

Speedment OMoC Live Data Agent

Free Your IBM OMoC Production Data to Your Business Users



THE PROBLEM

Since the release of IBM Order Management on Cloud (OMoC) customers have had problems accessing their production data in an efficient manner. Although IBM provides an agent for customers that will extract data from selected tables, the agent does so by creating FTP files and transferring them to the customer's site, hence leaving it up to the customer to convert those files into something their reporting tools can generally use. Consuming data in this form is not only error-prone, but cumbersome and makes it extremely difficult to expose that data to their business users who need to glean important insights from that data.

DIRECT ACCESS TO PRODUCTION DATA

To address these problems, the OMoC Live Data Agent extracts data from the production database and grants direct access to it via open standards. This allows organizations to easily access the data with analytics tools like Tableau, using a script, a web application or a micro-service. Data is exposed either as Kafka topics, Java Streams, via a REST API or in a target database accessible via JDBC.

NEAR-REAL TIME REPORTING

OMoC Live Data Agent provides a unique memory management solution that is able to minimize read latency to bare metal speed. This can be leveraged to create custom reporting tools which deliver valuable analyses in near real time.

EASY DEPLOYMENT

It is easy to deploy OMoC Live Data Agent since the solution utilizes the same configuration tables that are used to set up the IBM Data Extract Agent. This means organizations can use existing IBM API's to configure what is fed to the OMoC Agent.

KEY POINTS

- ▶ Data extract tool for organizations using IBM Order Management on Cloud
- ▶ Exposes live data in near real-time as a Kafka Topic, Java Stream, REST API or in a target database
- ▶ Easy configuration using existing IBM API's to dictate what data is fed to the Live Data Agent
- ▶ Can be configured with in-memory capabilities to allow data to be analyzed with ultra-low latency
- ▶ Connects to enterprise reporting tools and makes it possible to tailor-make live reports
- ▶ Supports IBM's DataExtracts' First Run to allow historical data from any number of days up to the current data/time to be synched

"Live Data Agent is tailor-made for IBM OMoC to finally allow quick and efficient retrieval of the critical transaction data with little to no impact on the customers' production systems."

Phil Tympanick
Solution Architect at IBM

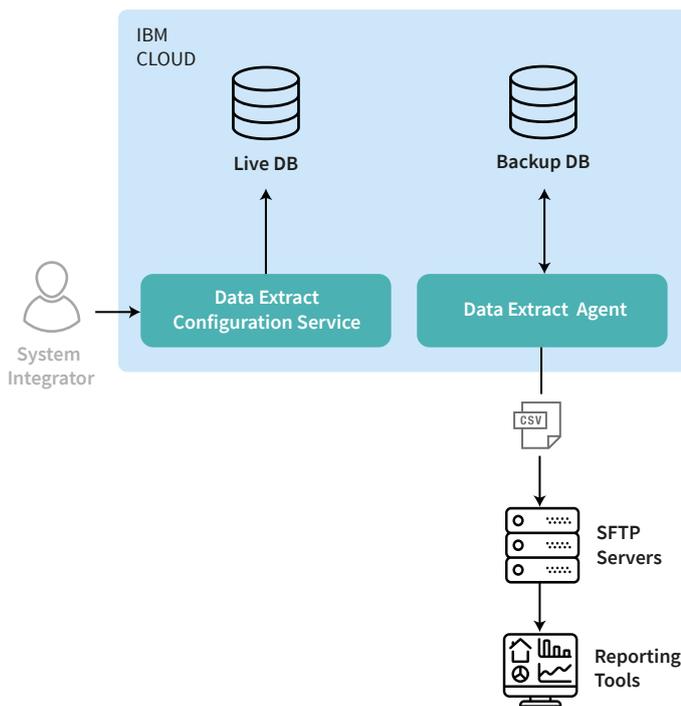
ARCHITECTURE

The current architecture relies on IBM Data Extract Agent to extract and transfer table row and column data from the Backup IBM OMS database to a remote FTP file system.

The new architecture replaces the Data Extract Agent with OMoC Live Data Agent that utilizes Transactional Kafka technology to fetch information from the live database. Kafka is the latest in scalable messaging technology and is used by IBM internally and many others. The data is delivered to the Kafka topic in comma delimited format and the delivery is fast, reliable, and scalable. Once on the Kafka Queue, the Live Data Client allows the data to be moved from the the Kafka Topic directly to any or all targets, including a database of the organization's choosing (DBaaS or On-Site), presented as a Java Stream or over a REST API.

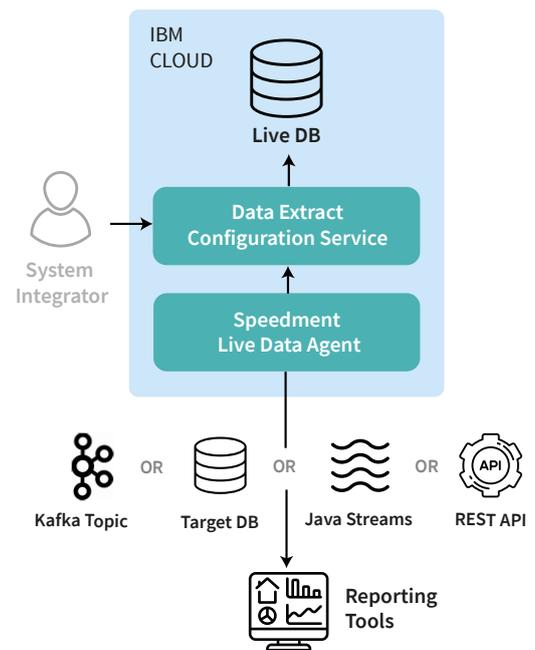
CURRENT

IBM Data Extract Agent



NEW

OMoC Live Data Agent



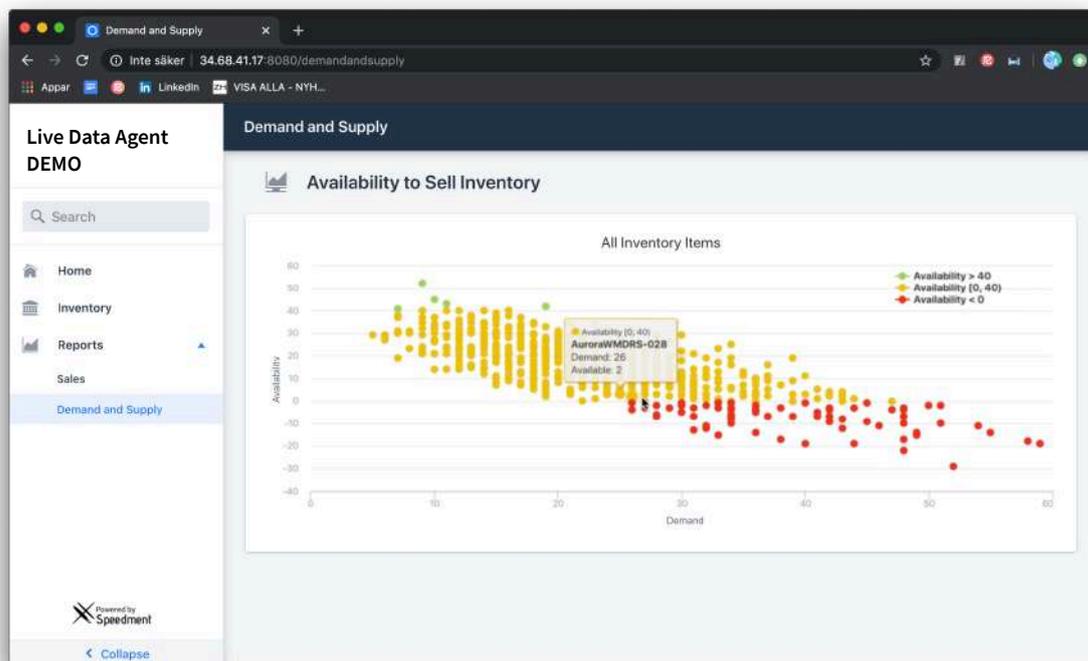
NEAR REAL-TIME REPORTING

In addition to setting data free for use in different formats, the OMoC Live Data Agent contains the unique productivity and performance capabilities of Speedment. Meaning organizations can, within minutes, create tailor-made web applications and reports.

The solution includes a Java Stream ORM toolkit which allows translation of Kafka Streams to Java Streams or automatic generation of a complete REST API. This way, developers are equipped with the standard Java API, an expressive and type-safe language which minimizes the risk for bugs. The toolkit

analyses the underlying data sources' metadata and automatically generates code which reflects the structure (i.e. the "domain model") of the underlying data sources. This eliminates the need to write boilerplate code or Java Entity Classes. A graphical interface lets the user monitor the process and perform custom configurations and optimizations.

Moreover, the OMoC Live Data agent includes an optional in-JVM-memory manager that is able to boost application speed by orders of magnitude. Snapshots of the live database are automatically made available close to the application, to allow advanced exploration of the most foreign landscapes of data with minimum effort. Even organizations with huge datasets will experience hypersonic performance.



Demo application written in Java using OMoC Live Data Agent's Java Stream outlet combined with graphical components from Vaadin.

CONCLUSION

The Speedment OMoC Live Data Agent lays the groundwork for IBM OMoC customers to realize the full potential of the order management data that is today, trapped inside the four walls of the IBM Cloud data centers. Using this revolutionary Data Extract tool that is purpose built for IBM OMoC, using all the standard IBM OM Agent frameworks, customers can finally get at the critical transaction data, quickly, efficiently, and with little to no impact on their production system. Once the data is extracted into the format of your preference, you are free to leverage the Speedment tools, or any of your other enterprise reporting frameworks to build reports.