



**FREE eBook**

# LEARNING hazelcast

Free unaffiliated eBook created from  
**Stack Overflow contributors.**

**#hazelcast**

# Table of Contents

About.....	1
<b>Chapter 1: Getting started with hazelcast.....</b>	<b>2</b>
Remarks.....	2
Examples.....	2
Installation or Setup.....	2
Hello World!.....	3
<b>Credits.....</b>	<b>4</b>

---

# About

You can share this PDF with anyone you feel could benefit from it, downloaded the latest version from: [hazelcast](#)

It is an unofficial and free hazelcast ebook created for educational purposes. All the content is extracted from [Stack Overflow Documentation](#), which is written by many hardworking individuals at Stack Overflow. It is neither affiliated with Stack Overflow nor official hazelcast.

The content is released under Creative Commons BY-SA, and the list of contributors to each chapter are provided in the credits section at the end of this book. Images may be copyright of their respective owners unless otherwise specified. All trademarks and registered trademarks are the property of their respective company owners.

Use the content presented in this book at your own risk; it is not guaranteed to be correct nor accurate, please send your feedback and corrections to [info@zzzprojects.com](mailto:info@zzzprojects.com)

---

# Chapter 1: Getting started with hazelcast

## Remarks

This section provides an overview of what hazelcast is, and why a developer might want to use it.

It should also mention any large subjects within hazelcast, and link out to the related topics. Since the Documentation for hazelcast is new, you may need to create initial versions of those related topics.

## Examples

### Installation or Setup

Hazelcast runs inside a Java Virtual Machine (JVM). It is compatible with Java versions 1.6.x, 1.7.x, and 1.8.x. Installation and setup is as simple as downloading the zip (or tar) archive, copying the uncompressed directory to a desired installation directory, and adding the jar to your Java class path.

For example, after downloading the hazelcast zip from <https://hazelcast.org/download/>, using bash on Linux (Hazelcast 3.7.4 is used in this example, but the version you download may be different):

```
unzip hazelcast-3.7.4.zip
```

Set up the CLASSPATH variable:

```
export CLASSPATH=${CLASSPATH}:${PWD}:hazelcast-3.7.4/lib/hazelcast-3.7.4.jar
```

You should now be able to start the hazelcast server to check your installation by executing the start script. On Linux, execute the start.sh script. Example script and expected output:

```
$ hazelcast-3.7.4/bin/start.sh
JAVA_HOME environment variable not available.
Path to Java : /path/to/your/java

... ### More output here, ending with lines similar to: ### ...

Members [1] {
  Member [192.168.38.1]:5701 - 3456f96d-3646-459b-9199-caa6ebb3e5ee this
}

Jan 07, 2017 8:30:53 PM com.hazelcast.core.LifecycleService
INFO: [192.168.XX.XX]:5701 [dev] [3.7.4] [192.168.38.1]:5701 is STARTED
```

Note: if your java installation is not in a standard location, you may have to set the JAVA\_HOME environment variable as well.

You should now be set to download and run the code samples (available at

<http://download.hazelcast.com/code-samples/hazelcast-code-samples-3.7.4.zip>), or to start playing around with writing your own simple Java Hazelcast client to connect to the Hazelcast server node you just started.

## Hello World!

After installation of hazelcast and adding to Java Build Path, you can write `Main.class` that starts cluster work

```
public static void main(String[] args){
    Config config = new Config();
    // creates a new HazelcastInstance (a new node in a cluster)
    HazelcastInstance instance = Hazelcast.newHazelcastInstance(config);
    // returns the Cluster that this HazelcastInstance is part of
    Cluster cluster = instance.getCluster();
    // get all devices, that are in the cluster
    Set<Member> setMembers = cluster.getMembers();

    // get ExecutorService that works on cluster instance
    ExecutorService mService = instance.getExecutorService("exec");

    for (int i = 0; i < setMembers.size(); i++) {
        // send a task for each member on service of HazelcastInstance
        final Future<String> future = mService.submit(new ClusterWorkingTask());

        String response = null;
        try {
            // wait for response
            response = future.get();
            System.out.println(response); // each member return: Hello World!
        } catch (InterruptedException e) {
            e.printStackTrace();
        } catch (ExecutionException e) {
            e.printStackTrace();
        }
    }
}
```

create `ClusterWorkingTask.class` that can be executed on each member

```
public class ClusterWorkingTask implements Callable<String>, Serializable {
    @Override
    public String call() throws Exception {
        // send Hello World! as result of execution
        return "Hello World!";
    }
}
```

Read [Getting started with hazelcast online](https://riptutorial.com/hazelcast/topic/8221/getting-started-with-hazelcast): <https://riptutorial.com/hazelcast/topic/8221/getting-started-with-hazelcast>

---

# Credits

S. No	Chapters	Contributors
1	Getting started with hazelcast	<a href="#">anatoli</a> , <a href="#">Community</a> , <a href="#">Ogre Psalm33</a>