How Hazelcast Acts During A Failover Scenario

In a failover situation, Hazelcast takes care of node failures by promoting backup copies to become the main data holder. This keeps your data safe and accessible. The system also makes sure that client requests are sent to healthy nodes, and it spreads the data around the cluster to keep things running smoothly. Thanks to this, even if there's a hardware crash or network problem, Hazelcast ensures the cluster keeps working with little to no downtime. Basically, it helps the system stay up and running without much hassle, even during failures.

Here Is The Steps and Screenshots That You Can Follow:

Step 1: Create a Docker Network

docker network create hazelcast-network

Step 2: Pull Hazelcast and Management Center Docker Images

docker pull hazelcast/hazelcast:latest

docker pull hazelcast/management-center:latest

Step 3: Run Hazelcast Container in the Custom Network

docker run -d --name hazelcast --net hazelcast-network -p 5701:5701 hazelcast/hazelcast:latest

Step 4: Run Management Center Container in the Custom Network

docker run -d --name man-center --net hazelcast-network -p 8080:8080 hazelcast/management-center:latest

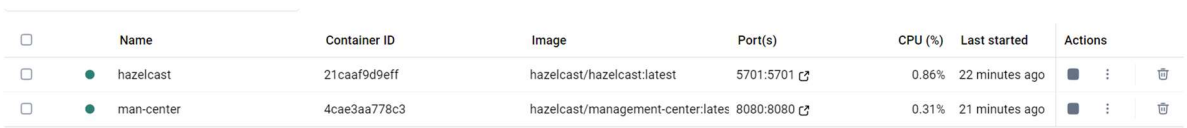
Step 5: Configure Hazelcast Client (Java Code)

Ensure your Hazelcast client code connects to the correct member address:

ClientConfig clientConfig = new ClientConfig();

clientConfig.getNetworkConfig().addAddress("hazelcast:5701"); // Docker container name

HazelcastInstance hz = HazelcastClient.newHazelcastClient(clientConfig);



	Name	Container ID	Image	Port(s)	CPU (%)	Last started	Actions
☐	hazelcast	21caaf9d9eff	hazelcast/hazelcast:latest	5701:5701	0.86%	22 minutes ago	
☐	man-center	4cae3aa778c3	hazelcast/management-center:lates	8080:8080	0.31%	21 minutes ago	

Then execute the Java codes:

Step 6: Clean and Install the Project

This command will clean the project and install all the dependencies:

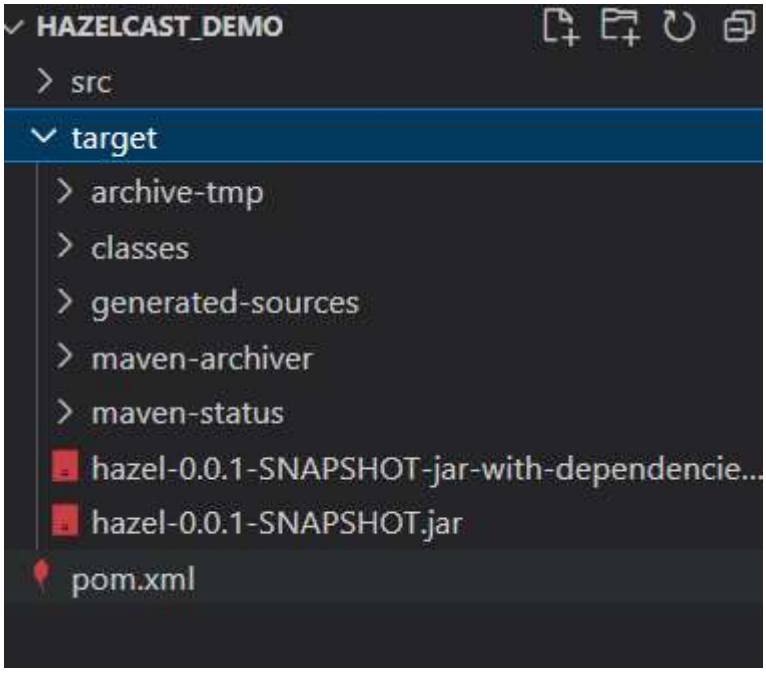
mvn clean install

Step 7: Package the Project with Dependencies

Use the Maven Assembly Plugin to create an executable JAR with dependencies included:

mvn clean package

This will generate a JAR file in the target directory with a name similar to hazel-0.0.1-SNAPSHOT-jar-with-dependencies.jar.



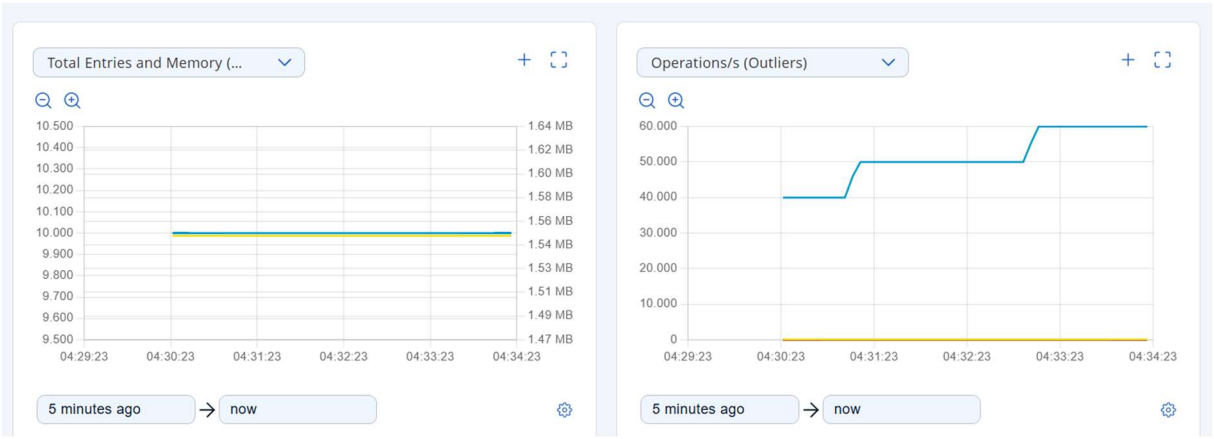
Step 8: Run the Executable JAR

Finally, run the JAR file:

java -jar target/hazel-0.0.1-SNAPSHOT-jar-with-dependencies.jar

These commands will ensure that your project is built and executed correctly, including all the necessary dependencies.

```
6810. Added: Person 6810 (aged 43)
6811. Added: Person 6811 (aged 9)
6812. Added: Person 6812 (aged 87)
6813. Added: Person 6813 (aged 91)
6814. Added: Person 6814 (aged 51)
6815. Added: Person 6815 (aged 83)
6816. Added: Person 6816 (aged 46)
6817. Added: Person 6817 (aged 53)
6818. Added: Person 6818 (aged 57)
6819. Added: Person 6819 (aged 22)
6820. Added: Person 6820 (aged 72)
6821. Added: Person 6821 (aged 23)
6822. Added: Person 6822 (aged 3)
```



Map Statistics (In-Memory Format: BINARY)

RESET TIME | 1 minute ago → now | Default View

Member	Entries	Gets	Puts	Removals	Sets	Entry Memory
172.18.0.2:5701	10.000	66	60.000	0	0	1.55 MB
TOTAL	10.000	66	60.000	0	0	1.55 MB

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