

How to run AsterixDB locally on your machine

1. Preparation

Before we start, make sure to download the right version of AsterixDB [[Link](#)](Updated on Mar. 10). The SHA1sum of the binary release is

```
173a46548904028869e70d0014b283d6c2a4fadd
```

You may compare this against the checksum of the downloaded file to make sure that you have pulled the right version [[Windows](#), [OSX](#), [Linux](#)]. (This step can be skipped if you are certain about your package.)

The other thing that you will need to check is the Java Development Kit (JDK) installation on your machine. We highly recommend that you upgrade your JDK to the latest version (1.8).

For Windows users:

- a) Start the Command Prompt ([How](#)).
- b) Execute 'java -version'.
- c) If you see 'java version xxxx' that means you have Java properly installed.
- d) If you see 'java is not recognized as xxxx', that means you don't have Java installed. Check [this](#) to install Java and try again.

For OSX users:

1. Start your terminal
2. Execute 'java -version'.
3. If you see 'java version xxxx' that means you have Java properly installed.
4. If you see 'command not found java', that means you don't have Java installed. Check [this](#) to install Java and try again.

For Linux users:

- a) Start your terminal.
- b) Execute 'java -version' to make sure Java is properly installed.
- c) If you didn't install the Java environment, follow the [link](#) to install it.
- d) Execute 'echo \$JAVA_HOME'.
- e) If you see a blank line, that means your environment variable is not set properly. Execute the following command to set it:

```
export JAVA_HOME=PATH_TO_YOUR_JAVA_INSTALLATION
```

- f) You can put this command into your configuration file (e.g., .bashrc) to set the path variable automatically everytime you login.
- g) Rerun the command in b) and d) to make sure everything is properly configured.

h) openJDK is also Ok, but we highly recommend Oracle JDK.

2. Start an AsterixDB sample cluster

After you download the package, move it to your preferred working directory and unzip it. Please check the download folder if you can't find it. You should see following structure once you're done unzipping the package:

```
asterix-server-0.9.1-SNAPSHOT-binary-assembly
├── LICENSE
├── NOTICE
├── bin
├── etc
├── lib
├── opt
└── repo
```

The scripts used for starting a sample AsterixDB cluster reside in the opt/local/bin directory. You should see 4 scripts files under this directory:

```
bin
├── start-sample-cluster.bat
├── start-sample-cluster.sh
├── stop-sample-cluster.bat
└── stop-sample-cluster.sh
```

For Windows Users:

- 1) **[Recommended]** Start the Windows Command Prompt and navigate to asterix-server-0.9.1-SNAPSHOT-binary-assembly/opt/local/bin under your working directory. Execute start-sample-cluster.bat.
- 2) You can also navigate to this directory using your file browser and double click on start-sample-cluster.bat to start the cluster.

For Linux/OSX Users:

- 1) Start your terminal.
- 2) Navigate to asterix-server-0.9.1-SNAPSHOT-binary-assembly/opt/local/bin under your working directory.
- 3) Execute start-sample-cluster.sh using the following command:

```
bash start-sample-cluster.sh
```

Whichever way you start the sample cluster, if everything works properly, you should see the following message printed.

```
INFO: Starting sample cluster...
```

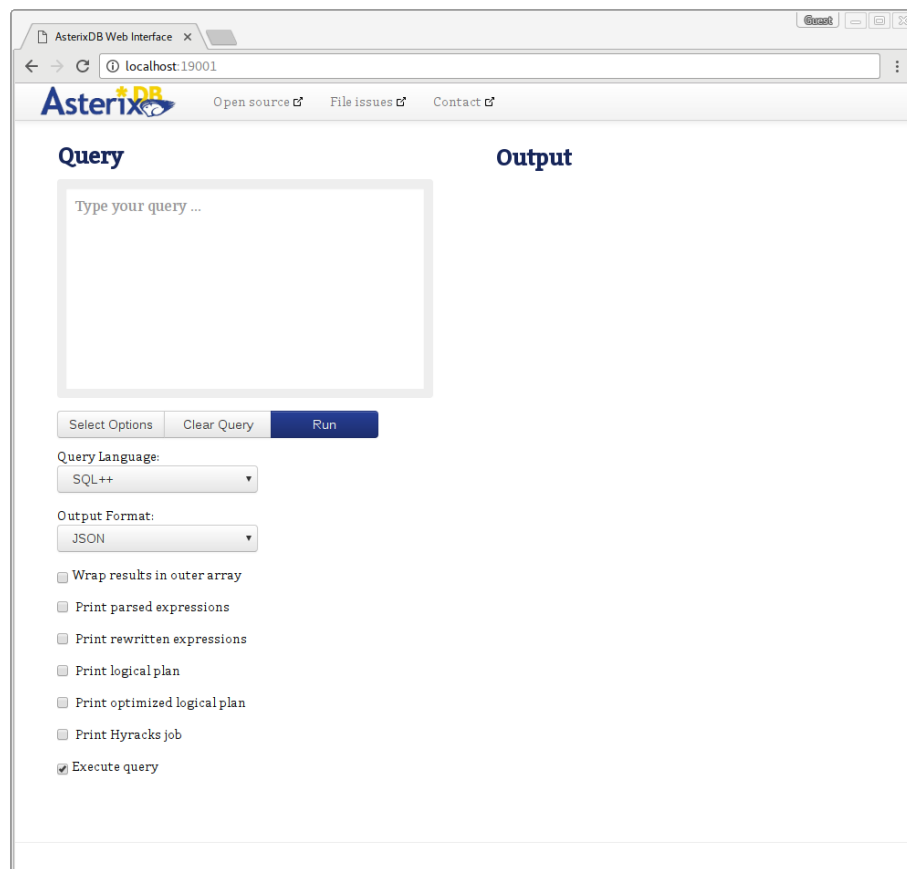
INFO: Waiting up to 30 seconds for cluster 127.0.0.1:19002 to be available.

INFO: Cluster started and is ACTIVE.

By executing the stop-sample-cluster script in the same way, you can shutdown the sample cluster. Note that AsterixDB is designed to run on parallel hardware; the sample cluster is a virtual cluster with two nodes.

3. Access the AsterixDB query interface

After you've started the local cluster, you can access the query interface from your browser at: <http://localhost:19001>. Our query interface looks like this:



Type the following query into the query box on the left and click the 'Run' button to execute the query:

```
SELECT * FROM Metadata.`Dataset`;
```

You will see the query result in the blank area on the right side.

Note: If you want to use AQL for querying, remember to change the 'Query Language' option. Otherwise you will be using SQL++ (our newer query language).

4. Enjoy the ride!

If you are here in the instructions, now you have a mini-cluster running an AsterixDB instance on your machine. There are a lot more interesting features and examples to explore on the

Apache AsterixDB website, both in [AQL](#) and [SQL++](#). We also uploaded the [dataset](#) in SQL++ Primer using Insert Statement. Please give them a try and enjoy!