The data architecture in the JourneyApps Cloud Backend-as-a-Service (BaaS) is designed for data flexibility: Using NoSQL database technology coupled with a dynamic universal relational data model, it maximizes the agility of applications built on the JourneyApps Platform.

However, you may often find that you need access to data in a more structured format for analytics and BI purposes — in other words, you need a SQL/ODBC interface. The JourneyApps SQL Data Pipelines feature gives you the best of both worlds: It allows you to easily consume your data by connecting to a SQL database.

How It Works

Under the hood, the SQL Data Pipelines service replicates data from the JourneyApps Cloud BaaS to a customer-dedicated Microsoft SQL Server database running on Microsoft Azure (a new MSSQL Server database is automatically provisioned when you enable the SQL Data Pipeline service for a specific JourneyApps application).
As your JourneyApps application's data model changes, the SQL Data Pipeline automatically updates the table structure, relationships and data types in the SQL database. And as data is created, modified or deleted on the JourneyApps Cloud BaaS, changes are automatically replicated to the SQL database in near real-time.

Customers can whitelist specific models that should be synced to the SQL database — easing compliance with regulatory frameworks by filtering sensitive data such as Personally Identifiable Information (PII).

Customers then get read-only SQL access to the data, and can consume the data using any tools at their disposal. Note that the SQL data cannot be modified by the customer; data is only replicated in one direction — from the JourneyApps Cloud BaaS to the SQL database.

Benefits of JourneyApps SQL Data Pipelines:

- **Best of Both Worlds:** SQL Data Pipelines merge the power of SQL databases with the flexibility of the JourneyApps NoSQL-based cloud environment. It allows customers to leverage SQL-compatible analytics and BI tools to visualize and analyze data, while being highly agile with changes to their apps and data models.

- **Ease of Use:** There is no need to run schema migrations or data migrations on the SQL database — all migrations are handled automatically by the SQL Data Pipeline.

- **Protect Sensitive Data:** Customers can specify what subset of models should be synced to SQL, filtering out sensitive data such as PII.

- **Create Real-Time Dashboards:** Near real-time data replication enables near real-time operational dashboards, allowing you to have the most relevant data at your fingertips.

- **No Maintenance / Low TCO:** SQL Data Pipelines form part of the JourneyApps Platform full stack and is managed by JourneyApps, which means it leverages the same security foundation and cloud architecture, and lowers the maintenance overhead for customers.

- **Easy SQL-to-SQL Replication:** If customers want to replicate data from the SQL database (for example, to another SQL database), the SQL Data Pipeline provides a schema changelog that can be used to keep the external database schema in sync.

How to Enable the SQL Data Pipeline Service

If you are interested in accessing your JourneyApps data in SQL format, please [click here](#) or contact your JourneyApps Account Manager for pricing.