

**X10 compiler:** In order to run the MiX10 compiler, one does not need to have an X10 compiler. However, to compile and run the X10 files generated by the MiX10 compiler, it is required to have a compatible version of the X10 compiler. The X10 code generated by the MiX10 compiler requires at least version 2.4 of the X10 compiler, available freely from the X10 website<sup>1</sup>. Details about the different variations of the X10 compiler used for our experiments are discussed in Section 2

## 1.2 Availability

The latest version of the MiX10 artifact, its md5 hash and this getting started guide can be downloaded from the following links:

The artifact packages as tar.gz: <http://www.sable.mcgill.ca/mclab/mix10/MiX10.tar.gz>

The md5 hash of the artifact: [http://www.sable.mcgill.ca/mclab/mix10/md5sum\\_mix10.txt](http://www.sable.mcgill.ca/mclab/mix10/md5sum_mix10.txt)

Getting started guide: [http://www.sable.mcgill.ca/mclab/mix10/getting\\_started.pdf](http://www.sable.mcgill.ca/mclab/mix10/getting_started.pdf).

## 1.3 Setup and usage

Once the prerequisites are satisfied, download the artifact (`MiX10.tar.gz`) and follow the following step-by-step guide to run the MiX10 compiler with the various command-line switches. We will use bubble sort implementation in MATLAB, as an example input file.

### 1.3.1 Step 1: Extract the archive

Once you have downloaded the file `MiX10.tar.gz`, open a terminal and `cd` to the directory where the `MiX10.tar.gz` file is located. To extract the archive, run the following command:

```
1 $ tar -xvf MiX10.tar.gz
```

This will create a directory named `MiX10`, which will contain a `README.txt` file with a description of the contents of the directory.

### 1.3.2 Step 2: Run the jar file

Inside the `MiX10` directory, there is the jar file named `MiX10.jar`. This jar file can be run using a command formatted as:

```
1 $ java -jar MiX10.jar -mix10c\  
2 -arg_info "DOUBLE&1*1&REAL"\  
3 -main "path/to/the/input_matlab_file.m"\  
4 -od "path/to/the/output/directory/"\  
5 [Optional switches]
```

For example, to compile the bubble sort example located in the directory `examples/bubble/`, run the following command:

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<sup>1</sup><http://x10-lang.org/software/download-x10/latest-release.html>