







Bigstep Provides Superlative Software Orchestration for Advanced Analytics





About Atheon Analytics

Atheon Analytics set out to secure the high level of analytic performance required to speed up the visual data insights it provides to its clients. By creating a robust, yet highly scalable and flexible big data architecture on the Bigstep Metal Cloud, the Atheon DevOps team can now focus on developing the analytics solutions needed by their clients to thrive in the data-driven retail landscape of the 21st century.

Atheon Analytics has been researching, developing, implementing and training in visual analytics tools and techniques for nearly ten years. The founders come from backgrounds in computer science and grocery retail, and the company has delivered over one hundred commercial consulting projects for clients in the grocery retail & consumer goods sectors – for both international retailers and global consumer goods manufacturers.

Atheon's retail analytics platform SKUtrak[®] is used by over 400 consumer goods companies to understand, optimize and communicate trading performance with their retail customers.

skutrak



SKUtrak®, an Atheon Analytics Application

SKUtrak is the UK's leading grocery flow of goods tracker for fast-moving consumer goods (FMCG) suppliers. SKUtrak makes retailer data user-friendly. It collects the data automatically every day and displays it in an interactive visual dashboard. By using this application, suppliers save time and gain the ability to find insights buried inside the numbers. Here are the main features of SKUtrak:

- Collect and process SKU-level data every day
- Highlight supplier-to-depot and depot-to-store delivery shortages
- Visualize sales and service patterns
- Send daily performance alerts

SKUtrak Premium Features:

- Store daily performance information indefinitely
- Extensive promotional and range evaluation tools
- Custom alerts and target levels
- Custom categorization of products

By visualizing vast data sets, Atheon Analytics helps its clients to process complex information quickly. The data can then be understood across the entire business, providing greater accessibility to more accurate decisions.





The Need for Nimbleness in the Data-Driven Retail Landscape

Unprecedented growth in data gathered by retailers and suppliers has made it difficult for many technologies to cope with the vast amounts of information, especially in such a dynamic and competitive market as retail. A back-end analytic database system that would unearth valuable data insights in real-time is needed, and one that complements front-end visualizations.

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Working with Bigstep, we have created a flexible, bare-metal platform for our SKUtrak service comprising an Exasol cluster, Tableau Server and HDFS data storage using Bigstep Data Lake. This new SKUtrak platform is enabling Atheon Analytics to scale SKUtrak to previously impossible levels, as SKUtrak's popularity continues to rise.

Guy Cuthbert, Managing Director of Atheon Analytics

Atheon Analytics Turns to Bigstep Metal Cloud for Superior Performance and Software Orchestration



Atheon's Big Data Architecture on Bigstep Metal Cloud SKUtrak is now benefiting from a multi-node Exasol cluster on the Bigstep Metal Cloud, providing vastly more storage and processing power than its previousgeneration SQL Server database. Using Bigstep Metal Cloud to provide SKUtrak's Exasol database means that the Atheon DevOps team can focus on developing new Exasol content rather than managing the server platform, and makes increases in node count and computing power per node a single-click deployment option.

Initial trials of Tableau Server on Bigstep Metal Cloud have shown noticeable performance improvements from the bare-metal server, running around 25% faster than its equivalent VM deployment. This performance boost guarantees that SKUtrak Premium customers receive the fastest possible responses in all of their visual analytics activities, ensuring SKUtrak remains the UK's leading flow-of-goods tracker for FMCG suppliers.





bigstep[®]

EXASolution on Bigstep Metal Cloud



The World's Fastest Analytic Database on the World's Highest Performance Big Data Cloud

EXASOL'S EXASolution holds the TPC-H certification as the world's fastest SQL database. It is a high-performance, in-memory, massively parallel processing (MPP) database designed specifically for analytics. EXASolution achieves lightning-fast performance with linear scalability by combining in-memory technology, columnar compression and storage, and massively parallel processing.

EXASolution is ideally suited for real-time big-data reporting, analysis, and advanced analytics. EXASolution management is highly automated, making it easy to use and maintain. Bigstep deploys the latest version of EXASolution, seamlessly integrates it with other applications, and readily scales it with the underlying infrastructure.

As a data warehouse and analytics engine, either standalone or integrated with Hadoop, EXASolution is useful in a wide range of big-data use cases, including accelerating standard reporting, running multi-user ad-hoc analytics, and performing complex modeling using predictive in-database analytics.

Tableau Server on Bigstep Metal Cloud



Tableau is one of the most popular and powerful visualization tools for big data to date. Tableau is easy to deploy, scale, and monitor on the Bigstep Metal Cloud. Users can manage permissions, data sources and monitor usage visually, while fully leveraging the high-performance underlying infrastructure. Scaling takes mere minutes, and integration with new and varied big data applications and data sources is as easy as drag and drop on the Bigstep Metal Cloud.

Enterprise-Grade Data Lake-as-a-Service



At its core, Bigstep Data Lake is an exabyte-scale storage repository and processing engine which supports big data projects by paving the way to the discovery of brand new and actionable insights.

- Infinitely scalable active data store
- Fully encrypted data in transit and at rest
- Multi-terabit throughput architecture
- Fully HDFS compatible and native NoSQL integration

High throughput on Bigstep's high-performance infrastructure layer gets the data where you need it when you need it. Large volumes of data that seem forever stuck in traditional virtual cloud storage solutions can be easily migrated through HTTP to the Bigstep Data Lake to benefit from unlimited storage and the added bare-metal performance.





Atheon Analytics and Bigstep Metal Cloud

Game-changing analytics solutions such as SKUtrak demand a reliable, high-performance ecosystem to scale and adapt to the ever-changing business scenarios in the retail landscape. Success in the retail industry is increasingly based on the insights provided by big data projects, so the ability to explore the ever-increasing amount of data is quickly turning from a competitive advantage into a survival requirement.

Bigstep Metal Cloud provides Atheon Analytics with the seamless software orchestration and high-performance environment essential to cut through the complexity of setting up big data architectures. Atheon saves days and days of DevOps time, and adjacent costs and effort usually associated with on-premises deployments, thus being able to focus on big data experimentation and the constant improvement of their industry-leading, robust analytics solutions.



