

SLIC FAQ



Deprecation

Some of the material in this FAQ has become dated.

This is an FAQ for the SLIC simulator package and related content. See also the org.lcsim [Frequently Asked Questions](#)

SLIC FAQ

General

- [What is SLIC](#)
- [Who is the primary maintainer of SLIC](#)
- [Is there a forum for issues related to SLIC](#)
- [Is there a wiki about SLIC](#)
- [Is there a mailing list for announcements about SLIC](#)
- [Are there any papers or writeups about SLIC](#)
- [Where can I find analysis results that were based on SLIC](#)
- [Where can I report bugs in SLIC](#)

Obtaining and Building

- [How do I build SLIC](#)



Rest of this section is deprecated/unneeded.

- [What operating systems and compilers are supported by SLIC](#)
- [Where can I download SLIC binaries](#)
- [How do I checkout SLIC from CVS](#)
- [Is there an online CVS for SLIC](#)
- [What are SLIC's external dependencies](#)
- [What tools will I need to build SLIC](#)
- [How do I build SLIC from scratch](#)
- [How do I build CLHEP](#)
- [How do I build Geant4](#)
- [How do I rebuild the Geant4 visualization libraries](#)
- [How do I build LCIO](#)
- [How do I build GDML](#)
- [How do I build LCPhys](#)
- [How do I build LCDD](#)
- [How do I build Xerces](#)
- [At what sites is SLIC installed](#)
- [How can I run SLIC at SLAC](#)
- [How can I run SLIC at FNAL](#)
- [How can I run SLIC at NICADD](#)
- [How do I run a SLIC Linux binary on SL5](#)

Commands

- [How do I run SLIC from the command line](#)
- [What command line options does SLIC support](#)
- [How can I get help on the command line interface](#)
- [How do I run in batch mode](#)
- [How do I run in interactive mode](#)
- [How do I run a file with Geant4 macro commands](#)
- [Where can I get example macro files](#)
- [How can I get help on the macro commands](#)
- [How do I find out what version of SLIC I am running](#)
- [How do I find out what version of Geant4 I am running](#)
- [How do I submit a batch job using LSF](#)
- [How do I set the number of events to run](#)
- [How do I turn off the event messages in SLIC](#)
- [How do I print some information about various Geant4 and SLIC data objects at runtime](#)
- [How do I print the table of defined materials](#)

LCIO

- [What is LCIO](#)
- [How do I set the output path for LCIO files](#)
- [How do I set the name of the LCIO file](#)
- [How do I automatically name an LCIO file](#)
- [How do I automatically delete an existing LCIO file](#)

- How do I append to an existing LCIO file
- How do I cause slic to fail if it finds an existing LCIO file
- How do I set the CHBIT_LONG flag to store explicit hit positions
- How do I set the CHBIT_PDG flag to store each individual MCParticle contribution in a hit
- How do I set the run number
- How can I dump information about my LCIO file from the command line

Physics

- What is the default physics list
- What is LCPhys
- What other simulators use LCPhys
- How can I change the physics list
- What other Geant4 physics lists does SLIC support
- What should I do when I get an error message about missing Geant4 data files
- How do I set the minimum tracking distance using Geant4 commands
- How do I activate or deactivate certain Geant4 processes

Magnetic Field

- How do I create a simple solenoid using the compact description
- How do I create a solenoidal field map using the compact description
- How do I create a dipole using the compact description
- How do I change the magnetic field stepper used by Geant4
- How do I change the delta of one step for the field stepper
- How do I change the delta of intersection with the chord for the field stepper

Geometry

- What is GDML
- What is LCDD
- Where can I get some example LCDD files
- What is GeomConverter
- What is the compact description
- What is LCDetectors
- Where can I find full detector geometry files in the compact description
- How do I create full detector geometry files from the compact description
- How do I dump a GDML file of the current geometry using SLIC
- How can I make SLIC look for XML schemas in a local directory
- How do I install the XML schemas to a local directory
- How do I check the LCDD geometry for errors

Visualization

- How do I visualize with OpenGL
- How do I visualize with DAWN
- How do I visualize with OpenInventor
- How do I visualize with VRML
- How do I visualize with HepRep and WIRED
- How do I visualize with ROOT

Event Generation

- What event generators are available from within SLIC
- How do I use a StdHep file as my event source
- How do I use an LCIO file as my event source
- How do I use the General Particle Source (GPS) as my event source
- How do I create an event with two or more different particles using the GPS
- How do I create events sampled from multiple sources using the GPS
- How do I use the particle gun as my event source
- How can I print information about the current event generator
- How do I skip events in a StdHep file
- How do I reset an event source to the first record

Random Engine

- How do I set the random seed
- How do I dump the state of the CLHEP random engine
- How can I set the directory for the random dumps
- How do I load back the state of the random engine that I dumped previously

Grid

- How do I setup the public and private keys from a Grid certificate
- How do I use the OSG Grid
- How do I use the LCG grid