**RDBMS OPTIONS AND RECOMMENDATIONS**

***Constraints as addressed by solutions provided via features.***

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| **Cloud-Based DBMS** | **Cost** | **Ease of Use** | **Ease of Management** | **Multiple Users- Desktop and Mobile** | **Replication or Migration** | **Back-Up** | **Information Source** |
| Amazon RDS – Supports MySQL, PostgreSQL, MS-SQL Server etc. | **$400** per month. This is enough based on the current inventory capacity. Pay as you go. | Easy to use | Managed by host | Accepts multiple users concurrently and on desktop, and mobile | Supports data migration | Supports a fully operational Roll Back and Back-up | [Amazon RDS Service Pricing](https://calculator.aws/#/createCalculator/RDSMySQL)  More documentation via ([Link](https://aws.amazon.com/rds/mysql/?nc=sn&loc=1)) |
| Google Cloud SQL  Supports MySQL, PostgreSQL, MS-SQL Server etc. | About **$80** per month based on current inventory needs and demands. | Easy to use | Managed by Host | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Google Cloud SQL Service Pricing](https://cloud.google.com/sql/pricing)  More documentation via ([Link](https://cloud.google.com/sql/docs)) |
| Microsoft Azure | About **$250** per month based on current inventory needs and demands. | Easy to use | Managed by Host | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Microsoft Azure for MySQL Pricing](https://azure.microsoft.com/en-us/pricing/calculator/)  More documentation via([Link](https://learn.microsoft.com/en-us/azure/azure-sql/?view=azuresql)) |
| IBM DB2 | About **$100** for standard packageper month based on current inventory needs and demands | Easy to use | Managed by Host | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [IBM DB2 Standard Package Pricing](https://www.ibm.com/products/db2/pricing)  More documentation via ([Link](https://www.ibm.com/products/db2)) |
| Google Spanner | Cost per node with 3-year committed use discounts (including all replications) **$473** | Requires a great deal of databases, so not very easy to use. | Managed and maintained by Google.  **Has the nature of relational and non-relation DBMS** in one. | Has provision for Desktop, Mobile, and multiple users concurrently. However not quite easy to use. | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Google Spanner pricing and documentation.](https://cloud.google.com/spanner/pricing) |
| Amazon Dynamo-NoSQL | Costs **$100.05** per month for a single region for the On-Demand package. | Easy to use | Managed by Host | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Amazon Dynamo Pricing and Doc.](https://aws.amazon.com/dynamodb/pricing/on-demand/) |
| Cassandra-NoSQL | Costs **$33.12** per month. | Has a not quite easy to Use GUI. | Managed by Apache Software Foundation and Community Contributors. | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Cassandra Pricing and Doc.](https://aws.amazon.com/marketplace/pp/prodview-nlosctwqqlutu#pdp-pricing) |
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| **Non-Cloud Based DBMS** | **Cost - Effective** | **Ease of Use** | **Ease of Management** | **Multiple Users- Desktop and Mobile** | **Replication or Migration** | **Back-Up** | **Information Source** |
| MySQL | The Enterprise version costs **$445.8** per month which is **$5,350 per year** | Easy to Use | The paid Enterpise version is managed by Oracle or you opt to hire Third Party Managed Service Providers (MSPs) | Has provision for Desktop, Mobile, and multiple users concurrently  *SQLPro for MySQL for iOS and MySQL client for Andriod* | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [MySQL Enterprise Edition Pricing 1 year](https://shop.oracle.com/apex/f?p=DSTORE:PRODUCT::::6:P6_LPI,P6_PROD_HIER_ID:60720318189220530576677,58095029061520477171389)  More documentation  ([Link](https://www.mysql.com/products/enterprise/)) |
| PostgreSQL | Postgres Pro Standard costs **$250** per month which is about **$3,000 per year** | Easy to use | Database management is a combined effort of the subscription provider and the subscriber IT team or hired managed service providers. | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Postgres Pro Standard Doc and pricing](https://postgrespro.com/products/postgrespro/standard) |
| SQLite | SQLite License costs a one-time fee of **$6000** with a couple of shortcomings. **This is the lack of capacity to take multiple read and write operation concurrently** | Easy to use. | The management of the database is a combined effort of the subscription provider and the subscriber IT team or hired managed service providers. | Has provisions for Desktop and Mobile device use. | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [SQLite pricing and documentation](https://sqlite.org/prosupport.html) |
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| **Commercial Off-the-Shelve Options** | **Cost - Effective** | **Ease of Use** | **Ease of Management** | **Multiple Users- Desktop and Mobile** | **Replication or Migration** | **Back-Up** | **Information Source** |
| Sortly | The most robust package; the Enterprise version costs **$233.3 per month which is $2,800** per year | Easy-to-use inventory | Easy to manage and maintain with responsive support from the host | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Sorlty pricing and documentation](https://www.sortly.com/) |
| Zoho Inventory | $250 per year | Easy-to-use inventory | Easy to manage and maintain with responsive support from the host | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Zoho Inventory pricing and documentation](https://www.zoho.com/inventory/) |
| Katana Inventory Standard package  cost $360 per month |  | Easy-to-use inventory | Easy to manage and maintain with responsive support from the host | Has provision for Desktop, Mobile, and multiple users concurrently | Supports Data Migration | Supports a fully operational Roll Back and Back-up | [Katana Inventory pricing and doc](https://katanamrp.com/) |

**Inventory Management Suitability:**

* **Cloud-based Relational Databases (RDS, Cloud SQL, Azure SQL):** Good for structured inventory data, offer scalability, ease of use, and good security. Can be expensive for high-volume writes.
* **IBM Db2:** Robust and secure, but can be complex to manage for inventory management.
* **Google Spanner:** Highly scalable and globally distributed, but might be overkill for most inventory management needs.
* **NoSQL Databases (DynamoDB, Cassandra):** Good for large, unstructured datasets or high-velocity data but require specialized expertise for inventory management.
* **MySQL & PostgreSQL:** Popular open-source options, good for relational data, but require separate server management for inventory management.
* **SQLite:** Lightweight and easy to use, but not suitable for large-scale inventory management.
* **Inventory Management Software (Sortly, Katana, Zoho):** Often built on top of relational databases, offer features specifically designed for inventory management, might have limitations on customization and integrations.

**Choosing the right option depends on your specific inventory management needs, budget, and technical expertise.** Consider factors like:

* **Inventory size and complexity**
* **Read/write frequency**
* **Scalability needs**
* **Security requirements**
* **Integration needs with other systems**
* **Budget and IT resources**