Xtract Universal

Data integration between SAP and Tableau: Atmel relies on Xtract Universal

"With Xtract Universal we can bring large SAP data sets directly into Tableau for our reporting needs."

Taru Gupta, Business Intelligence Manager at Atmel Corporation.

Company

Atmel Corporation (Nasdaq: ATML) is a worldwide leader in the design and manufacture of microcontrollers, capacitive touch solutions, advanced logic, mixedsignal, nonvolatile memory and radio frequency (RF) components. Leveraging one of the industry's broadest intellectual property (IP) technology portfolios, Atmel provides the electronics industry with complete system solutions focused on industrial, consumer, security, communications, computing and automotive markets.



Today, microcontrollers are just about everywhere, powering an expansive array of digital devices. Many are calling this the era of The Internet of Things, a highly intelligent, connected world where Internet-enabled devices will outnumber people.

Atmel is pleased to be at the heart of this movement, developing innovative technologies that fuel machine-to-machine (M2M) communication and the "industrial Internet."

Challenges

Access to up-to-date operational and manufacturing data is critical for Atmel to stay competitive and run their business efficiently. The SAP landscape at Atmel includes multiple SAP BW systems from the newest releases going back to BW 3.5. SAP is a critical data source for many of Atmel's reporting needs and the company had been using SAP Business Explorer (BEx) queries for reporting and ad-hoc analysis. The IT group was faced with a decision to expand on an existing SAP Business-Objects implementation. While considering cost and time, as well as the objective to provide faster performance for reporting and what-if-analysis, Tableau became the visualization and analysis tool of choice. The decision to use Tableau was driven by the business needs and heavily influenced by the look and feel and the ease of use that the tool offered. When it came to connecting Tableau to SAP data, Atmel was in need of a better solution. "The process we had been looking at initially proved to be unsuccessful in practice, as it was not reliable," explains Taru Gupta, Business Intelligence Manager at Atmel. "The data output from SAP BW did not always work, and the data volumes we were extracting were not supported by the native extractors in

Solution at a glance

Company

Building on two decades of experience and industry leadership, Atmel offers the broadest microcontroller (MCU) portfolio. Atmel has the world's most popular AVR and ARM architecture and their 8-bit and 32-bit microcontroller are known for superior design and architecture. Atmel is also a world-class supplier of touch sensing solutions. The company is headquartered in San Jose, California, and has approximately 5,100 employees worldwide.

Challenges

- SAP data in different environments (SAP BW, SAP ECC, SAP SNP, SAP DP) and different structures
- No suitable tool to bring large SAP data sets into Tableau in a reliable and per formant manner
- No time or budget for costly upgrades or larger IT investments

Solution

Use of Xtract Universal to connect Tableau with SAP BW data

Advantages

- Direct access to SAP data in different formats and environments
- Reliable and performant data extraction process
- · Fast implementation at lower cost

Data sources

SAP BW, SAP ECC, SAP SNP, SAP DP



Performant & Reliable

issues and also functional shortcomings, making it very difficult for us to enable the reports in Tableau that we needed."

Solution

For analysis and reports specific to manufacturing, data from existing SAP BW BEx queries was loaded, and variables could be used at extraction time to vary the output of the queries. Large data sets of up to 2 million rows were extracted in less than 4 minutes. Due to the very good price/performance ratio compared to other solutions, the decision was made in favor of Xtract Universal from Theobald Software. The product offers a total of nine different extraction types that can be used not only with SAP BW but also with SAP ECC and other SAP NetWeaver based systems. The extraction types that are offered with Xtract Universal include BEx queries, InfoProviders, function modules, tables, queries, ABAP reports, and OLTP data Advantages sources that enable delta extraction. To automate the extraction process, Atmel utilizes the Task Scheduler application which is part of the Windows OS. Extracts are scheduled to run once per day. Once the data is extracted from SAP, it can into production within a few

Tableau. We experienced performance be provided to the target system in different formats. For Tableau server or desktop, the most straight-forward approach is to provide the SAP data in form of a TDE (Tableau Data Extract) file which was utilized by Atmel. Other scenarios are possible with Xtract Universal where SAP data is provided as an OData feed or where weeks and without costly upgrades a data warehouse environment is continuously updated with SAP data. The data warehouse can be on Oracle, SQL Server, Teradata and other database products. Tableau can connect directly with the TDE file, the OData feed or the data warehouse.

2 million rows were extracted in less than 4 minutes

to their existing environment. Atmel plans to expand the use of Xtract Universal to additional data sources, including SAP ECC, SAP SNP, SAP DP and SAP BW. "We started off with BEx query



Xtract Universal has enabled Atmel to design and implement a performant data flow between their SAP BW systems and the Tableau server. Atmel was able to go from trial

extraction, but we quickly realized that there is much more value delivered with Xtract Universal - it has become a part of our enterprise data strategy." Taru concluded.

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"Previously we were not able to bring the SAP data that we need for our reporting into Tableau. Today we can deliver Tableau reports with SAP data fast and reliably to our business users."

Taru Gupta, Business Intelligence Manager at Atmel

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