

# Installing Chapel

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## 1 Introduction

This document describes how to install Chapel on your own machine. For Parallel Programming Practical we do not use the latest Chapel distribution but version 1.14.

## 2 Prerequisites

Chapel requires basically a standard UNIX system with a C and C++ compiler.

## 3 Acquiring the source

The Chapel 1.14 release can be acquired from: <https://github.com/chapel-lang/chapel/releases/download/1.14.0/chapel-1.14.0.tar.gz>

## 4 Installation

Chapel can be configured for multiple runtimes based on environment variables, for example for use on one node and for use with InfiniBand, the network of the DAS-4. On your local machine it is probably fine to install the standard version.

Unpack the tarball and go to directory `chapel-1.14.0`.

```
tar xvzf chapel-1.14.0.tar.gz
cd chapel-1.14.0
```

Set up the environment as shown below (for bash). For other shells there are different `setchplenv` scripts in the `util` directory.

```
source util/setchplenv.bash
```

To turn on optimizations for your specific architecture, set the following environment variable:

```
export CHPL_TARGET_ARCH=native
```

Execute the following commands:

```
make -j
make check
```

In the directory `lib` there should now be one instance of the runtime.

The sources can be completely cleaned with:

```
make clobber
```