Efficient SAP data replication to Azure

Qlik Data Integration opens up new insights for manufacturing group
“As we are rolling into this cloud environment using Qlik Data Integration, it’s all about the ability to use data to drive change through our organization and Qlik gives us the tools to do that.”

David Hufnagle, Manager of Enterprise Data and Analytics, Greene Tweed

**Need for more efficient data access**

Speedy access to real-time data is a necessary requirement for efficient data analysis and that was the aim of manufacturing company Greene Tweed.

For more than 150 years, Greene Tweed has developed materials and engineered high-performance solutions for critical applications in the automotive, aerospace, energy, semiconductor, oil and gas, life sciences, defense and other industries. Headquartered in Lansdale, Pennsylvania and active across the world, its products include O-rings, gaskets, other sealing products, coatings and connectors that are designed to cope with extreme temperature and are used in 90% of commercial aircraft.

Greene Tweed has been using SAP for more than 20 years and the data it holds is critical to running the whole organization. However, different extraction methods used for business reporting were slow, increased system overhead and delivered inconsistent data. As a result, future data-driven initiatives such as AI-enabled operations, efficiency drives and predictive analytics projects looked doubtful. Consequently, there was a need to standardize data and find extraction methods that ensured data was always accurate, consistent and trustworthy.

“SAP is our single source of truth on almost everything and we only have one instance that runs our environment worldwide. Every time we reach into SAP and pull data we are putting stress on the system,” says David Hufnagle, Manager of Enterprise Data and Analytics, Greene Tweed.

**Solution Overview**

- **Customer Name**: Greene Tweed
- **Industry**: Manufacturing
- **Geography**: Lansdale, PA, USA
- **Function**: Finance, Marketing, Sales, Supply Chain Management
- **Business Value Driver**: Balanced Risk/Reward, New Business Opportunities, Reimagined Processes
- **Challenges**
  - Achieve faster access to vital corporate data
  - Become a data-driven company by 2030
  - Increase revenue and drive down cost

**Solution**

 Expedited data availability with Qlik Data Integration, replicating from SAP to Microsoft Azure Synapse for cloud computing.

**Results**

- Reduces app development times by 65% to 70%
- Replicates more than 100 tables with 77,000,000 records of real-time data with just 2.5 minutes latency
- Provides a foundation for future growth and development plans
Quick delivery of analytics-ready data

Greene Tweed decided to move to a cloud structure and after considering various options, it chose Microsoft Azure with Synapse analytics services. Working with Microsoft partner Quisitive and the Microsoft team, the new data platform was stood up in only 30 days.

Having used Qlik analytics solutions since 2016, the company decided that Qlik Data Integration (QDI) was the best way to replicate data from SAP to Azure. The QDI platform uses Change Data Capture (CDC) to efficiently analyze source systems like SAP to identify any new changes in the data, then capture only the changes, conform the data and deliver it to target cloud systems like Azure Synapse. This CDC functionality delivers analytics-ready data from a wide range of sources to data warehouses and lakes, streaming and cloud platforms.

“The big benefit of QDI was the ability to pull data not just from transparent tables in SAP but also from other entities like cluster tables which are really hard to extract out of SAP,” says Hufnagle. “The fact that QDI had the dynamic drive overlay (DDO) and the metadata available to navigate those objects was a big plus.”

Low latency for huge data volumes

Utilizing CDC automation, change data is pulled from SAP to Azure Synapse, then every hour it is loaded into Greene Tweed’s Enterprise Data Warehouse (EDW) environment.

Seventy-seven million records in more than 100 tables are replicated using QDI and the longest replication latency is 2.5 minutes.

“The biggest advantage we have seen so far is the times to develop analytics on the data from SAP have been cut by 65% to 70% because we do not have to write extracts anymore,” says Hufnagle. “We don’t have to write a logical layer because we have already incorporated that. It’s just a matter of going and grabbing the data. We’re quicker at getting things done because using data extracts from the cloud is faster than from SAP.

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The keys to success

- **65%+** reduction in app development times
- **2.5** minute replication latency

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The Qlik Data Integration and Microsoft Partnership

Qlik and Microsoft have been strategic partners for over a decade and have worked together to ensure all your data works seamlessly on Azure. This strong alliance offers you more freedom and flexibility to choose where data should reside, where the analytics should take place, and how and where your users can seamlessly access SAP data, whether on-premises or in the Microsoft Azure cloud. Qlik is a recognized Microsoft Gold Partner and has a competency in the area of data and AI with proven expertise in delivering solutions for Azure data migrations.

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