

Seamless Integration Between **OneStream™ & SAP**



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Introduction

As businesses grow and become more complex, Finance executives are often challenged in signing off and delivering timely and accurate results to internal and external stakeholders. Why is this? Finance Controllers often attribute this to the lack of transparency into the underlying data behind the financial statements that exists in multiple, decentralized Finance applications.

Real-time data availability and data integrity are vital to a successful financial reporting model and require robust integration between source and target systems. For businesses to successfully manage their financial reporting and performance management requirements, the data must be accurate, timely and consistently available. Executives and business process owners in the digital economy must therefore acquire and analyze relevant transactional data if they want to optimize financial decisions.

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Case Study

In late 2019, a Fortune 200 telecommunications business with over \$20 billion in revenue approached NIMBL, a trusted advisor. The Fortune 200 firm's financial transactional data totaled over one billion records spread across several legacy applications. Meanwhile, its month-end processes spanned anywhere between three and six business days, for both internal and external reporting. While the need to upgrade the existing infrastructure was clear, the firm knew it could not solve all of the issues alone and save time.

The customer aimed to simplify the financial close and consolidation process, reduce manual processes, and improve reporting transparency. At the time, the finance team was using at least three different applications for the reporting processes. Thanks to NIMBL's consultative approach during the software selection process, the customer chose OneStream's™ Intelligent Finance platform for the firm's end-to-end reporting needs.

NIMBL is a OneStream Silver Partner and an SAP Gold Partner with in-depth experience in business transformation projects, including ERP solutions and data analytics expertise. As a trusted OneStream partner, NIMBL had the opportunity to lead the customer's financial reporting transformation initiative. Prompt data availability to close the financial books on time was an essential requirement for the customer. The business requirement was to integrate financial consolidation data from their SAP ERP (ECC) as a source system into the target system: the OneStream application. NIMBL's vast experience as a premium SAP service provider helped the customer with complex data sourcing and reporting needs.

By partnering with NIMBL and leveraging NIMBL's SAP HANA and OneStream application expertise, the customer created a lean financial reporting process, including several dashboards

and reports for month-end reporting and analysis. In three months, the financial consolidation and account reconciliation processes were successfully migrated to OneStream. The consolidation processing time improved significantly — dropping from three full days to less than an hour. Plus, more than 20 reports were automated with drill-down and drill-through functionality to provide transparent reporting.

This white paper focuses on the data integration between OneStream and an SAP HANA database. Through the seamless integration between the SAP in-memory HANA database and the OneStream application reporting layer, NIMBL enabled real-time transactional data



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consumption. The customer could, as a result, dramatically reduce run time for consolidations, account reconciliations and financial reporting. In addition, the customer improved accuracy and transparency, transforming data into opportunities through insightful dashboards. Having multiple dashboards allows the customer to now monitor task activities, journal status, journal details, data loads and transformations. With OneStream's reporting capabilities, the customer also improved the visibility into affiliate and non-affiliate accounts data. Utilizing OneStream ultimately allowed the customer to consolidate over a hundred hierarchies that were in use with the legacy system, reducing the number of necessary hierarchies to only five.

SAP to OneStream Integration

In the HANA models that use transactional data from the source system, the accuracy of the business logic, data flows and custom calculations helps facilitate faster development time. The ability to acquire on-demand real-time data directly affects business decisions related to or reliant on financial consolidation, planning, budgeting and forecasting. Having an SAP object-based integration to OneStream provides the flexibility to integrate on-demand, user-defined timeframe data from the SAP ERP into the OneStream application.

The OneStream application utilizes a Microsoft® SQL Azure database that can connect to the SAP system in many ways to extract summary, transactional or master data into the OneStream application layer. Primarily,

the SQL Azure database can connect to SAP via two separate layers: the application layer and the database layer. The two approaches have a significant difference: One processes data in an SAP ERP application layer with an ABAP program or predefined Functional Module (BAPI) code-based structure. The other processes data in a HANA database layer, which utilizes in-memory HANA capabilities and the HANA Calculation engine, resulting in improved performance. When deciding at what level the OneStream application should communicate to the SAP system, both approaches have their benefits and drawbacks. This article focuses on the SAP HANA database connection with the OneStream application (see figure 1).

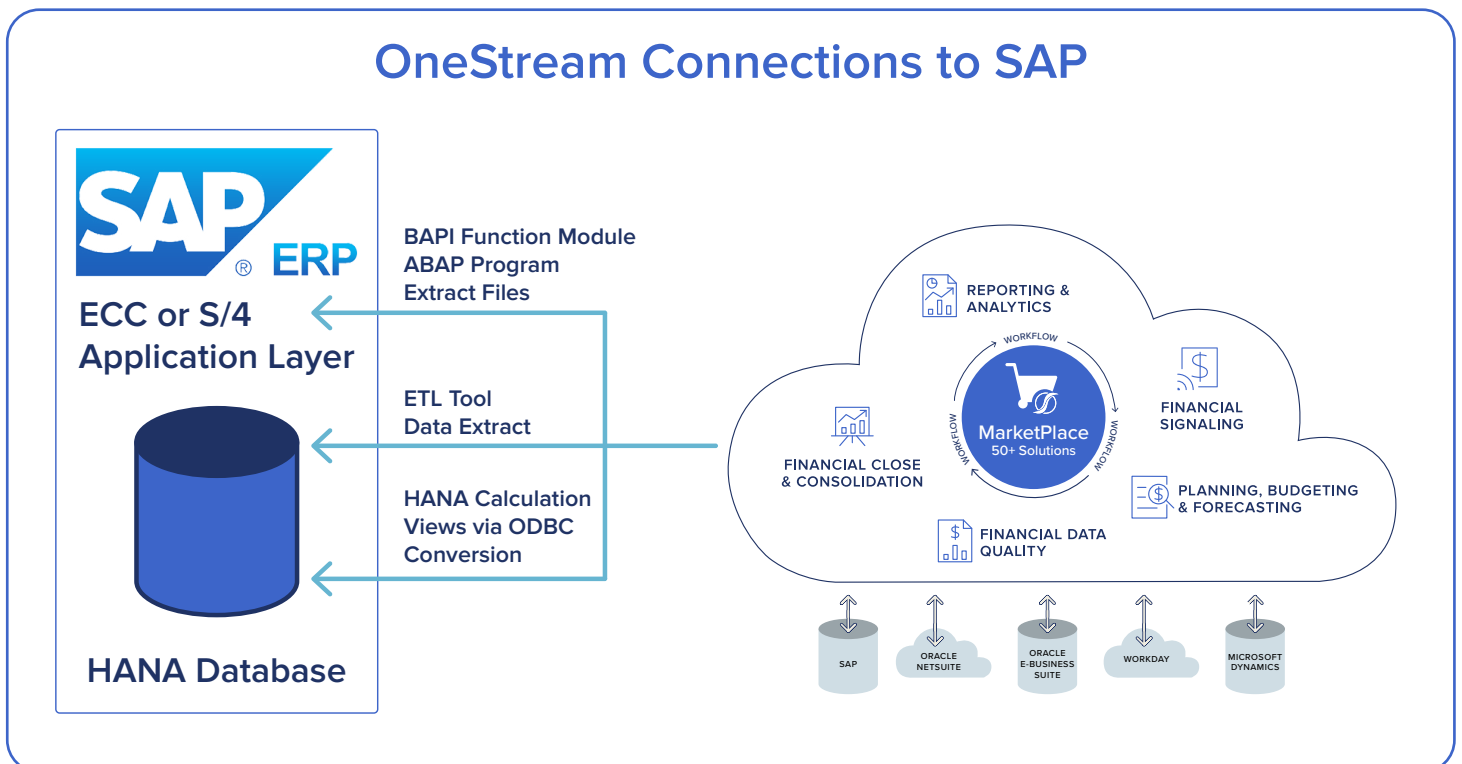


Figure 1: Connection layers between OneStream and SAP

SAP HANA Database to OneStream Connection

The SAP HANA database can connect to the OneStream application via installing an ODBC driver in the OneStream application configuration environment. By relying on the SQL database language, the ODBC driver helps the OneStream application query the HANA database. Utilizing HANA views to connect to OneStream provides many technical and business benefits, such as the ability to push code down to the database level, a faster development time, real-time data, and faster run times. One key benefit is that HANA provides pre-modeled and structured source system data into OneStream to enhance reporting — eliminating the need for OneStream’s data processing to apply the business logic and prepare the transactional data. Utilizing HANA models can help reduce

database resource usage within the OneStream environment. The SAP HANA to OneStream architecture is illustrated in figure 2.

By modeling data in the HANA databases using SAP best practices and drawing on many years of SAP experience, NIMBL created multiple data models in the customer’s infrastructure using both SAP and non-SAP data. The flexibility of integrating non-SAP data and creating mix modeling can help companies consolidate and report on multiple source systems data. In the case study, efficient modeling techniques helped the customer deliver data faster and eliminated the need for data warehouse applications, multiple SAP ABAP programs and other legacy consolidation systems, such as SAP BPC and Blackline.

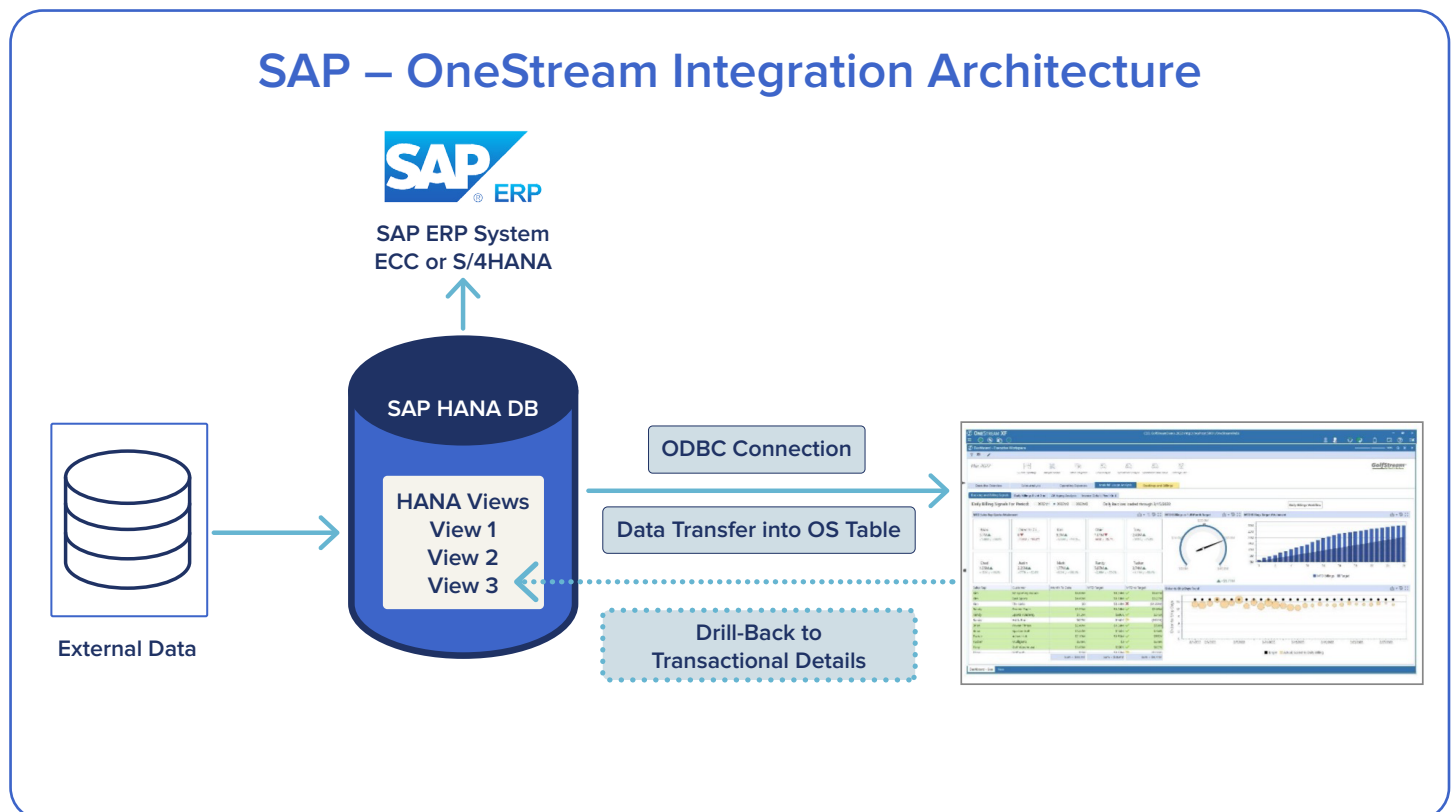


Figure 2: SAP HANA to OneStream Architecture

NIMBL's approach and expertise brought the customer's lofty goals to fruition in record time, a period of just three months. As a result, the consolidation processing time was four to 10 times faster, and the data loading time from SAP improved from three hours to less than 10 minutes. Table 1 summarizes the business results achieved.

HANA Model	HANA Runtimes	OneStream End-to-End Process	Legacy Systems Process	Data Volume
Consolidations/ Account Reconciliations	8 minutes	~ 30 to 40 minutes	4 hours to 3 days	Over 500K
Internal Reporting	6 minutes	~ 40 to 60 minutes	6 hours to 3 days	Over 2 million

Table 1: Efficiencies achieved through SAP to OneStream integration

Conclusion

By deploying a direct integration to SAP and unifying financial consolidation, account reconciliation and reporting within the OneStream application, the customer replaced Blackline, SAP BPC and other reporting systems. NIMBL could retire the customer's need for data warehouse solutions and build sustainable data processes to reduce database resource usage. As a result, the customer now understands and controls the consolidation data and process by utilizing SAP HANA and OneStream applications. The task scheduler also initiates HANA Calculation views on a user-defined schedule.

The efficiency achieved here is two-fold. First, the SAP HANA and OneStream integration architecture help simplify the business processes and enable data insights with a robust reporting structure. NIMBL can provide the expertise to integrate the customer's transactional source system data into the OneStream application to reduce longer runtimes and minimize data latency. Second, the SAP HANA database

integration with OneStream benefits the finance business team's ability to rapidly process financial reports to help with month-end processes and other data analytical needs.

NIMBL's technical acumen can ultimately deliver end-to-end integration between your company's existing infrastructure and the OneStream application while enabling analytics through data visualization.



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About OneStream Software

OneStream Software provides a market-leading intelligent finance platform that reduces the complexity of financial operations. OneStream unleashes the power of finance by unifying corporate performance management (CPM) processes such as planning, financial close & consolidation, reporting and analytics through a single, extensible solution. We empower the enterprise with financial and operational insights to support faster and more informed decision-making. All in a cloud platform designed to continually evolve and scale with your organization.

OneStream's Intelligent Finance platform can easily be extended with over 50 solutions from the OneStream MarketPlace. These downloadable solutions are fully battle-tested and optimized for the OneStream platform. They allow customers to easily extend the value of their investment to meet the changing needs of finance and operations.

For more information, visit our website at [OneStreamSoftware.com](https://www.onestreamsoftware.com).

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