_file_input_t (fname, lurep)
- subroutine init_xml_file_input_t

Variables

- integer, private lurep_
- logical, private strict_
- type(settings_xml) settings_
- type(material_xml), dimension(:), pointer material_ = > null()

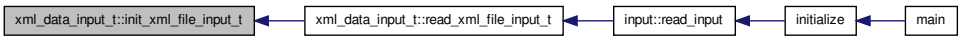
7.10.1 Function/Subroutine Documentation

7.10.1.1 subroutine xml_data_input_t::init_xml_file_input_t ( )

Definition at line 662 of file input_t.f90.

Referenced by read_xml_file_input_t().

Here is the caller graph for this function:

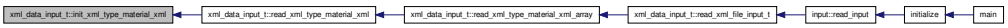


7.10.1.2 subroutine xml_data_input_t::init_xml_type_material_xml (type(material_xml) *dvar*)

Definition at line 520 of file input_t.f90.

Referenced by read_xml_type_material_xml().

Here is the caller graph for this function:



7.10.1.3 subroutine xml_data_input_t::init_xml_type_material_xml_array (type(material_xml),dimension(:),pointer *dvar*)

Definition at line 513 of file input_t.f90.

7.10.1.4 subroutine xml_data_input_t::init_xml_type_nuclide_xml (type(nuclide_xml) *dvar*)

Definition at line 365 of file input_t.f90.

Referenced by read_xml_type_nuclide_xml().

Here is the caller graph for this function:

7.10.1.5 subroutine xml_data_input_t::init_xml_type_nuclide_xml_array (type(nuclide_xml),dimension(:),pointer *dvar*)

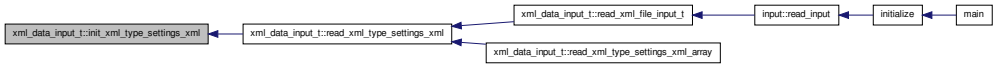
Definition at line 358 of file input_t.f90.

7.10.1.6 subroutine xml_data_input_t::init_xml_type_settings_xml (type(settings_xml) *dvar*)

Definition at line 181 of file input_t.f90.

Referenced by read_xml_type_settings_xml().

Here is the caller graph for this function:



7.10.1.7 subroutine xml_data_input_t::init_xml_type_settings_xml_array (type(settings_xml),dimension(:),pointer *dvar*)

Definition at line 174 of file input_t.f90.

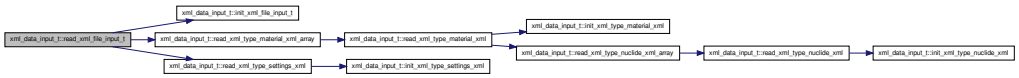
7.10.1.8 subroutine xml_data_input_t::read_xml_file_input_t (character(len=∗),intent(in) *fname,* integer,intent(in),optional *lurep,* logical,intent(out),optional *errout*)

Definition at line 550 of file input_t.f90.

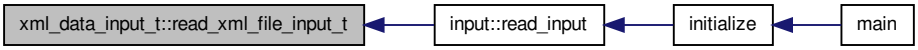
References init_xml_file_input_t(), lurep_, material_, read_xml_type_material_xml_-array(), read_xml_type_settings_xml(), settings_, and strict_.

Referenced by input::read_input().

Here is the call graph for this function:



Here is the caller graph for this function:



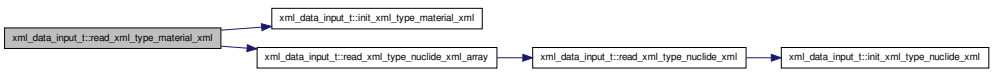
7.10.1.9 subroutine xml_data_input_t::read_xml_type_material_xml (type(XML_PARSE) *info*, character(len=∗),intent(in) *starttag*, logical,intent(inout) *endtag*, character(len=∗),dimension(:,:),intent(inout) *attribs*, integer,intent(inout) *noattribs*, character(len=∗),dimension(:),intent(inout) *data*, integer,intent(inout) *nodata*, type(material_xml),intent(inout) *dvar*, logical,intent(inout) *has_dvar*)

Definition at line 424 of file input_t.f90.

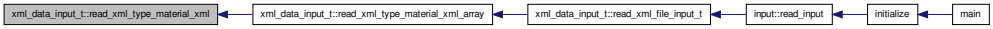
References init_xml_type_material_xml(), lurep_, read_xml_type_nuclide_xml_array(), and strict_.

Referenced by read_xml_type_material_xml_array().

Here is the call graph for this function:



Here is the caller graph for this function:



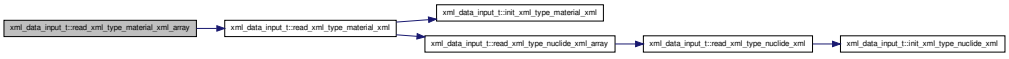
7.10.1.10 subroutine xml_data_input_t::read_xml_type_material_xml_array (type(XML_PARSE) *info*, character(len=∗),intent(inout) *tag*, logical,intent(inout) *endtag*, character(len=∗),dimension(:,:),intent(inout) *attribs*, integer,intent(inout) *noattribs*, character(len=∗),dimension(:),intent(inout) *data*, integer,intent(inout) *nodata*, type(material_xml),dimension(:),pointer *dvar*, logical,intent(inout) *has_dvar*)

Definition at line 398 of file input_t.f90.

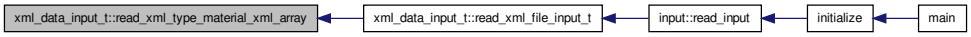
References read_xml_type_material_xml().

Referenced by read_xml_file_input_t().

Here is the call graph for this function:



Here is the caller graph for this function:



7.10.1.11 subroutine xml_data_input_t::read_xml_type_nuclide_xml (type(XML_PARSE) *info*, character(len=∗),intent(in) *starttag*, logical,intent(inout) *endtag*, character(len=∗),dimension(:,:),intent(inout) *attribs*, integer,intent(inout) *noattribs*, character(len=∗),dimension(:),intent(inout) *data*, integer,intent(inout) *nodata*, type(nuclide_xml),intent(inout) *dvar*, logical,intent(inout) *has_dvar*)

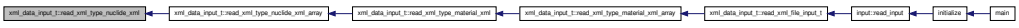
Definition at line 240 of file input_t.f90.

References init_xml_type_nuclide_xml(), lurep_, and strict_.

Referenced by read_xml_type_nuclide_xml_array().

Here is the call graph for this function:

Here is the caller graph for this function:



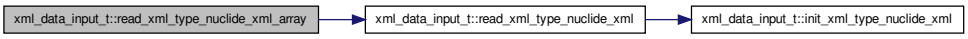
7.10.1.12 subroutine xml_data_input_t::read_xml_type_nuclide_xml_array (type(XML_PARSE) *info*, character(len=∗),intent(inout) *tag*, logical,intent(inout) *endtag*, character(len=∗),dimension(:,:),intent(inout) *attribs*, integer,intent(inout) *noattribs*, character(len=∗),dimension(:),intent(inout) *data*, integer,intent(inout) *nodata*, type(nuclide_xml),dimension(:),pointer *dvar*, logical,intent(inout) *has_dvar*)

Definition at line 214 of file input_t.f90.

References read_xml_type_nuclide_xml().

Referenced by read_xml_type_material_xml().

Here is the call graph for this function:



Here is the caller graph for this function:

7.10.1.13 subroutine xml_data_input_t::read_xml_type_settings_xml (type(XML_PARSE) *info*, character(len=∗),intent(in) *starttag*, logical,intent(inout) *endtag*, character(len=∗),dimension(:,:),intent(inout) *attribs*, integer,intent(inout) *noattribs*, character(len=∗),dimension(:),intent(inout) *data*, integer,intent(inout) *nodata*, type(settings_xml),intent(inout) *dvar*, logical,intent(inout) *has_dvar*)

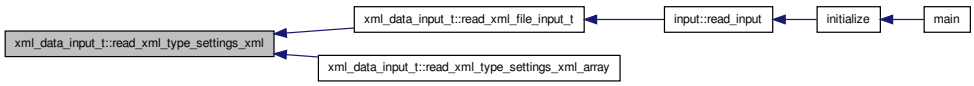
Definition at line 56 of file input_t.f90.

References init_xml_type_settings_xml(), lurep_, and strict_.

Referenced by read_xml_file_input_t(), and read_xml_type_settings_xml_array().

Here is the call graph for this function:

Here is the caller graph for this function:

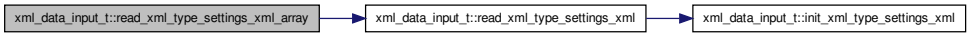


7.10.1.14 subroutine xml_data_input_t::read_xml_type_-settings_xml_array (type(XML_PARSE) *info,* character(len=∗),intent(inout) *tag,* logical,intent(inout) *endtag,* character(len=∗),dimension(:,:),intent(inout) *attribs,* integer,intent(inout) *noattribs,* character(len=∗),dimension(:),intent(inout) *data,* integer,intent(inout) *nodata,* type(settings_xml),dimension(:),pointer *dvar,* logical,intent(inout) *has_dvar*)

Definition at line 30 of file input_t.f90.

References read_xml_type_settings_xml().

Here is the call graph for this function:

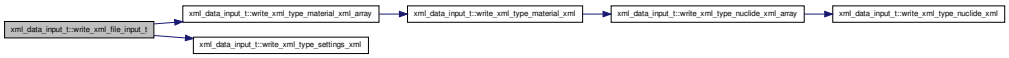


7.10.1.15 subroutine xml_data_input_t::write_xml_file_input_t (character(len=∗),intent(in) *fname,* integer,intent(in),optional *lurep*)

Definition at line 642 of file input_t.f90.

References material_, settings_, write_xml_type_material_xml_array(), and write_-xml_type_settings_xml().

Here is the call graph for this function:



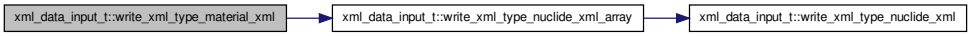
7.10.1.16 subroutine xml_data_input_t::write_xml_type_material_xml (type(XML_PARSE) *info*, character(len=∗),intent(in) *tag*, integer *indent*, type(material_xml) *dvar*)

Definition at line 535 of file input_t.f90.

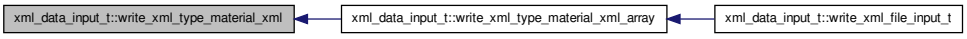
References write_xml_type_nuclide_xml_array().

Referenced by write_xml_type_material_xml_array().

Here is the call graph for this function:



Here is the caller graph for this function:



7.10.1.17 subroutine xml_data_input_t::write_xml_type_material_xml_array (type(XML_PARSE) *info*, character(len=∗),intent(in) *tag*, integer *indent*, type(material_xml),dimension(:) *dvar*)

Definition at line 523 of file input_t.f90.

References write_xml_type_material_xml().

Referenced by write_xml_file_input_t().

Here is the call graph for this function:

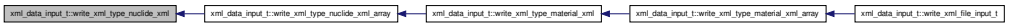
Here is the caller graph for this function:

7.10.1.18 subroutine xml_data_input_t::write_xml_type_nuclide_xml (type(XML_PARSE) *info*, character(len=∗),intent(in) *tag*, integer *indent*, type(nuclide_xml) *dvar*)

Definition at line 380 of file input_t.f90.

Referenced by write_xml_type_nuclide_xml_array().

Here is the caller graph for this function:



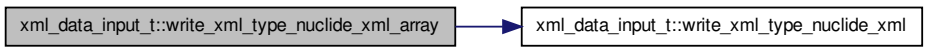
7.10.1.19 subroutine xml_data_input_t::write_xml_type_nuclide_xml_array (type(XML_PARSE) *info*, character(len=∗),intent(in) *tag*, integer *indent*, type(nuclide_xml),dimension(:) *dvar*)

Definition at line 368 of file input_t.f90.

References write_xml_type_nuclide_xml().

Referenced by write_xml_type_material_xml().

Here is the call graph for this function:



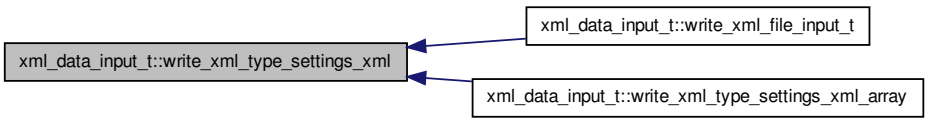
Here is the caller graph for this function:

7.10.1.20 subroutine xml_data_input_t::write_xml_type_settings_xml (type(XML_PARSE) *info*, character(len=∗),intent(in) *tag*, integer *indent*, type(settings_xml) *dvar*)

Definition at line 196 of file input_t.f90.

Referenced by write_xml_file_input_t(), and write_xml_type_settings_xml_array().

Here is the caller graph for this function:

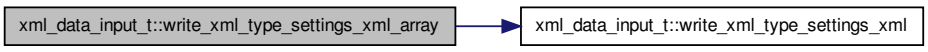


7.10.1.21 subroutine xml_data_input_t::write_xml_type_settings_xml_array (type(XML_PARSE) *info*, character(len=∗),intent(in) *tag*, integer *indent*, type(settings_xml),dimension(:) *dvar*)

Definition at line 184 of file input_t.f90.

References write_xml_type_settings_xml().

Here is the call graph for this function:



7.10.2 Variable Documentation

7.10.2.1 integer,private xml_data_input_t::lurep_

Definition at line 7 of file input_t.f90.

Referenced by read_xml_file_input_t(), read_xml_type_material_xml(), read_xml_type_nuclide_xml(), and read_xml_type_settings_xml().

7.10.2.2 type(material_xml),dimension(:),pointer xml_data_input_t::material_ => null()

Definition at line 28 of file input_t.f90.

Referenced by input::read_input(), read_xml_file_input_t(), and write_xml_file_input_t().

7.10.2.3 type(settings_xml) xml_data_input_t::settings_

Definition at line 16 of file input_t.f90.

Referenced by input::read_input(), read_xml_file_input_t(), and write_xml_file_input_t().

7.10.2.4 logical,private xml_data_input_t::strict_

Definition at line 8 of file input_t.f90.

Referenced by read_xml_file_input_t(), read_xml_type_material_xml(), read_xml_type_nuclide_xml(), and read_xml_type_settings_xml().

7.11 xmlparse Module Reference

Data Types

- type XML_PARSE
- interface xml_report_details
- interface xml_report_errors

Functions/Subroutines

- subroutine xml_report_errors_extern_ (info, text)

- subroutine xml_open (info, fname, mustread)
- subroutine xml_close (info)
- subroutine xml_get (info, tag, endtag, attribs, no_attribs, data, no_data)
- subroutine xml_put (info, tag, attribs, no_attribs, data, no_data, type)
- subroutine xml_options (info, ignore_whitespace, no_data_truncation, report_-lun, report_errors, report_details)
- logical xml_ok (info)
- logical xml_error (info)
- logical xml_data_trunc (info)
- integer xml_find_attrib (attribs, no_attribs, name, value)
- recursive subroutine xml_process (filename, attribs, data, startfunc, datafunc, endfunc, lunrep, error)

Variables

- integer, parameter XML_BUFFER_LENGTH = 10000
- integer, parameter XML_STDOUT = -1
- integer, private report_lun_ = XML_STDOUT
- logical, private report_errors_ = .false.
- logical, private report_details_ = .false.
- character(len=10), dimension(2, 3), save, private entities = reshape((/ '& ', '&', '> ', '> ', '< ', '< ' /), (/2,3/))

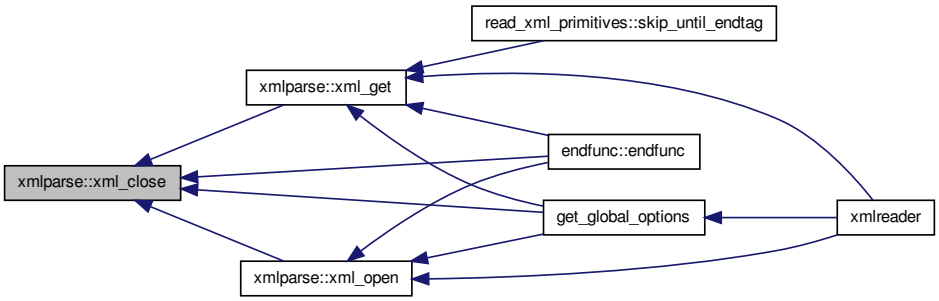
7.11.1 Function/Subroutine Documentation

7.11.1.1 subroutine xmlparse::xml_close (type(XML_PARSE),intent(inout) *info*)

Definition at line 332 of file xmlparse.f90.

Referenced by endfunc::endfunc(), get_global_options(), xml_get(), and xml_open().

Here is the caller graph for this function:



7.11.1.2 logical xmlparse::xml_data_trunc (type(XML_PARSE),intent(in) *info*)

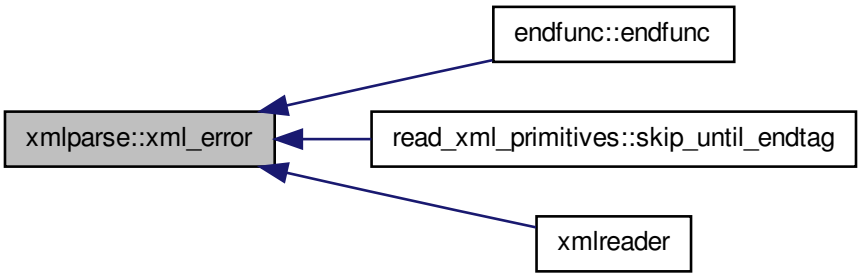
Definition at line 932 of file xmlparse.f90.

7.11.1.3 logical xmlparse::xml_error (type(XML_PARSE),intent(in) *info*)

Definition at line 915 of file xmlparse.f90.

Referenced by endfunc::endfunc(), read_xml_primitives::skip_until_endtag(), and xml-reader().

Here is the caller graph for this function:

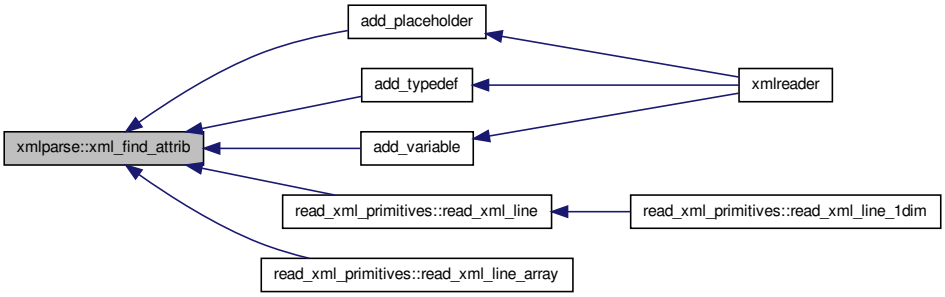


7.11.1.4 integer xmlparse::xml_find_attrib (character(len=∗),dimension(:,:) *attribs,* integer *no_attribs,* character(len=∗) *name,* character(len=∗) *value*)

Definition at line 942 of file xmlparse.f90.

Referenced by add_placeholder(), add_typedef(), add_variable(), read_xml_primitives::read_-xml_line(), and read_xml_primitives::read_xml_line_array().

Here is the caller graph for this function:



7.11.1.5 subroutine xmlparse::xml_get (type(XML_PARSE),intent(inout) *info*, character(len=∗),intent(out) *tag*, logical,intent(out) *endtag*, character(len=∗),dimension(:,:),intent(out) *attribs*, integer,intent(out) *no_attribs*, character(len=∗),dimension(:),intent(out) *data*, integer,intent(out) *no_data*)

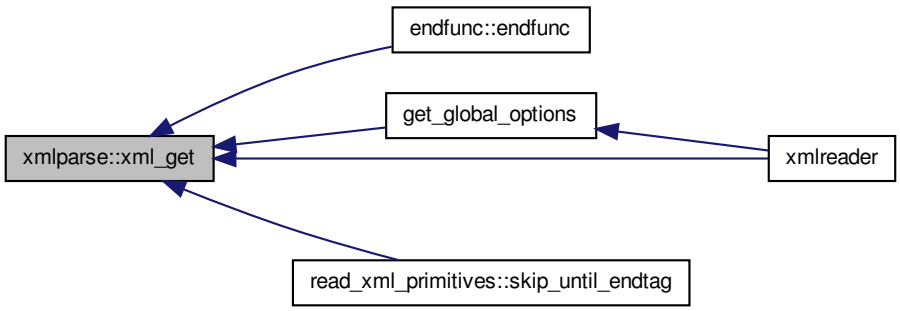
Definition at line 358 of file xmlparse.f90.

References xml_close().

Referenced by endfunc::endfunc(), get_global_options(), read_xml_primitives::skip_-until_endtag(), and xmlreader().

Here is the call graph for this function:

Here is the caller graph for this function:

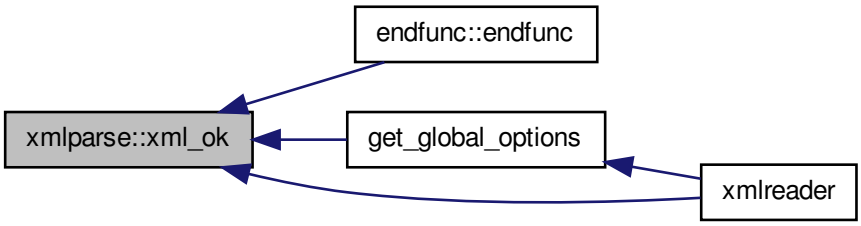


7.11.1.6 logical xmlparse::xml_ok (type(XML_PARSE),intent(in) *info*)

Definition at line 897 of file xmlparse.f90.

Referenced by endfunc::endfunc(), get_global_options(), and xmlreader().

Here is the caller graph for this function:



7.11.1.7 subroutine xmlparse::xml_open (type(XML_PARSE),intent(out) *info,* character(len=∗),intent(in) *fname,* logical,intent(in) *mustread*)

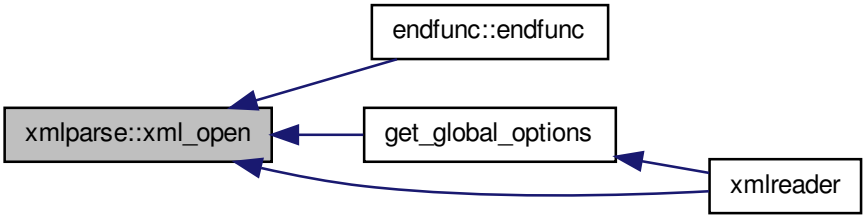
Definition at line 252 of file xmlparse.f90.

References xml_close().

Referenced by endfunc::endfunc(), get_global_options(), and xmlreader().

Here is the call graph for this function:

Here is the caller graph for this function:



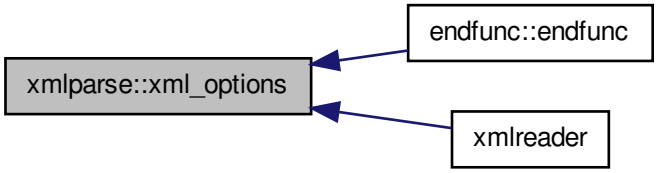
7.11.1.8 subroutine xmlparse::xml_options (type(XML_PARSE),intent(inout) *info,* logical,intent(in),optional *ignore_whitespace,* logical,intent(in),optional *no_data_truncation,* integer,intent(in),optional *report_lun,* logical,intent(in),optional *report_errors,* logical,intent(in),optional *report_details*)

Definition at line 860 of file xmlparse.f90.

References report_details_, report_errors_, and report_lun_.

Referenced by endfunc::endfunc(), and xmlreader().

Here is the caller graph for this function:



7.11.1.9 recursive subroutine xmlparse::xml_process (character(len=∗) *filename,* character(len=∗),dimension(:,:) *attribs,* character(len=∗),dimension(:) *data,* startfunc *startfunc,* datafunc *datafunc,* endfunc *endfunc,* integer *lunrep,* logical *error*)

Definition at line 978 of file xmlparse.f90.

7.11.1.10 subroutine xmlparse::xml_put (type(XML_PARSE),intent(inout) *info,* character(len=∗),intent(in) *tag,* character(len=∗),dimension(:,:),intent(in) *attribs,* integer,intent(in) *no_attribs,* character(len=∗),dimension(:),intent(in) *data,* integer,intent(in) *no_data,* character(len=∗) *type*)

Definition at line 614 of file xmlparse.f90.

References entities.

7.11.1.11 subroutine xmlparse::xml_report_errors_extern_ (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *text*)

Definition at line 229 of file xmlparse.f90.

References report_details_, report_errors_, report_lun_, and XML_STDOUT.

7.11.2 Variable Documentation

7.11.2.1 character(len=10),dimension(2,3),save,private xmlparse::entities = reshape((/ '& ', '&', '> ', '> ', '< ', '< ' /), (/2,3/))

Definition at line 81 of file xmlparse.f90.

Referenced by xml_put().

7.11.2.2 logical,private xmlparse::report_details_ = .false.

Definition at line 75 of file xmlparse.f90.

Referenced by xml_options(), xmlparse::xml_report_details::xml_report_details_int_-(), xmlparse::xml_report_details::xml_report_details_string_(), xml_report_errors_extern_-(), xmlparse::xml_report_errors::xml_report_errors_int_(), and xmlparse::xml_report_-errors::xml_report_errors_string_().

7.11.2.3 logical,private xmlparse::report_errors_ = .false.

Definition at line 74 of file xmlparse.f90.

Referenced by xml_options(), xml_report_errors_extern_(), xmlparse::xml_report_errors::xml_-report_errors_int_(), and xmlparse::xml_report_errors::xml_report_errors_string_().

7.11.2.4 integer,private xmlparse::report_lun_ = XML_STDOUT

Definition at line 73 of file xmlparse.f90.

Referenced by xml_options(), xmlparse::xml_report_details::xml_report_details_int_-(), xmlparse::xml_report_details::xml_report_details_string_(), xml_report_errors_extern_-(), xmlparse::xml_report_errors::xml_report_errors_int_(), and xmlparse::xml_report_-errors::xml_report_errors_string_().

7.11.2.5 integer,parameter xmlparse::XML_BUFFER_LENGTH = 10000

Definition at line 49 of file xmlparse.f90.

7.11.2.6 integer,parameter xmlparse::XML_STDOUT = -1

Definition at line 72 of file xmlparse.f90.

Referenced by xmlparse::xml_report_details::xml_report_details_int_(), xmlparse::xml_-report_details::xml_report_details_string_(), xml_report_errors_extern_(), xmlparse::xml_-report_errors::xml_report_errors_int_(), and xmlparse::xml_report_errors::xml_report_-errors_string_().

8 Data Type Documentation

8.1 datafunc Interface Reference

Public Member Functions

- recursive subroutine datafunc (tag, data, error)

8.1.1 Detailed Description

Definition at line 995 of file xmlparse.f90.

8.1.2 Constructor & Destructor Documentation

8.1.2.1 recursive subroutine datafunc::datafunc (character(len=∗) *tag*, character(len=∗),dimension(:) *data*, logical *error*)

Definition at line 995 of file xmlparse.f90.

The documentation for this interface was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/xmlparse.f90

8.2 endfunc Interface Reference

Public Member Functions

- recursive subroutine endfunc (tag, error)

8.2.1 Detailed Description

Definition at line 1003 of file xmlparse.f90.

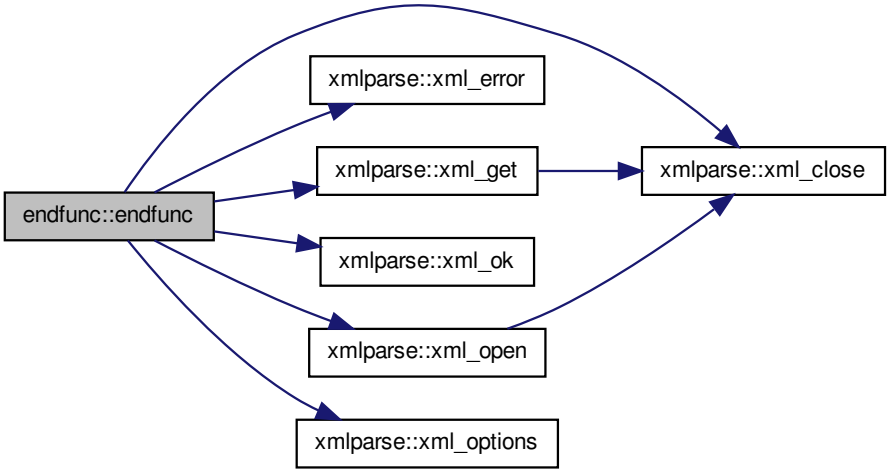
8.2.2 Constructor & Destructor Documentation

8.2.2.1 recursive subroutine endfunc::endfunc (character(len=∗) *tag*, logical *error*)

Definition at line 1003 of file xmlparse.f90.

References xmlparse::xml_close(), xmlparse::xml_error(), xmlparse::xml_get(), xmlparse::xml_ok(), xmlparse::xml_open(), and xmlparse::xml_options().

Here is the call graph for this function:

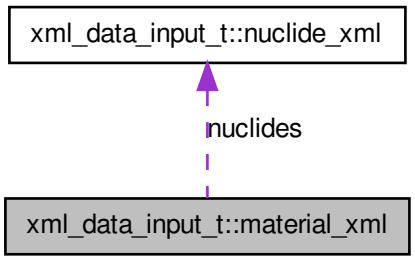


The documentation for this interface was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/xmlparse.f90

8.3 xml_data_input_t::material_xml Type Reference

Collaboration diagram for xml_data_input_t::material_xml:



Public Attributes

- type(nuclide_xml), dimension(:), pointer nuclides => null()

8.3.1 Detailed Description

Definition at line 25 of file input_t.f90.

8.3.2 Member Data Documentation

8.3.2.1 type(nuclide_xml),dimension(:),pointer xml_data_input_t::material_xml::nuclides => null()

Definition at line 26 of file input_t.f90.

The documentation for this type was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/templates/input_t.f90

8.4 xml_data_input_t::nuclide_xml Type Reference

Public Attributes

- real(kind=kind(1.0d0)) N

- real(kind=kind(1.0d0)) A
- character(len=255) path
- logical thermal

8.4.1 Detailed Description

Definition at line 18 of file input_t.f90.

8.4.2 Member Data Documentation

8.4.2.1 real(kind=kind(1.0d0)) xml_data_input_t::nuclide_xml::A

Definition at line 20 of file input_t.f90.

8.4.2.2 real(kind=kind(1.0d0)) xml_data_input_t::nuclide_xml::N

Definition at line 19 of file input_t.f90.

8.4.2.3 character(len=255) xml_data_input_t::nuclide_xml::path

Definition at line 21 of file input_t.f90.

8.4.2.4 logical xml_data_input_t::nuclide_xml::thermal

Definition at line 22 of file input_t.f90.

The documentation for this type was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/templates/input_-t.f90

8.5 read_xml_primitives::read_from_buffer Interface Reference

Public Member Functions

- subroutine read_from_buffer_integers (buffer, var, ierror)
- subroutine read_from_buffer_reals (buffer, var, ierror)
- subroutine read_from_buffer_doubles (buffer, var, ierror)
- subroutine read_from_buffer_logicals (buffer, var, ierror)
- subroutine read_from_buffer_words (buffer, var, ierror)

8.5.1 Detailed Description

Definition at line 30 of file read_xml_primitives.f90.

8.5.2 Member Function/Subroutine Documentation

8.5.2.1 subroutine read_xml_primitives::read_from_buffer::read_from_buffer_doubles (buffer , real(kind=kind(1.0d00)),dimension(:),pointer *var,* ierror)

Definition at line 331 of file read_xml_primitives.f90.

8.5.2.2 subroutine read_xml_primitives::read_from_buffer::read_from_buffer_integers (buffer , integer,dimension(:),pointer *var,* ierror)

Definition at line 312 of file read_xml_primitives.f90.

8.5.2.3 subroutine read_xml_primitives::read_from_buffer::read_from_buffer_logicals (buffer , logical,dimension(:),pointer *var,* ierror)

Definition at line 339 of file read_xml_primitives.f90.

8.5.2.4 subroutine read_xml_primitives::read_from_buffer::read_from_buffer_reals (buffer , real,dimension(:),pointer *var,* ierror)

Definition at line 323 of file read_xml_primitives.f90.

8.5.2.5 subroutine read_xml_primitives::read_from_buffer::read_from_buffer_words (buffer , character(len=∗),dimension(:),pointer *var,* ierror)

Definition at line 347 of file read_xml_primitives.f90.

The documentation for this interface was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/read_xml_primitives.f90

8.6 xml_data_input_t::settings_xml Type Reference

Public Attributes

- integer histories
- integer seed
- integer source_type
- character(len=255) source_path

8.6.1 Detailed Description

Definition at line 10 of file input_t.f90.

8.6.2 Member Data Documentation

8.6.2.1 integer xml_data_input_t::settings_xml::histories

Definition at line 11 of file input_t.f90.

8.6.2.2 integer xml_data_input_t::settings_xml::seed

Definition at line 12 of file input_t.f90.

8.6.2.3 character(len=255) xml_data_input_t::settings_xml::source_path

Definition at line 14 of file input_t.f90.

8.6.2.4 integer xml_data_input_t::settings_xml::source_type

Definition at line 13 of file input_t.f90.

The documentation for this type was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/templates/input_-t.f90

8.7 startfunc Interface Reference

Public Member Functions

- recursive subroutine startfunc (tag, attribs, error)

8.7.1 Detailed Description

Definition at line 987 of file xmlparse.f90.

8.7.2 Constructor & Destructor Documentation

8.7.2.1 recursive subroutine startfunc::startfunc (character(len=∗) *tag,* character(len=∗),dimension(:,:) *attribs,* logical *error*)

Definition at line 987 of file xmlparse.f90.

The documentation for this interface was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/xmlparse.f90

8.8 write_xml_primitives::write_to_xml_line Interface Reference

Public Member Functions

- subroutine write_to_xml_string (info, tag, indent, value)

8.8.1 Detailed Description

Definition at line 27 of file write_xml_primitives.f90.

8.8.2 Member Function/Subroutine Documentation

8.8.2.1 subroutine write_xml_primitives::write_to_xml_line::write_to_xml_string (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *tag,* integer,intent(in) *indent,* character(len=∗),intent(in) *value*)

Definition at line 184 of file write_xml_primitives.f90.

The documentation for this interface was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/write_xml_primitives.f90

8.9 write_xml_primitives::write_to_xml_word Interface Reference

Public Member Functions

- subroutine write_to_xml_string (info, tag, indent, value)

8.9.1 Detailed Description

Definition at line 24 of file write_xml_primitives.f90.

8.9.2 Member Function/Subroutine Documentation

8.9.2.1 subroutine write_xml_primitives::write_to_xml_word::write_to_xml_string (type(XML_PARSE),intent(in) *info*, character(len=∗),intent(in) *tag*, integer,intent(in) *indent*, character(len=∗),intent(in) *value*)

Definition at line 184 of file write_xml_primitives.f90.

The documentation for this interface was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/write_xml_primitives.f90

8.10 xmlparse::XML_PARSE Type Reference

Public Attributes

- integer lun
- integer level
- integer lineno
- logical ignore_whitespace
- logical no_data_truncation
- logical too_many_attribs
- logical too_many_data
- logical eof
- logical error
- character(len=XML_BUFFER_LENGTH) line

8.10.1 Detailed Description

Definition at line 55 of file xmlparse.f90.

8.10.2 Member Data Documentation

8.10.2.1 logical xmlparse::XML_PARSE::eof

Definition at line 63 of file xmlparse.f90.

8.10.2.2 logical xmlparse::XML_PARSE::error

Definition at line 64 of file xmlparse.f90.

8.10.2.3 logical xmlparse::XML_PARSE::ignore_whitespace

Definition at line 59 of file xmlparse.f90.

8.10.2.4 integer xmlparse::XML_PARSE::level

Definition at line 57 of file xmlparse.f90.

8.10.2.5 character(len=XML_BUFFER_LENGTH) xmlparse::XML_PARSE::line

Definition at line 65 of file xmlparse.f90.

8.10.2.6 integer xmlparse::XML_PARSE::lineno

Definition at line 58 of file xmlparse.f90.

8.10.2.7 integer xmlparse::XML_PARSE::lun

Definition at line 56 of file xmlparse.f90.

8.10.2.8 logical xmlparse::XML_PARSE::no_data_truncation

Definition at line 60 of file xmlparse.f90.

8.10.2.9 logical xmlparse::XML_PARSE::too_many_attribs

Definition at line 61 of file xmlparse.f90.

8.10.2.10 logical xmlparse::XML_PARSE::too_many_data

Definition at line 62 of file xmlparse.f90.

The documentation for this type was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/xmlparse.f90

8.11 xmlparse::xml_report_details Interface Reference

Public Member Functions

- subroutine xml_report_details_int_ (text, int)
- subroutine xml_report_details_string_ (text, string)

8.11.1 Detailed Description

Definition at line 106 of file xmlparse.f90.

8.11.2 Member Function/Subroutine Documentation

8.11.2.1 subroutine xmlparse::xml_report_details::xml_report_details_int_ (character(len=∗),intent(in) *text*, integer,intent(in) *int*)

Definition at line 126 of file xmlparse.f90.

References xmlparse::report_details_, xmlparse::report_lun_, and xmlparse::XML_-STDOUT.

8.11.2.2 subroutine xmlparse::xml_report_details::xml_report_details_string_ (character(len=∗),intent(in) *text*, character(len=∗),intent(in) *string*)

Definition at line 147 of file xmlparse.f90.

References xmlparse::report_details_, xmlparse::report_lun_, and xmlparse::XML_-STDOUT.

The documentation for this interface was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/xmlparse.f90

8.12 xmlparse::xml_report_errors Interface Reference

Public Member Functions

- subroutine xml_report_errors_int_ (text, int, lineno)
- subroutine xml_report_errors_string_ (text, string, lineno)
- subroutine xml_report_errors_extern_ (info, text)

8.12.1 Detailed Description

Definition at line 110 of file xmlparse.f90.

8.12.2 Member Function/Subroutine Documentation

8.12.2.1 subroutine xmlparse::xml_report_errors::xml_report_errors_extern_ (type(XML_PARSE),intent(in) *info,* character(len=∗),intent(in) *text*)

Definition at line 229 of file xmlparse.f90.

8.12.2.2 subroutine xmlparse::xml_report_errors::xml_report_errors_int_ (character(len=∗),intent(in) *text,* integer,intent(in) *int,* integer,intent(in),optional *lineno*)

Definition at line 169 of file xmlparse.f90.

References xmlparse::report_details_, xmlparse::report_errors_, xmlparse::report_lun_-
, and xmlparse::XML_STDOUT.

8.12.2.3 subroutine xmlparse::xml_report_errors::xml_report_errors_string_ (character(len=∗),intent(in) *text,* character(len=∗),intent(in) *string,* integer,intent(in),optional *lineno*)

Definition at line 198 of file xmlparse.f90.

References xmlparse::report_details_, xmlparse::report_errors_, xmlparse::report_lun_-
, and xmlparse::XML_STDOUT.

The documentation for this interface was generated from the following file:

- /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/xmlparse.f90

9 File Documentation

9.1 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/global.f90 File Reference

Modules

- module global

  Contains all of the global variables.

Functions/Subroutines

- subroutine global::allocate_problem ()

  allocates global variables for calculation

- subroutine global::deallocate_problem ()

  deallocates global variables

Variables

- integer global::VERSION_MAJOR = 0
- integer global::VERSION_MINOR = 1
- integer global::VERSION_RELEASE = 1
- type(material_type) global::mat
- type(particle_type) global::neut
- type(tally_type), dimension(:), allocatable global::tal
- integer global::nhistories
- integer global::seed
- integer global::source_type
- integer global::eidx
- real(8) global::emin = 1e-11_8
- real(8) global::emax = 20.0_8
- real(8) global::kT = 8.6173324e-5_8∗300∗1.0e-6_8

9.2 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/input.f90 File Reference

Modules

- module input

  Handles reading in the input xml file and intializing global vars.

Functions/Subroutines

- subroutine, public input::read_input

  Reads the input xml file and sets global variables.

9.3 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/main.f90 File Reference

Functions/Subroutines

- program main
- subroutine initialize ()

  high level routine for intializing problem

- subroutine run_problem ()

  main routine for executing the transport calculation

- subroutine finalize ()

  routine that finalizes the problem

9.3.1 Function Documentation

9.3.1.1 subroutine main::finalize ( )

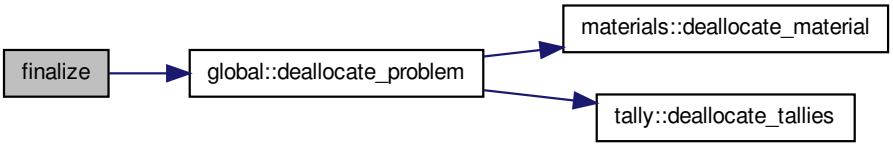
routine that finalizes the problem

Definition at line 156 of file main.f90.

References global::deallocate_problem().

Referenced by main().

Here is the call graph for this function:



Here is the caller graph for this function:

9.3.1.2 subroutine main::initialize ( )

high level routine for intializing problem

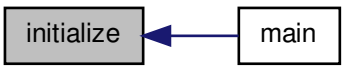
Definition at line 58 of file main.f90.

References global::allocate_problem(), materials::compute_totxs(), global::emax, global::emin, global::mat, output::print_heading(), input::read_input(), global::seed, tally::setup_tallies(), and global::tal.

Referenced by main().

Here is the call graph for this function:

Here is the caller graph for this function:

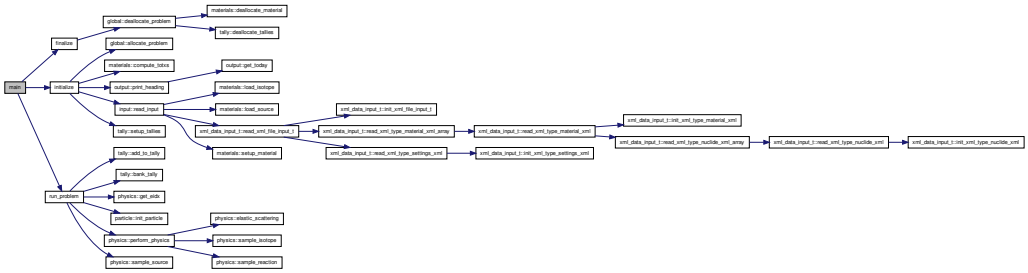


9.3.1.3 program main ( )

Definition at line 1 of file main.f90.

References finalize(), initialize(), and run_problem().

Here is the call graph for this function:



9.3.1.4 subroutine main::run_problem ( )

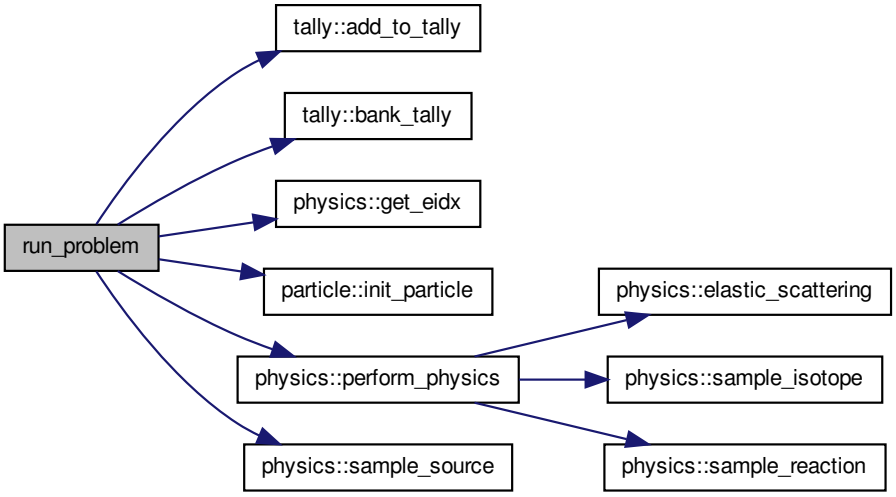
main routine for executing the transport calculation

Definition at line 99 of file main.f90.

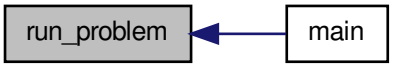
References tally::add_to_tally(), tally::bank_tally(), global::eidx, global::emin, physics::get_-eidx(), particle::init_particle(), global::mat, global::neut, global::nhistories, physics::perform_-physics(), physics::sample_source(), and global::tal.

Referenced by main().

Here is the call graph for this function:



Here is the caller graph for this function:



9.4 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/materials.f90 File Reference

Data Types

- type **materials::source_type**
- type **materials::thermal_type**
- type **materials::iso_type**
- type **materials::material_type**

Modules

- module materials

  Contains information about the isotopics of problem.

Functions/Subroutines

- subroutine, public materials::setup_material (this, emin, emax)

  routine that initializes the materials

- subroutine, public materials::load_isotope (this, N, A, path, thermal)

  routine that loads isotope properties, xs, etc.

- subroutine, public materials::load_source (this, source_type, source_path)

  routine to load fission source into memory

- subroutine, public materials::compute_totxs (this)

  routine to pre-compute macroscopic total xs

- subroutine, public materials::deallocate_material (this)

  routine to deallocate a material

9.5 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/output.f90 File Reference

Modules

- module output

  Contains routines for outputttting major info to user.

Functions/Subroutines

- subroutine, public output::print_heading ()

  prints the code heading and run information

- subroutine output::get_today (today_date, today_time)

  calculates information about date/time of run

9.6 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/particle.f90 File Reference

Data Types

- type **particle::particle_type**

Modules

- module particle

  Contains information about the particle that is transporting.

Functions/Subroutines

- subroutine, public particle::init_particle (this)

  routine to initialize a particle

9.7 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/physics.f90 File Reference

Modules

- module physics

  Contains routines to model the physics of the problem.

Functions/Subroutines

- subroutine, public physics::sample_source ()

  routine to sample source from cdf

- subroutine, public physics::perform_physics ()

  high level routine to perform transport physics

- integer, public physics::get_eidx (E)

  function to compute the index in unionized energy grid

- integer physics::sample_isotope ()

  function to sample interaction isotope

- integer physics::sample_reaction (isoidx)

  function to sample reaction type

- subroutine physics::elastic_scattering (isoidx)

  routine to perform thermal/asymptotic elastic scattering physics

9.8 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/tally.f90 File Reference

Data Types

- type **tally::tally_type**

Modules

- module tally

  Contains information about tallying quantities.

Functions/Subroutines

- subroutine, public tally::setup_tallies (this, n, emax, emin)

  routine to initialize all tallies

- subroutine, public tally::add_to_tally (this, n, totxs, E)

  routine to add quantities during transport of a particle

- subroutine, public tally::bank_tally (this, n)

  routine to bank a histories tallies

- subroutine, public tally::deallocate_tallies (this, n)

  routine to deallocate tally types

9.9 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/read_xml_primitives.f90 File Reference

Data Types

- interface read_xml_primitives::read_from_buffer

Modules

- module read_xml_primitives

Functions/Subroutines

- subroutine read_xml_primitives::skip_until_endtag (info, tag, attribs, data, error)
- subroutine read_xml_primitives::read_xml_integer (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_line (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_real (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_double (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_logical (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_word (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_integer_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_line_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_real_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_double_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_logical_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_word_array (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_integer_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_real_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_double_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_logical_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_word_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)
- subroutine read_xml_primitives::read_xml_line_1dim (info, tag, endtag, attribs, noattribs, data, nodata, var, has_var)

9.10 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/templates/input_t.f90 File Reference

Data Types

- type xml_data_input_t::settings_xml
- type xml_data_input_t::nuclide_xml
- type xml_data_input_t::material_xml

Modules

- module xml_data_input_t

Functions/Subroutines

- subroutine xml_data_input_t::read_xml_type_settings_xml_array (info, tag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine xml_data_input_t::read_xml_type_settings_xml (info, starttag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine xml_data_input_t::init_xml_type_settings_xml_array (dvar)
- subroutine xml_data_input_t::init_xml_type_settings_xml (dvar)
- subroutine xml_data_input_t::write_xml_type_settings_xml_array (info, tag, indent, dvar)
- subroutine xml_data_input_t::write_xml_type_settings_xml (info, tag, indent, dvar)
- subroutine xml_data_input_t::read_xml_type_nuclide_xml_array (info, tag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine xml_data_input_t::read_xml_type_nuclide_xml (info, starttag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine xml_data_input_t::init_xml_type_nuclide_xml_array (dvar)
- subroutine xml_data_input_t::init_xml_type_nuclide_xml (dvar)
- subroutine xml_data_input_t::write_xml_type_nuclide_xml_array (info, tag, indent, dvar)
- subroutine xml_data_input_t::write_xml_type_nuclide_xml (info, tag, indent, dvar)
- subroutine xml_data_input_t::read_xml_type_material_xml_array (info, tag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine xml_data_input_t::read_xml_type_material_xml (info, starttag, endtag, attribs, noattribs, data, nodata, dvar, has_dvar)
- subroutine xml_data_input_t::init_xml_type_material_xml_array (dvar)
- subroutine xml_data_input_t::init_xml_type_material_xml (dvar)
- subroutine xml_data_input_t::write_xml_type_material_xml_array (info, tag, indent, dvar)
- subroutine xml_data_input_t::write_xml_type_material_xml (info, tag, indent, dvar)
- subroutine xml_data_input_t::read_xml_file_input_t (fname, lurep, errout)
- subroutine xml_data_input_t::write_xml_file_input_t (fname, lurep)
- subroutine xml_data_input_t::init_xml_file_input_t

Variables

- integer, private xml_data_input_t::lurep_
- logical, private xml_data_input_t::strict_
- type(settings_xml) xml_data_input_t::settings_
- type(material_xml), dimension(:), pointer xml_data_input_t::material_ => null()

9.11 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/write_xml_primitives.f90 File Reference

Data Types

- interface write_xml_primitives::write_to_xml_word
- interface write_xml_primitives::write_to_xml_line

Modules

- module write_xml_primitives

Functions/Subroutines

- subroutine write_xml_primitives::write_to_xml_integer (info, tag, indent, value)
- subroutine write_xml_primitives::write_to_xml_integer_1dim (info, tag, indent, values)
- subroutine write_xml_primitives::write_to_xml_real (info, tag, indent, value)
- subroutine write_xml_primitives::write_to_xml_real_1dim (info, tag, indent, values)
- subroutine write_xml_primitives::write_to_xml_double (info, tag, indent, value)
- subroutine write_xml_primitives::write_to_xml_double_1dim (info, tag, indent, values)
- subroutine write_xml_primitives::write_to_xml_string (info, tag, indent, value)
- subroutine write_xml_primitives::write_to_xml_word_1dim (info, tag, indent, values)
- subroutine write_xml_primitives::write_to_xml_string_1dim (info, tag, indent, values)
- subroutine write_xml_primitives::write_to_xml_logical (info, tag, indent, value)
- subroutine write_xml_primitives::write_to_xml_logical_1dim (info, tag, indent, values)
- subroutine write_xml_primitives::write_to_xml_integer_array (info, tag, indent, array)
- subroutine write_xml_primitives::write_to_xml_real_array (info, tag, indent, array)
- subroutine write_xml_primitives::write_to_xml_double_array (info, tag, indent, array)
- subroutine write_xml_primitives::write_to_xml_logical_array (info, tag, indent, array)
- subroutine write_xml_primitives::write_to_xml_word_array (info, tag, indent, array)
- subroutine write_xml_primitives::write_to_xml_line_array (info, tag, indent, array)

9.12 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/xmlparse.f90 File Reference

Data Types

- type xmlparse::XML_PARSE
- interface xmlparse::xml_report_details
- interface xmlparse::xml_report_errors
- interface startfunc
- interface datafunc
- interface endfunc

Modules

- module xmlparse

Functions/Subroutines

- subroutine xmlparse::xml_report_errors_extern_ (info, text)
- subroutine xmlparse::xml_open (info, fname, mustread)
- subroutine xmlparse::xml_close (info)
- subroutine xmlparse::xml_get (info, tag, endtag, attribs, no_attribs, data, no_-data)
- subroutine xmlparse::xml_put (info, tag, attribs, no_attribs, data, no_data, type)
- subroutine xmlparse::xml_options (info, ignore_whitespace, no_data_truncation, report_lun, report_errors, report_details)
- logical xmlparse::xml_ok (info)
- logical xmlparse::xml_error (info)
- logical xmlparse::xml_data_trunc (info)
- integer xmlparse::xml_find_attrib (attribs, no_attribs, name, value)
- recursive subroutine xmlparse::xml_process (filename, attribs, data, startfunc, datafunc, endfunc, lunrep, error)

Variables

- integer, parameter xmlparse::XML_BUFFER_LENGTH = 10000
- integer, parameter xmlparse::XML_STDOUT = -1
- integer, private xmlparse::report_lun_ = XML_STDOUT
- logical, private xmlparse::report_errors_ = .false.
- logical, private xmlparse::report_details_ = .false.
- character(len=10), dimension(2, 3), save, private xmlparse::entities = reshape((/ ’& ’, ’&’, ’> ’, ’> ’, ’< ’, ’< ’ /), (/2,3/))

9.13 /mnt/md0/Documents/Documents/Spring2012/211/SlowMC/src/xml-fortran/xmlreader.f90 File Reference

Functions/Subroutines

- program xmlreader
- subroutine get_global_options (attribs, noattribs, strict, global_type, global_name, root_name, dyn_strings)
- subroutine set_options (attribs, noattribs, strict, global_type, global_name, root_name, dyn_strings)
- subroutine open_tmp_files (lufirst)
- subroutine close_tmp_files
- subroutine append_files (lufirst)
- subroutine merge_files
- subroutine write_prolog
- subroutine add_begin_loop (checktag, component)
- subroutine add_end_loop
- subroutine add_variable (component)
- subroutine add_typedef (dyn_strings)
- subroutine close_typedef (component)
- subroutine add_placeholder (dyn_strings)
- subroutine close_placeholder

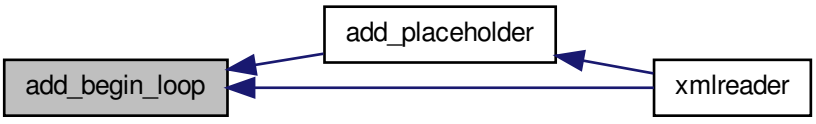
9.13.1 Function Documentation

9.13.1.1 subroutine xmlreader::add_begin_loop (logical *checktag*, logical *component*)

Definition at line 632 of file xmlreader.f90.

Referenced by add_placeholder(), and xmlreader().

Here is the caller graph for this function:

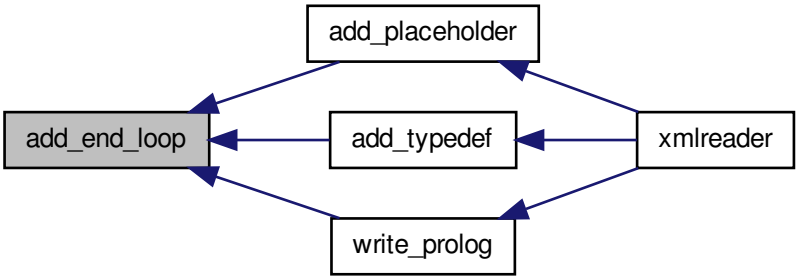


9.13.1.2 subroutine xmlreader::add_end_loop ( )

Definition at line 716 of file xmlreader.f90.

Referenced by add_placeholder(), add_typedef(), and write_prolog().

Here is the caller graph for this function:



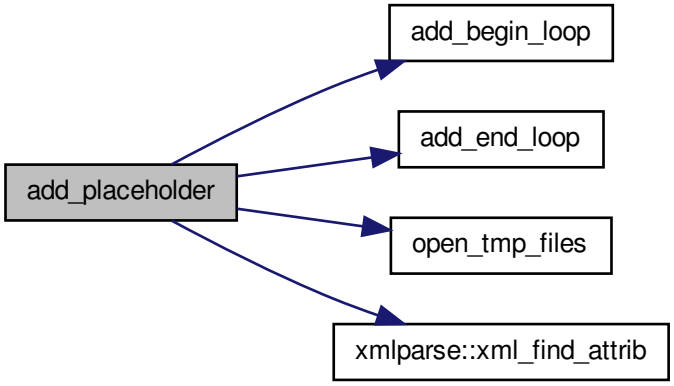
9.13.1.3 subroutine xmlreader::add_placeholder (logical,intent(in) *dyn_strings*)

Definition at line 1131 of file xmlreader.f90.

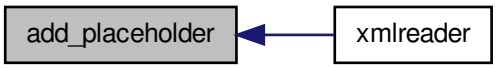
References add_begin_loop(), add_end_loop(), open_tmp_files(), and xmlparse::xml_-find_attrib().

Referenced by xmlreader().

Here is the call graph for this function:



Here is the caller graph for this function:



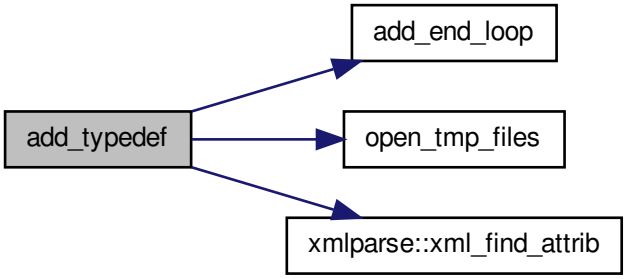
9.13.1.4 subroutine xmlreader::add_typedef (logical,intent(in) *dyn_strings*)

Definition at line 945 of file xmlreader.f90.

References add_end_loop(), open_tmp_files(), and xmlparse::xml_find_attrib().

Referenced by xmlreader().

Here is the call graph for this function:



Here is the caller graph for this function:

9.13.1.5 subroutine xmlreader::add_variable (logical *component*)

Definition at line 744 of file xmlreader.f90.

References xmlparse::xml_find_attrib().

Referenced by xmlreader().

Here is the call graph for this function:

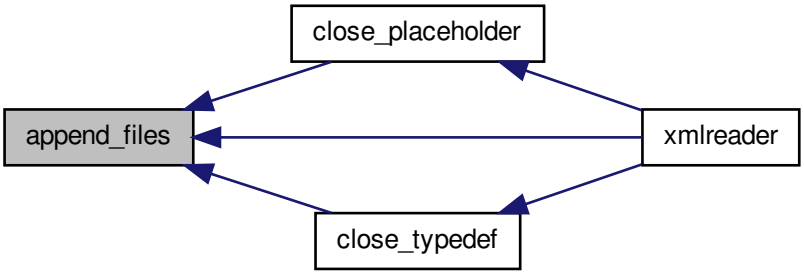
Here is the caller graph for this function:

9.13.1.6 subroutine xmlreader::append_files (integer,intent(in) *lufirst*)

Definition at line 467 of file xmlreader.f90.

Referenced by close_placeholder(), close_typedef(), and xmlreader().

Here is the caller graph for this function:



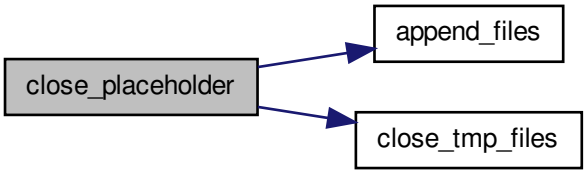
9.13.1.7 subroutine xmlreader::close_placeholder ( )

Definition at line 1223 of file xmlreader.f90.

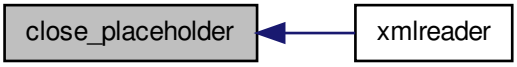
References append_files(), and close_tmp_files().

Referenced by xmlreader().

Here is the call graph for this function:



Here is the caller graph for this function:

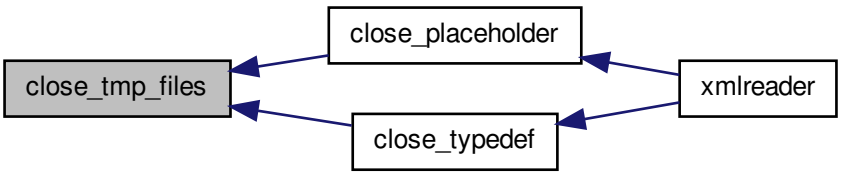


9.13.1.8 subroutine xmlreader::close_tmp_files ( )

Definition at line 444 of file xmlreader.f90.

Referenced by close_placeholder(), and close_typedef().

Here is the caller graph for this function:



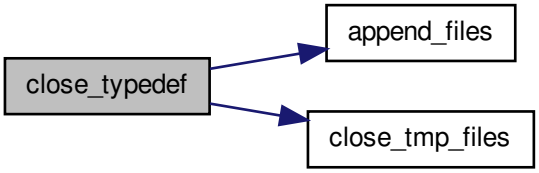
9.13.1.9 subroutine xmlreader::close_typedef (logical,intent(out) *component*)

Definition at line 1105 of file xmlreader.f90.

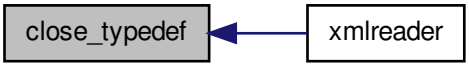
References append_files(), and close_tmp_files().

Referenced by xmlreader().

Here is the call graph for this function:



Here is the caller graph for this function:



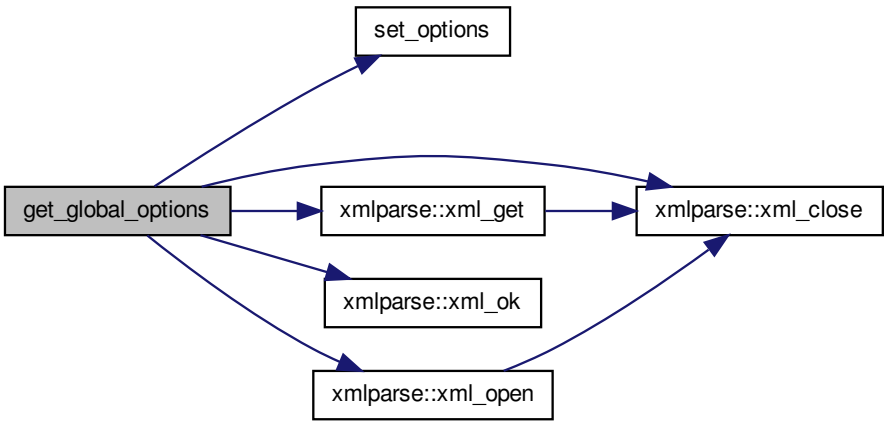
9.13.1.10 subroutine xmlreader::get_global_options (character(len=∗),dimension(:,:),intent(inout) *attribs,* integer,intent(inout) *noattribs,* logical,intent(inout) *strict,* logical,intent(inout) *global_type,* character(len=∗),intent(inout) *global_name,* character(len=∗),intent(inout) *root_name,* logical,intent(inout) *dyn_strings*)

Definition at line 328 of file xmlreader.f90.

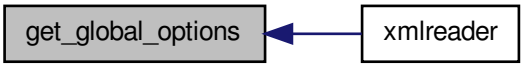
References set_options(), xmlparse::xml_close(), xmlparse::xml_get(), xmlparse::xml_ok(), and xmlparse::xml_open().

Referenced by xmlreader().

Here is the call graph for this function:



Here is the caller graph for this function:



9.13.1.11 subroutine xmlreader::merge_files ( )

Definition at line 506 of file xmlreader.f90.

Referenced by xmlreader().

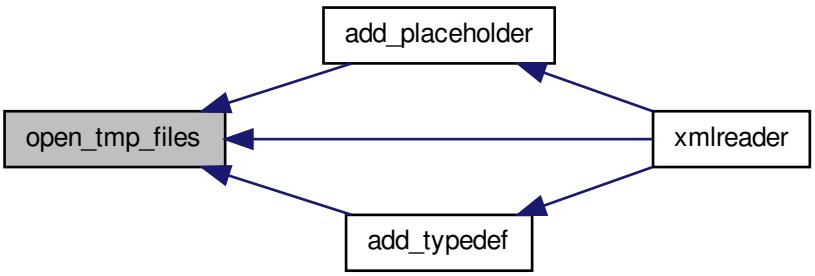
Here is the caller graph for this function:

9.13.1.12 subroutine xmlreader::open_tmp_files (integer,intent(in) *lufirst*)

Definition at line 420 of file xmlreader.f90.

Referenced by add_placeholder(), add_typedef(), and xmlreader().

Here is the caller graph for this function:

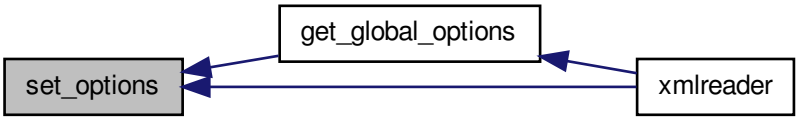


9.13.1.13 subroutine xmlreader::set_options (character(len=∗),dimension(:,:),intent(in) *attribs*, integer,intent(in) *noattribs*, logical,intent(inout) *strict*, logical,intent(inout) *global_type*, character(len=∗),intent(inout) *global_name*, character(len=∗),intent(inout) *root_name*, logical,intent(inout) *dyn_strings*)

Definition at line 372 of file xmlreader.f90.

Referenced by get_global_options(), and xmlreader().

Here is the caller graph for this function:



9.13.1.14 subroutine xmlreader::write_prolog ( )

Definition at line 549 of file xmlreader.f90.

References add_end_loop().

Referenced by xmlreader().

Here is the call graph for this function:

Here is the caller graph for this function:

9.13.1.15 program xmlreader ( )

Definition at line 12 of file xmlreader.f90.

References add_begin_loop(), add_placeholder(), add_typedef(), add_variable(), append_files(), close_placeholder(), close_typedef(), get_global_options(), merge_files(), open_tmp_files(), set_options(), write_prolog(), xmlparse::xml_error(), xmlparse::xml_get(), xmlparse::xml_ok(), xmlparse::xml_open(), and xmlparse::xml_options().

Here is the call graph for this function: