

AuriQ Brings Value from Big Data Logs



The Client

A leading digital media and advertising company servicing top brands. It's digital ad management and distribution platform services thousands of advertisers and agencies worldwide. A key component of their campaign management offering is in-depth analytics to help their customers optimize their campaigns.

The Challenge

Driven by the ever growing need to validate media spend, clients are seeking access to raw ad logs in the hopes of gaining greater insight into the customer journey. Increasingly, clients have turned to this company to request support in this "big data" analysis.

The task of finding valuable information in unstructured, big log data is fraught with high costs and time-consuming effort. Starting with an existing Hadoop-based processing system, the company ran into a number of challenges while trying to respond to these specific requests.

1. In order to begin the process, ad logs from multiple servers first need to be cleansed and merged. Each log contains millions to billions of lines of unstructured data and this task alone can take days or weeks to accomplish using their current tools.
2. Drawing out worthwhile analysis from this data requires running numerous, complicated queries – sometimes running into the thousands. Again, using only existing tools, execution of this task could add more days or even weeks to the process.

Advertisers need actionable information on campaigns in order to confidently allocate their media spend. And, with the high cost and the perpetual nature of digital media advertising efforts, the sooner they can get this information the better. Many clients balked at the high cost and long turnaround time presented by the company and choose to defer the analysis altogether, leaving customers dissatisfied and looking elsewhere for answers.

The Solution

In early 2013, the media company was introduced to AuriQ Essentia, the big log processing solution from AuriQ.

AuriQ Essentia makes it possible for businesses to obtain value from unstructured big data logs quickly and cost effectively. Innovative technology from AuriQ dramatically increases processing speeds and simplifies the task of working with unstructured data. ETL is performed directly on compressed raw data files bypassing time-consuming decompression and loading. Blazing fast ad hoc query analysis is achieved by processing the data on memory instead of to disk, as well as parallelization so that you can quickly scale out by simply adding nodes. Processing can be done in batch or streamed via API to achieve near real-time analysis. Visualizations for insightful review can be quickly developed using a wide range of tools.

AuriQ Essentia, run on AWS cloud infrastructure, offers unlimited scalability. It's easy to transfer log files into S3 (Simple Storage Service) then utilize as many EC2 (Elastic Cloud Computing) nodes as necessary to process the data. No physical hardware need be purchased or maintained. Running on AWS also ensures high availability and data security.

The Results

A proof of concept was setup to demonstrate the service which was then implemented with multiple customers.

Case 1: Large Telecommunication Company

Challenge: This client was spending tens of millions of dollars for each branding campaign through a variety of different channels. They wanted to know the best media mix for optimum reach of their target audience.

Solution: Using Essentia, billions of rows of log data was analyzed, profiling unique users against 1000 combinations of advertising touchpoints across the different channels. Essentia was able to analyze all instances of overlap by ad and by channel and calculate the conversion percentage for each which was used to derive the best mix for target audience reach and overall reach.

Case 2: Electronic Entertainment Company

Challenge: The client felt that conventional performance measurements were not efficient for optimizing their campaigns and was interested in more advanced attribution modeling to get greater yield on their media spend.

Solution: Essentia was used to analyze their logs to segment unique users by conversions, clicks, and impressions for specific media groups and analyze the frequency distribution of each ad. This was then used to create an attribution model that clearly showed what combination of ads and channels worked best which they applied for their future campaigns.

In all cases, gains in terms of time to prep, load and process data were 10-1000 times faster at one-tenth the cost of their pre-existing solution. The faster turnaround allowed their clients to identify what blend of ads, media, and channels worked best for different user groups. This greatly improved their visibility into the effectiveness of media spend. Rather than wasting money on bad campaigns they were able to support the successful ones and eliminate the others. The low cost and quick results, made it possible to perform more exploratory analyses. This in-depth analysis helps illuminate the entire customer journey and leads to more effective advertising. With near real-time insight into customer behavior, results are easy to quantify and more customers are asking for similar analysis on their data.

