# Hama Installation

Big Data Programming Assignment 2

## Requirements

- Ubuntu 12.04
- Sun Java JDK 1.6.x or higher version
- hadoop-1.0.x or higher version

#### Installation

- We will use hama version 0.6.3
  - Please download it from <a href="http://hama.apache.org/downloads.html">http://hama.apache.org/downloads.html</a>
- The setup is very similar to hadoop
  - Here we are using pseudo distributed mode
  - Example configuration of hama-site.xml can be download from <u>here</u>.
- set JAVA\_HOME to appropriate value in conf/hama-env.sh

# Running Examples

- First we need to start hadoop, please refer to the previous homework slides.
- Starting hama:
  - run bin/start-bspd.sh
- Run the pi example
  - bin/hama jar hama-examples-0.6.3.jar pi
  - You should see the following text if success

```
13/10/19 11:43:38 INFO bsp.BSPJobClient: Running job: job 201310191143 0001
13/10/19 11:43:41 INFO bsp.BSPJobClient: Current supersteps number: 0
13/10/19 11:43:50 INFO bsp.BSPJobClient: Current supersteps number: 1
13/10/19 11:43:50 INFO bsp.BSPJobClient: The total number of supersteps: 1
13/10/19 11:43:50 INFO bsp.BSPJobClient: Counters: 6
13/10/19 11:43:50 INFO bsp.BSPJobClient:
                                           org.apache.hama.bsp.JobInProgress$Job
13/10/19 11:43:50 INFO bsp.BSPJobClient:
                                             SUPERSTEPS=1
13/10/19 11:43:50 INFO bsp.BSPJobClient:
                                             LAUNCHED TASKS=3
13/10/19 11:43:50 INFO bsp.BSPJobClient:
                                           org.apache.hama.bsp.BSPPeerImpl$PeerC
13/10/19 11:43:50 INFO bsp.BSPJobClient:
                                             SUPERSTEP SUM=3
13/10/19 11:43:50 INFO bsp.BSPJobClient:
                                             TIME IN SYNC MS=92
13/10/19 11:43:50 INFO bsp.BSPJobClient:
                                             TOTAL MESSAGES SENT=3
13/10/19 11:43:50 INFO bsp.BSPJobClient:
                                             TOTAL MESSAGES RECEIVED=3
Estimated value of PI is
Job Finished in 12.499 seconds
```

# Compiling & Run

#### Compile

```
$ mkdir output
$ javac -classpath hadoop-core-*.jar路徑:hama-core-*.
jar路徑:hama-graph-*.jar路徑 -d output example.java
$ jar -zcf example.jar -C output
```

#### Run

```
$ hama jar example.jar <arguments>
```

### Reference

Apache HAMA getting start guide: <a href="http://hama.apache.">http://hama.apache.</a>
 org/getting started with hama.html