

Case Study

The software developer Adtoma



Fusion, Ad Serving application

Adtoma, an online advertising and media management company, built their live Ad Serving application, Fusion, on the database Starcounter. With high performance from Starcounter, the Fusion application can process large volumes of data and make complex calculations in real time.

The challenge

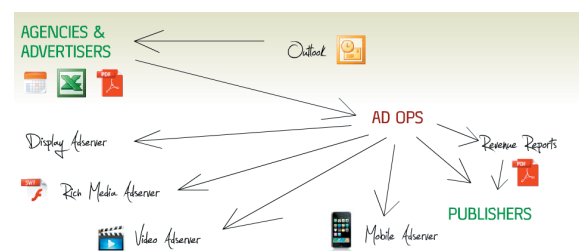
- ✓ Get good performance
- ✓ Handle large volumes of data
- ✓ Make complex calculations in real time
- ✓ Keeping data consistent
- ✓ Huge numbers of simultaneous users

The software developer Adtoma was developing their Ad Serving application Fusion. They wanted to provide several thousands of quality ads per second. The challenge included to be able in real time to investigate who the viewer was, what ads had been shown before, apply frequency capping for the underlying order (show max 2 times per hour and max 10 times a day per unique user), to apply retargeting (show best ads depending on what web pages the user has visited before this page) and to decide what ad would bring the most cost effective ad impression for the publisher.

The evaluation criteria

- ✓ Manage fine granulated object model
- ✓ Easy to use API
- ✓ Time to market
- ✓ Performance
- ✓ Whole workflow in one system

The complexity of the calculations and huge volumes in combined alternatives, made Adtoma require extreme performance from the database to use. The vision was to make it possible to run the whole workflow in one system; CRM, proposal & order and ad deliveries in one application. Adtoma wanted to develop Fusion with a short time to market. Learning times and development costs were therefore key decision points as well.



The solution

Adtoma chose Starcounter after careful research and evaluation of several different databases. They both looked into traditional databases as to different NoSQL alternatives. The Starcounter database met all the decision criteria, including a native object interface and extreme performance making it possible to create a unique Ad serving application with all necessary components needed to run their customers ad business.

The Starcounter database exceeded our expectations in performance making it possible for us to include CRM, Order and Ad serving in one application.

Stefan Johansson, CTO, Adtoma

The Adtoma Fusion application is a powerful software solution that integrates and streamlines the entire media supply chain, simplifying the organizations workflow; from proposal through orders and sales management to advertising operations, resulting in a dramatic increase in efficiency and reliability. For Adtoma's customers this means they can run their Ad business to less cost.

Unlike traditional databases the Starcounter database is an in-memory, transactional database with a unique set of features making it better in performance than any other. Starcounter's database handles millions of users and processes millions of ACID-compliant database transactions per second on a single server.

"With the performance from Starcounter, we didn't have to build any cache technologies. We escape from database conflict and can provide a strong reliable and robust application", said Stefan Johansson, CTO, Adtoma.

The technical platform is .NET and Visual Studio 2010. A scalable solution with low server hardware requirement, possible to implement as cloud service, making it possible for Adtoma to create flexible license models.

The Starcounter native object interface makes development simple and intuitive. "With Starcounter there is no need for O/R mapping, which saved us a lot of time writing the code. It also saves time maintaining the code, as half of the code is reduced" said Stefan Johansson.

Fusion is today the most comprehensive and intuitive application in the market, providing hundreds of thousands of ads per second. Some of their customers have several millions of active users and several billions of ad impressions per month.

How many systems does it take to run your ad business?



FUSION
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ROI

- ✓ Easy to learn, off shore developers up to speed within a week
- ✓ Cost savings in both development and maintenance
- ✓ Competitive advantage with the whole workflow in one system
- ✓ Better cost efficiency for customers
- ✓ Low hardware requirements