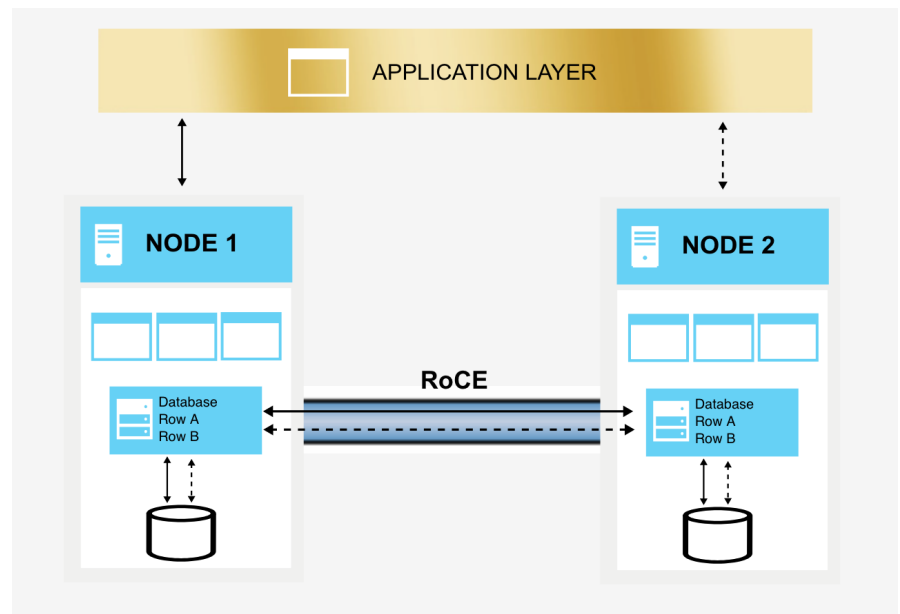# IBM Db2 Mirror for i

Continuous availability of Db2 for i

Highlights

- Provides continuous application availability
- Intuitive GUI for monitoring and managing the Db2 Mirror environment
- Enables active-active application deployment for load balancing options
- Enables active-passive application configuration for BI and query options
- Supports rolling upgrades
- No journaling required
- IBM i 7.4 Technology Refresh 2 adds cost effective options for implementation

Mission-critical applications are expected to run 24x7 with zero or near-zero planned or unplanned down time. IBM Db2 Mirror for i (Db2 Mirror) is a high availability solution with active-active topology providing zero Recovery Time Objective (RTO). It enables continuous availability of applications regardless of the nature of the data center outage.

Db2 Mirror for i synchronously mirrors database updates between two separate nodes via remote direct memory access (RDMA) over Converged Ethernet (RoCE) network. Applications can be deployed in an active-active or active-passive (with read access on the secondary) mode. Db2 Mirror supports applications using either traditional record-level access or SQL based database access. It also supports both JDBC attached application servers and the traditional 5250 approach. The applications and databases may reside in either SYSBASE or as part of an IASP.

Db2 Mirror for i

- A Db2 Mirror configuration consists of two IBM Power System servers in close proximity connected via RoCE. Application workload updates to the Db2 for i database are replicated in real-time synchronously between the two systems, either bidirectionally for active-active application deployment, or unidirectionally for active-passive application deployments. The active-passive configuration is ideal for query and BI options leveraging real-time accurate data on the secondary node. In both cases, the Db2 is always active-active.

- One standard configuration would include two SAN storage servers. IBM Spectrum Virtualize family and IBM System Storage DS8000 family are supported for automated setup and management. There are other configurations available, and third-party SAN storage supported on the IBM i platform can be deployed manually.

- With the announcement of IBM i 7.4 Technology Refresh 2, IBM has added the support for direct attach storage devices for Db2 Mirror. This means that small and mid-sized clients may also enjoy the benefits of Db2 Mirror for i.

- Additionally for all clients, the attachment of NVMe storage for Db2 Mirror clients may significantly reduce the overall cost of implementing a complete active-active solution.

- Installation, monitoring and management of the Db2 Mirror cluster is conducted via an intuitive GUI dashboard which resides on an IBM i partition.

- The IFS is configured in an IASP in either a switchable LUN configuration or a Metro Mirror configuration. Db2 Mirror enables active-active application access to the IASP(s).

- Disaster recovery can be deployed via Full System Replication, PowerHA SystemMirror for i or logical replication.

For many businesses today, it is no longer an option to be "down". Clients need to implement a solution that provides a zero Recovery Time Objective (RTO). IBM Db2 Mirror for i provides continuous availability or what the industry calls Active-Active. All companies need to be looking at the technology and getting ready for what the future will demand in terms of availability.

Why IBM?

IBM has long pioneered technologies and provided services that help companies manage valuable business data. With IBM Db2 Mirror for i, customers can attain near continuous availability for their mission-critical applications.

For more information

To learn more about IBM Db2 Mirror for i, please contact your IBM representative or IBM Business Partner, or visit the following websites:

Db2 Mirror for i in the IBM Marketplace and Db2 Mirror for i in the IBM Knowledge Center

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