Benefits

- **Increase Availability** by eliminating the time-consuming leader election process on node failure

- **Minimize effort required** for new members to come online by using volume clones

- **Reduce Cost** by lowering cluster members required to maintain availability

- **Recover data quickly** and simply with built-in 1-second RPO granularity

Enterprises are rapidly embracing a multi-cloud approach, distributing compute resources and data services across different geographic locations. Enabling databases to run on multiple clusters, while avoiding single points of failure, and cloud vendor lock in, is a priority.

ionir is a container-native storage platform for Kubernetes. ionir virtualizes physical storage in a Kubernetes cluster to create a virtual pool of highly scalable capacity to be consumed by database services like MySQL, PostgreSQL, MongoDB, and Redis.

These databases require high-performance storage that is deployed with multiple copies to ensure persistence and high availability.

MongoDB, for instance, is usually deployed as a StatefulSet and uses persistent volumes for each database server pod. With this style of deployment, ionir offers faster recovery by allowing pods to restart on any node without data copy, saving significantly on infrastructure requirements, while ensuring all data is deduped across the cluster.

To scale MongoDB in hybrid cloud deployments, a new replica is added to the Replica Set configuration. A synchronization process then copies data to the new member before it can come online. The duration of this process depends on the amount of data being synchronized. This is also true on rebuilding replicas after a network failure.

ionir jumpstarts the scaling process by providing the new member with a copy of data only seconds behind the master, so minimal synchronization is required before the member can be operational.

Primary and secondary members can exist on different K8s clusters, hosted on different clouds. With ionir, an up-to-date copy of the data is available across clouds in seconds, further speeding the scaling process.

The ionir platform is an ideal solution to deploy containerized databases. Data agility, including the ability to move any size volume to any location in 40 seconds, and the ability to instantly restore 1-second RPOs significantly accelerates workflows that require data to be preserved and copied.

info@ionir.com • **ionir.com**
+1 617.299.2806