



What Is an In-Memory Database, and What Are the Benefits of Hybrid Integration?

For ecommerce stores that rely on traffic and conversions, search functionality on your website is a critical component of the user experience. But if your online store has a large inventory or requires ultra-fast processing speeds for search queries, some traditional database models may pose problems for your platform.

Thankfully, technological upgrades have made it possible to enjoy the best of both worlds through in-memory databases and hybrid integration.

What is an in-memory database?

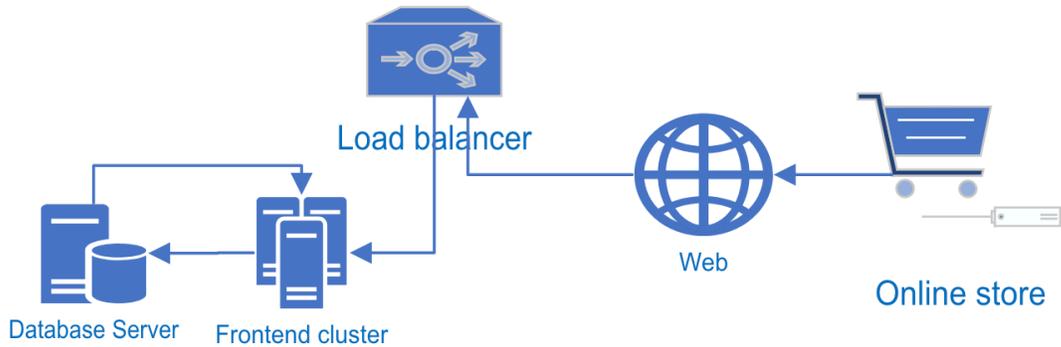
In-memory database systems, also known as IMDB or main memory database systems (MMDB), use the main memory of a server to read and write data, instead of relying on a set of hard drives or disks. IMDB keeps information in RAM, meaning no disks are involved in accessing data.

IMDB has previously been a hot topic of discussion because of its formerly high price point and volatile information status. In the event of a shutdown, RAM data is lost. However, numerous processes can be followed to back up and restore main memory data in the event of a server failure.

IMDB is appealing because it helps achieve a much better data retrieval performance. Hard Disks (especially magnetics) have significantly slower access speeds than RAM for data, meaning delay time, or latency, is higher.

When response time for data is critical, such as in website searching, IMDB is the best option and provides best-in-class results. Consumers will be able to access data more quickly when it is pulled from in-memory systems.

Another unique benefit of IMDB is the opportunity it presents for supporting hybrid integration. This integration is an important step in improving the processes for enterprise and mission-critical online stores to ensure your computing remains controllable and reliable without becoming unwieldy.

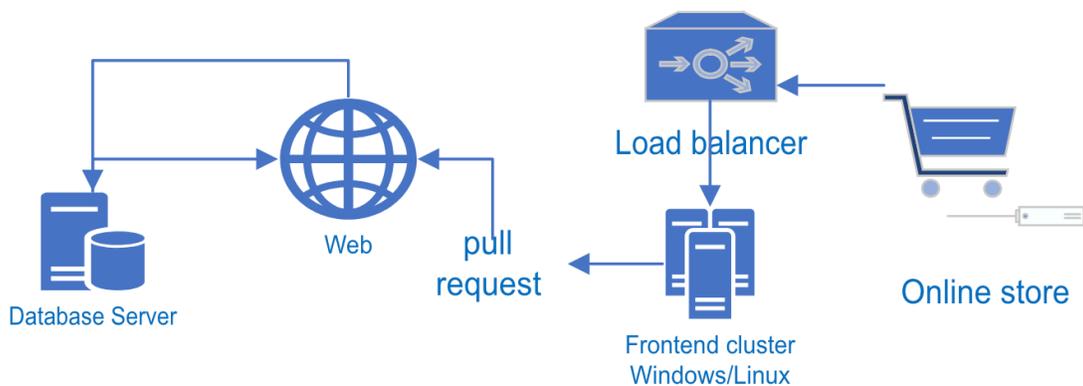


Traditional Site search with SaaS integration

Understanding hybrid integration

Many services, such as Celebros' Site Search, are provided in the form of software (SaaS). SaaS offers a breadth of benefits to ecommerce companies in comparison to on-premise services, including no maintenance requirements and upgrades and updates being completed by the service vendor. Despite these benefits, though, SaaS also presents major risks for mission-critical ecommerce sites because of the necessary reliance on third-party hosting and servers and general lack of control.

In these instances, hybrid integration may be better for such applications than SaaS. In hybrid integration, you are able to retain full control of your mission-critical environment and enjoy minimal latency, while also enjoying the convenience of upgrades and updates being done by the vendor service.



Site search with IMDB hybrid integration



Celebros is now offering hybrid integration with its proprietary IMDB

To assist our enterprise and mission-critical consumers in their ecommerce search and conversion endeavors, Celebros is pleased to introduce hybrid integration with our existing proprietary IMDB. As a combination of on-premise and cloud-based services, this offering truly provides the best of both worlds. This integration is supported only when using Celebros' proprietary IMDB.

Here's how our hybrid integration can benefit your business:

- **Full control:** With an on-premise service, you retain full control of your mission-critical ecommerce environment, but that comes with the price of maintaining and upgrading your own server. With hybrid integration, you still retain full control, but the vendor handles all the backend upgrades, updates and bug fixes on your behalf. All you'll need to do is maintain your front end's server.
- **Easy scalability:** With SaaS, your company lacks the ability to scale your server to meet your needs. Hybrid integration grants you that ability, much like in an on-premise server situation, so you can do what you need to help your business grow.
- **Minimal latency:** One of the biggest consumer and internal employee frustrations comes from latency, or delay time in information. Latency poses risks to your business' productivity and the services it provides. When using SaaS servers, travel time has the potential to be high, but in hybrid integration, latency is minimal because the frontend cluster is next to your core servers.
- **Real-time monitoring:** When your servers are having problems, so is your business, and you'll want the ability to monitor their performance in real time to cut down on errors and downtime. Hybrid integration acts much like on-premise servers in that it allows for real-time server monitoring.

As an expert in site search for online retailers, Celebros is constantly looking for ways to upgrade its user experience and create more conversations for ecommerce clients. With our newly available hybrid integration, your mission-critical online store has the potential to enjoy greater control, lower latency and better overall performance.