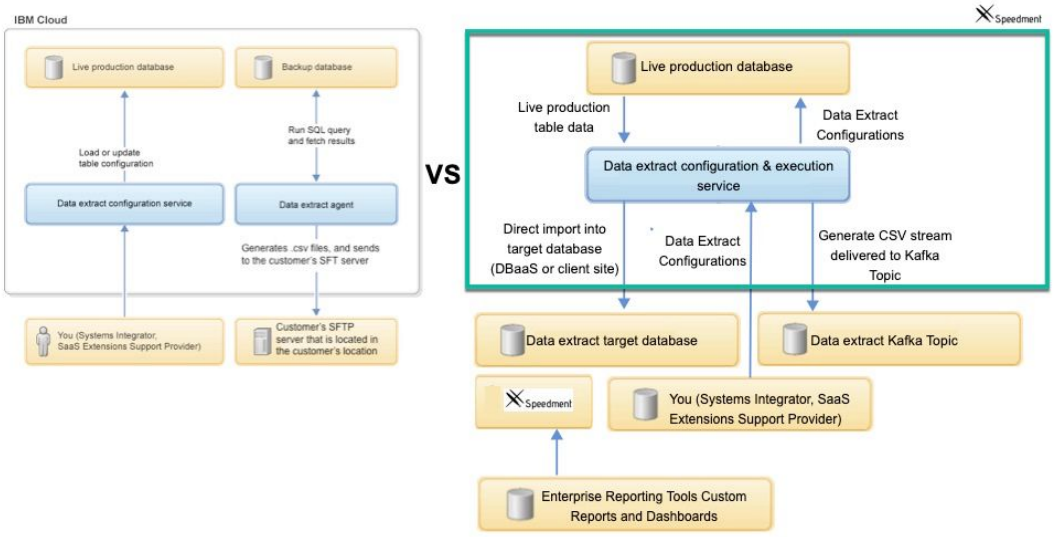
Speedment Live Data Agent™

Free your IBM OMoC production data to your Business Users

Since the release of the IBM Order Management on Cloud (OMoC) customers have been challenged to access their production data in near-real time and have faced the frustration of having to use the only solution made available by IBM that moved table-level entity data over FTP to CSV flat files on an hourly basis at best. 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 trapped in their IBM OMoC production system.

Figure 1 - IBM OMoC Data Extract Agent vs. Speedment Live Data Agent



1. The Obstacles

In the world of IBM Order Management on Cloud (OMoC), customers are ***not*** granted direct access to their production database via JDBC or any other open standard. This creates a major obstacle for customers looking to use their enterprise reporting tools to connect to their order repository to run reports from in near real time. Although IBM provides an agent for customers that will extract data from select tables, the agent does so by creating FTP files and transferring them to the customer site leaving it up to the customer to convert those files into something their reporting tools can generally use.

1.1 A Better solution to Access Customer Data

It's apparent that a better solution is needed for IBM OMoC customers and the ideal solution would have the following benefits and capabilities.

1. The solution is a turn-key replacement of the IBM Data Extract Agent that uses cumbersome FTP to transfer table row/column data from the Production IBM OMS system to remote FTP file system with an agent that moves the data either over a *Kafka* Topic Queue or directly into a shadow database. From a Kafka Topic, it can be easily loaded into a database of the customer's choosing (DBaaS or On-Site) that, in-turn will be directly accessible to Speedment via JDBC and ***all*** it's capabilities.

2. The solution should utilize all the same configuration tables that are already available to set up the IBM Data Extract Agent. This means customers can use existing IBM API's to configure what is fed to the Speedment Live Data Agent. For the most part, the documentation for that IBM Data Extract agent should still apply, although disregarding the FTP-centricity of those docs should be obvious. Those docs are here:https://www.ibm.com/support/knowledgecenter/en/SSGTJF/com.ibm.help.omcloud.administer.doc/tools/c_omc_dataextract.html

3. The solution should utilize Transactional Kafka technology (Kafka is the latest in Scalable Messaging Technology and is used by IBM internally and by many others) to move the data from the IBM OMoC Production DB to a Kafka Topic. The data is delivered to the queue in Comma Delimited Format and the delivery is very fast, very reliable, and very scalable.

4. The solution should allow customers to "**Override**" the part of the ***Speedment Live Data Agent*** that moves the data to **Kafka** in CSV format, so the customer can instead, decide to move it over their own ESB technology The default implementation of this override moves it over Kafka in CSV format.

5. Since the data is typically going to be targeted for a Database vs FTP files, the solution should allow the customer to configure table groups and sequence the extracted tables so they can, for example, send the YFS_ORDER_HEADER records before YFS_ORDER_LINE records which have a one-to-many relationship and leverage foreign keys to tie the headers to the lines. This grouping should not require any change to the existing YFS_DATA_EXTR_CFG table to accomplish this.

6. The solution should come with a Client Side Server application that can move the data from the Kafka Topic to a **target** Data Base via JDBC. That client application should only read the committed records from the Speedment Live Data Agent topic and should be restartable, and should allow multiple consumers to be active to support one-to-many target db instances. It should also have the ability to create the corresponding table schema on the destination database using the YFS_DATA_EXTR_CFG configurations stored and to re-create any of these tables as new columns are added or others dropped.

7. The solution should extend IBM's DataExtract's "First Run" capabilities that is used to synch back any number of days up to the current date/time. This solution should allow

customers to trigger a Reset to force any Pending or Running tasks refreshed to a given start date dictated by the table's **FirsRunExtractInDays** configuration setting. It should also facilitate a way to tell the downstream client what tables, if any, should be deleted, dropped, created, dropped and created, or left as is in preparation for getting a new full data synch.

1.2 Conclusion

The Speedment 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 your own customer-owned databases, you're free to leverage the Speedment tools, or any of your other enterprise reporting frameworks to build real-time reporting capabilities.