

Datasheet

Hazelcast Cloud

A Managed Service for Hazelcast IMDG. cloud.hazelcast.com

Feature Summary

- In-memory computing platform as a fully managed service.
- Available on AWS, Azure, and GCP.
- Client libraries for Java, .NET, Node.js, Python, and Go.
- Comprehensive API for storing, querying, and retrieving data objects and JSON using a wide variety of data structures including maps, lists, queues, ring buffers, and counters.
- Management Center user interface to give you metrics on your Hazelcast Cloud cluster.
- Continually updated software with the latest versions and security patches with minimal planned downtime.
- Multi-instance clusters enable elastic scaling, high parallelism, and fault tolerance.
- WAN Replication for extra resilience by deploying across regions (multi-zone), across cloud providers (multi-cloud), or across the cloud and on-premises (hybrid cloud).
- Auto-scaling to automatically expand/shrink clusters based on load.
- Integrated security (TLS encryption) ensures your data is always protected. Hazelcast admins do not have access to your data.
- Compliance certifications for ISO 27001 and SOC 2 (PCI DSS and HIPAA coming soon).

Hazelcast Cloud® is an on-demand managed service for Hazelcast IMDG (In-Memory Data Grid). It offers a scalable, shared pool of RAM across multiple dedicated cloud instances to provide low-latency access to your data in a secure, always-on environment. It is maintained by Hazelcast to free you from day-to-day infrastructure management responsibilities. Hazelcast Cloud is available on the Hazelcast website on an annual contract basis or pay-as-you-go.

Why Hazelcast Cloud

Hazelcast Cloud is the simplest way to deploy, monitor, and scale Hazelcast clusters in the cloud to accelerate your cloud application performance. More than just a caching layer, its advanced query and computation engine enable the creation of powerful, high performance applications. Unlike service-wrapped products by cloud vendors, Hazelcast Cloud lets you run mission-critical environments by offering advanced capabilities for high availability, security, scale, and multi-cloud, managed by the creators of the underlying software.

Hazelcast Cloud is available in several editions to suit your needs.

Edition	Cloud Starter	Cloud Enterprise
Workload profile	Light workload Trial, Dev and Test	Production workloads Advanced cache and DataGrid use cases
Features	<ul style="list-style-type: none"> ■ HD Memory Store ■ Custom Class upload ■ Rolling upgrades ■ Backups ■ Hot Restart ■ Standard Security 	All Features of Cloud Essential + <ul style="list-style-type: none"> ■ Advanced WAN replication (Active-Active replication) ■ CP Subsystem ■ Advanced Security (client ACLs)
Cloud Providers	AWS only	AWS, Azure, GCP
Networking	Multi-tenancy Availability: Single cluster only Connection: Public IP access only	Single-tenancy High Availability: Multiple clusters with replication, Multi-AZ Connection: Private Link, VPC peering, Public IP
Contract	Pay-as-you-go: \$0.10 per hour per GB Free tier available	Hazelcast sales team, annual contract

Advantages

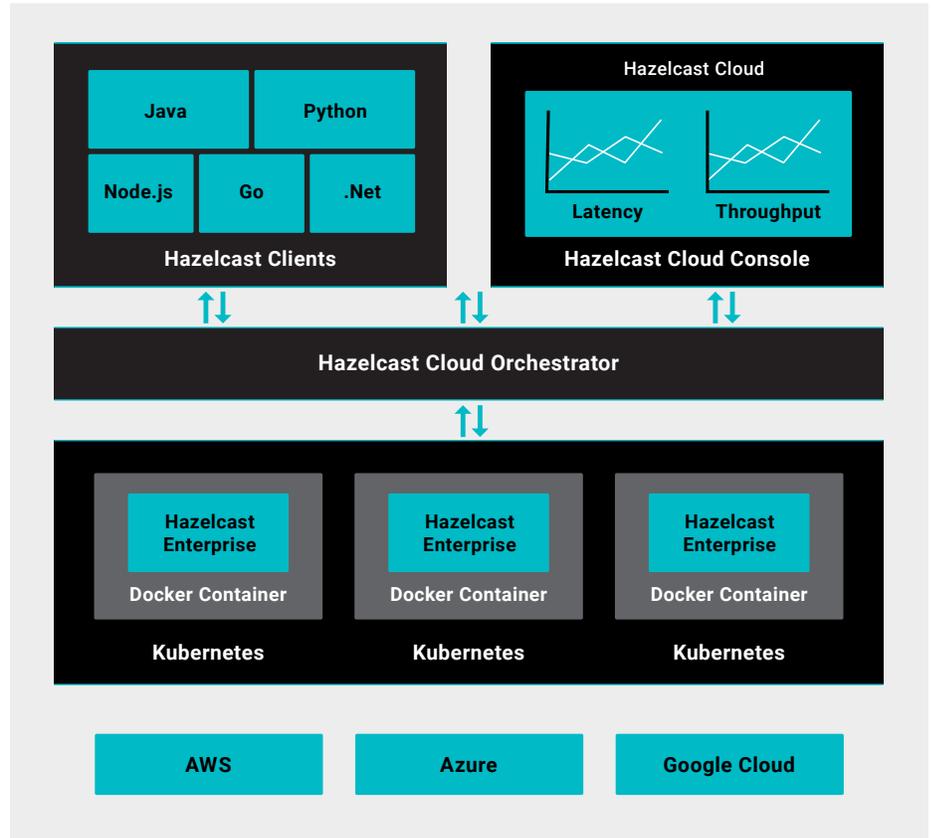
- **Fast.** A cloud-native implementation of Hazelcast IMDG, the industry's fastest in-memory data grid, as shown by published benchmarks.
- **Scalable.** Terabytes of RAM for your in-memory processing, with elastic scaling (automatic or manual) as your workloads change.
- **Easy.** Managed by the creators of the underlying software for optimal deployment. Get all the elasticity and agility of the cloud.
- **Reliable.** Several levels of fault tolerance, including disaster recovery across different cloud vendors, to enable 24/7 operation.
- **Secure.** Data protection with a full suite of built-in security controls.

Top Use Cases

- **Cache-as-a-service.** Large-scale caching platform for cloud applications.
- **Microservices store.** High speed state management and data lookups.
- **Accelerator for serverless tasks.** High speed data store for state management and faster data access.
- **Transaction processing.** High throughput, low latency data processing environment for the cloud.

Architecture

Hazelcast Cloud runs on industry-standard container platforms (Docker and Kubernetes) enhanced by our own orchestration tools and management console. Enterprise editions provide secure isolation through Virtual Private Cloud technology. VPC Peering or Private Link networking allow connections from clients without leaving the Cloud vendor infrastructures.



Orchestration. The Hazelcast Cloud orchestrator manages the Hazelcast cluster account with regard to connectivity, scaling, and cluster termination per your request.

High Availability. In addition to handling instance failures, Hazelcast offers higher uptime by safeguarding against a site-wide (an entire zone) failure. WAN Replication maintains a duplicate cluster in another region, in another cloud vendor, or onto an on-premises data center. With automatic client failover, applications can be quickly redirected to the secondary cluster.

Security. TLS/SSL protects communications between all instances and clients. Mutual authentication with X.509 certificates is supported. An upcoming release additionally supports JAAS-based authorization to enable role-based security.

To get started with Hazelcast Cloud, visit <https://cloud.hazelcast.com>.