

PPW Quick-Start Guide

for v3.0

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Parallel Performance Wizard Quick-Start Guide

Thank you for downloading the Parallel Performance Wizard (PPW) tool, version 3.0. This guide will help you get off and running with PPW as quickly as possible. For more documentation, please see the user's manual.

- Install a version of Berkeley UPC that has GASP support from [the Berkeley UPC download page](#), such as version 2.8.0. Be sure to compile Berkeley UPC using the '`--with-multiconf=+opt_inst`' configuration flag, which adds a configuration with GASP support enabled. For example,

```
$ ./configure --with-multiconf=+opt_inst --prefix=/home/user/bupc
```

- Optionally, you can use a version of the GCC UPC compiler with GASP support (4.3.2.4 or newer), available from <http://www.intrepid.com/upc/downloads.html>.
- If you want to work with Quadrics SHMEM, get an updated version of QSNETLIBS and QSNET2LIBS from the Quadrics website that supports the PSHMEM interface. PPW should work with QSNET2LIBS versions 2.2.8 and later.
- To work with MPI, you'll need to point PPW at a working MPI installation using the '`--with-mpi`' option.
- Download the PPW source distribution and untar it.
- Run the `./configure` script and use the '`--with-upc=DIR`' option to point PPW to your installation of Berkeley UPC (if that installation's `upcc` isn't in your `PATH` environment variable).
- Type `make` and `make install`, and add the installation path to your `PATH` environment variable.
- To compile your UPC programs, use the `ppwupcc` compiler wrapper instead of `upcc`, specifying the '`--inst-functions`' flag if you want to profile your application's functions.
- To compile your SHMEM programs, use the `shmemcc` compiler wrapper instead of `cc` or `gcc`. Make sure to include '`-lshmem`' at the end of your link string if you normally do so.
- Run your program as normal except prefixed with the `ppwrun` command, as in

```
ppwrun --output=foo.par upcrun -N 4 ./a.out
```
- View the resulting data file in the PPW GUI by using the Java web start link or by using the `ppw` command.

Example code and Makefiles for UPC, Quadrics SHMEM, and sequential C programs are available in the '`examples`' directory of the PPW source distribution.