

Lab Environment Setup - Cloud

In this hands-on exercise, you will:

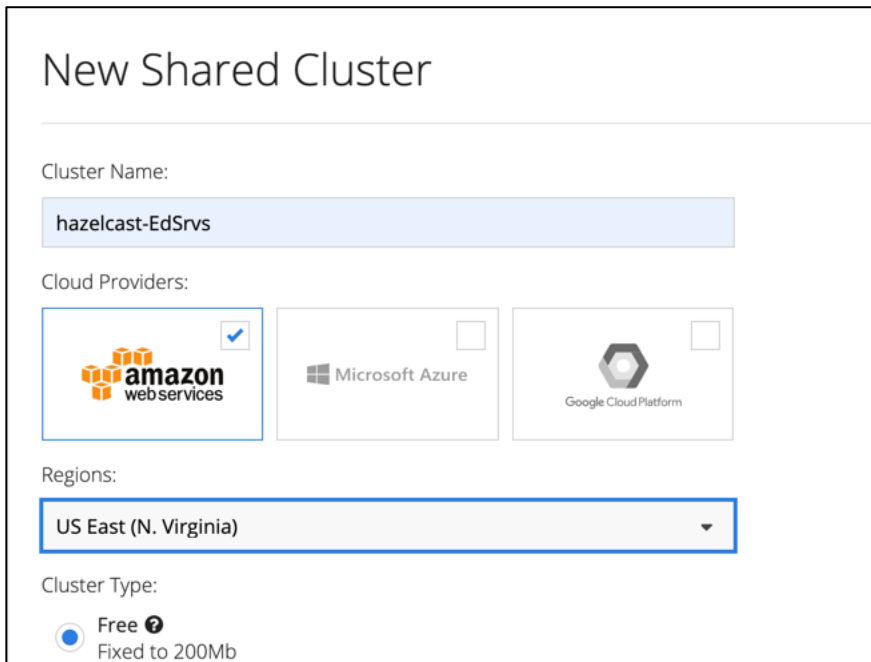
- Create an instance of Hazelcast IMDG in a public cloud
- Run client code on your cloud instance of Hazelcast

Part 1: Create Cluster

1. Browse to cloud.hazelcast.com and create an account. Log in.
2. Click the **New Cluster** button. If you see options for **Shared Cluster** and **Dedicated Cluster**, select **Shared Cluster**.

Note: Dedicated is our Enterprise software and requires a license. For this demo, it's not necessary.

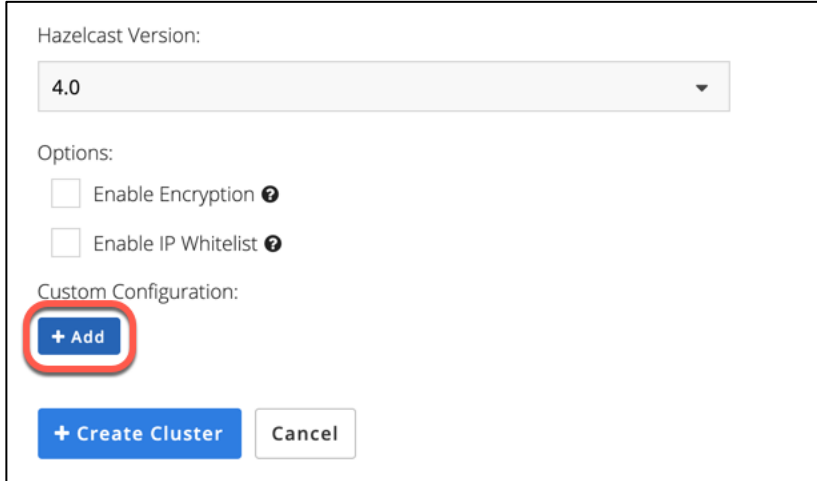
3. Set up your cluster:
 - a. Give your cluster a name.
 - b. Select the cloud provider and region appropriate for you.
 - c. Select the free service.
 - d. Select version 4.0.
 - e. Leave other options at the default.



The screenshot shows the 'New Shared Cluster' configuration page. It includes a 'Cluster Name' field with the value 'hazelcast-EdSrvs'. Under 'Cloud Providers', three options are shown: Amazon Web Services (selected with a blue checkmark), Microsoft Azure, and Google Cloud Platform. The 'Regions' dropdown is set to 'US East (N. Virginia)'. Under 'Cluster Type', the 'Free' option is selected, with a note 'Fixed to 200Mb'.

This is an example. Use your own name and settings appropriate for your location.

4. Under Custom Configuration, click Add.



Hazelcast Version:

4.0

Options:

☐ Enable Encryption ?

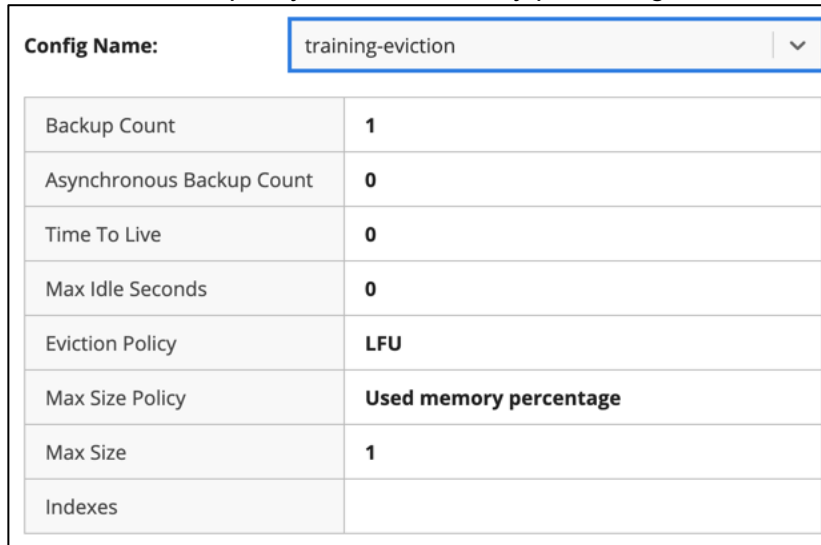
☐ Enable IP Whitelist ?

Custom Configuration:

+ Add

+ Create Cluster Cancel

5. Create a custom configuration called training-eviction. You will use this in the eviction lab later in this course.
 - a. Set the max size to 1
 - b. Set the eviction policy to LFU
 - c. Set the max size policy to Used memory percentage



Config Name: training-eviction	
Backup Count	1
Asynchronous Backup Count	0
Time To Live	0
Max Idle Seconds	0
Eviction Policy	LFU
Max Size Policy	Used memory percentage
Max Size	1
Indexes	

6. Click Save Configuration, then Add Cluster.

Creating the cluster will take a few moments while your cloud provider allocates resources. The cluster is ready when the display changes to **Running**.

Cluster: **hazelcast-EdSrvs** Running

Created April 29, 2020, 12:56 PM	Started April 29, 2020, 12:57 PM	Running time 2 minutes, 14 seconds
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CONFIGURATION



[</> Configure Clients](#) [</> IP Whitelist](#) [Manage Memory](#) [Data Structure Config](#)

7. Retrieve your instance credentials. Save this information for use in all lab exercises.

- Click on the Configure Clients button.
- Under the Java tab, scroll down to Java Client Advanced Setup.
- Click the eye icon to reveal your token.

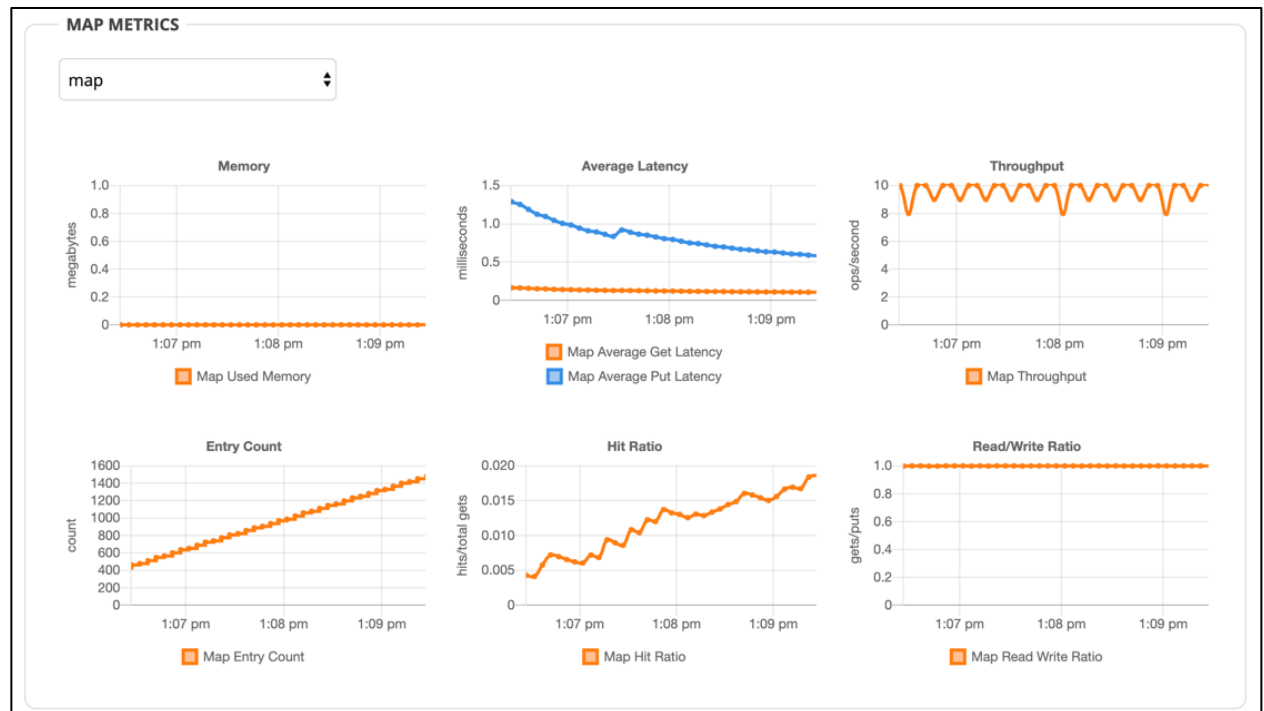
Java Client Advanced Setup

For more details and advanced options, use the [Java Client Setup Guide](#) with the below parameters:

Cluster group name	hazelcast-EdSrvs
Cluster discovery token	 cdt6vABfsLdK Your token appears here itWNKCRKIE 

Part 2: Verify Cluster with Pre-Configured Client

1. Click on the **Configure Clients** button.
2. Follow the steps on the screen to download and build the pre-configured Java client application.
3. Scroll down in the cluster dashboard window to **Map Metrics**. Observe the changes over time as the client continues to run and add data to the map.



4. Scroll down further to view the connected client. Click on the client name to open a detailed view.

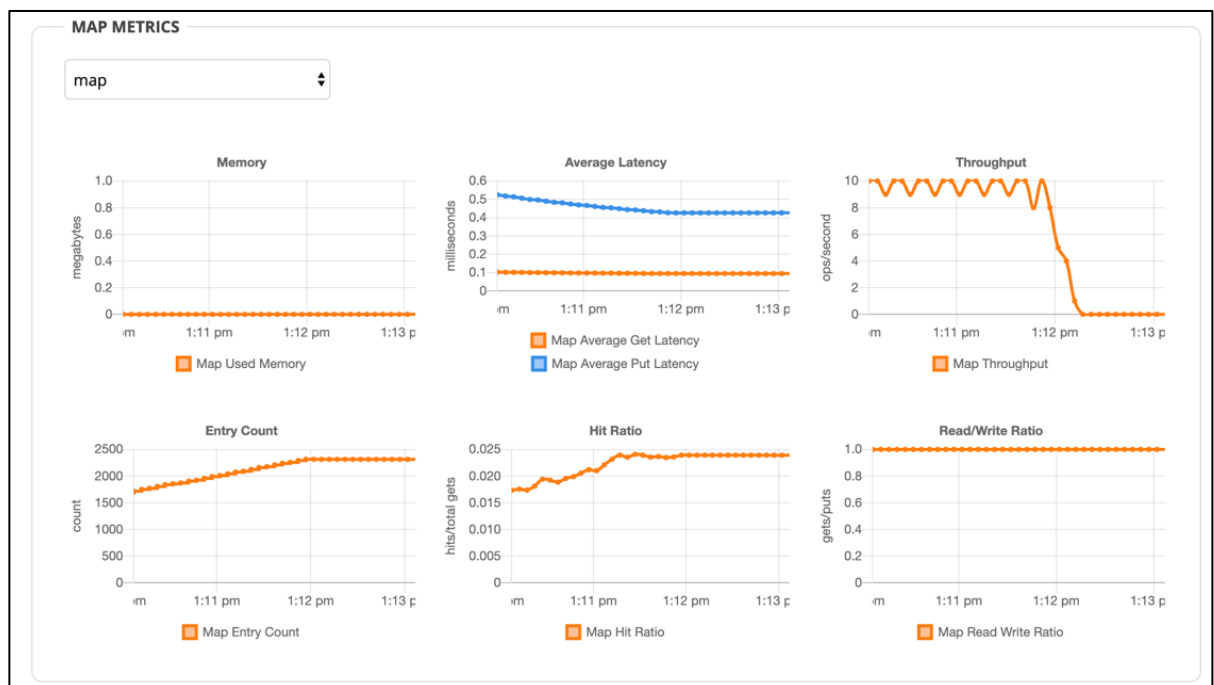
CLIENT STATISTICS		
Client Name (Click for details)	Client Type	Connection Time
hz.client_1(b76bb446-53ff-433d-ade5-01d46438342a)	JAVA	Apr 30, 2020, 01:32 AM

CLIENT DETAILS: HZ.CLIENT_1



Max File Descriptor Count	0
Total Swap Space Size	0 B
Committed Virtual Memory Size	0 B
Uptime	34 s
Free Physical Memory Size	0 B
Client Type	JAVA
Free Swap Space Size	0 B
Total Memory	323.0 MB
User Executor Queue Size	0
Total Physical Memory Size	0 B
Available Processors	12
Is Enterprise	true
Name	hz.client_1
Process Cpu Time	0 s
Member Connection	100.127.33.222:30209
Used Memory	55.6 MB
Version	3.12.6
Free Memory	267.4 MB
Cluster Connection Timestamp	30-04-2020 01:33
Id	875e2fec-2b2c-400c-9c08-984289211584
Max Memory	4.3 GB
System Load Average	3.04541015625

- Stop the client. Continue to observe the statistics. Note that the client statistics disappear once the client disconnects.



Note that the map is still resident in the cluster even though the client is no longer connected.