

Prerequisites



New!

We are experimenting with a set of scripts that automate prerequisite installation. This should greatly simplify the process of building LTR prerequisites on new computing environments. Find the script & patches here:

- [intel-x86_64 mvapich2](#)

Don't see your environment listed? [Contact us](#) or follow the directions below to manually build everything.

Prerequisites

The LFM requires supporting software in order to function properly. Before building these prerequisites, we recommend you set a few environment variables:

Variable	Description
CC	path to C compiler (ie. <code>icc</code> , <code>pgcc</code> , <code>xlc</code> , etc.)
CXX	path to C++ compiler (ie. <code>icpc</code> , <code>pgCC</code> , <code>xlc</code> , etc.)
F90	path to Fortran 90 compiler (ie. <code>ifort</code> , <code>pgf90</code> , <code>xlf</code> , etc.)
FC	Set to <code>\$(F90)</code>
F77	Set to <code>\$(F90)</code>
MPICC	path to MPI C compiler (ie. <code>mpicc</code> , <code>mpcc</code> , etc.)
MPICXX	path to MPI C++ compiler (ie. <code>mpiCC</code> , <code>mpicxx</code> , etc.)
MPIF90	path to MPI Fortran 90 compiler (ie. <code>mpif90</code>)
INSTALL_DIR	Path where you will install all the prerequisites. If you do not have root access, we recommend you make a directory in your \$HOME named according to the compiler combination you're using. For example, using version 11.1 of the Intel compilers and version 1.4.4 of OpenMPI: <pre>mkdir ~/opt-intel-11.1-openmpi-1.4.4 export INSTALL_DIR=\$HOME/opt-intel-11.1-openmpi-1.4.4</pre>

We have found the best performance with the Intel compiler suite versions 9, 11 and 12.

We have tested the LFM with the following versions of the prerequisites:

MPI

- We recommend [OpenMPI](#) and have had luck with version [1.4.x](#).
- Please make sure that the MPI on your system was built with the same set of compilers you wish to build the LTR with. For example, if you are using the Intel compiler suite, make sure `mpicc --version` corresponds to the Intel C compiler.

A++ & P++

- Version: 8-28-2007
- [Download & Install instructions](#)

InterComm-2.0

- Version: 2.0
- [Download & Install instructions](#)

Overture

- Version: 2-19-2008
- [Download & Install instructions](#)