



Mavenir Systems Overview

Mavenir Systems provides innovative mobile convergence solutions that enable mobile operators to offer subscribers new and enhanced services and applications. Mavenir delivers next generation Mobile Voice, Messaging and Presence services from a single converged core, saving CAPEX and OPEX for the mobile operators.

The Mavenir mOne Convergence Platform allows mobile operators to accelerate the launch of Converged Voice and Messaging services. The integrated solution blends IMS services such as Presence and Instant Messaging with SMS, MMS, Email and Web 2.0 applications to accelerate the adoption of mobile social networking and content delivery.

Headquartered in Richardson, Texas, Mavenir has sales, business development and R&D and operations facilities in India, China and Europe. For more information see www.mavenir.com.

Challenge

Mavenir's SMS application is an example of a very fast-growing class of applications that combine both a vertical application that captures large volumes of data, and an embedded data mart/analytic database used for business analytics. The application captures, stores and enables analysis of SMS messages. SMS volume is increasing at a very high rate worldwide, and according to Portfolio Research, SMS services are *"currently generating revenues in excess of USD 150 billion, and set to continue growing to more than USD 233 billion by 2014"*.

The Mavenir solution was designed to handle very large data volumes per day, as evidenced by a recent announcement that it has been deployed by four mobile operators in Asia, Europe and North America, with capacity in excess of 3 billion messages per day. Peak periods like Chinese New Year can generate over 70 million messages in an hour. The system captures all of the SMS message details as well as information about where the SMS originated from, where it was sent to, which network was used etc. The data is loaded from event/log files every 5 minutes, which makes the data available to the wireless carrier in near-real time. Typically about 90 days of data is stored, which equates to many terabytes of data.

Carriers use this data for a variety of analytic purposes, including trend analysis, traffic pattern analysis, network performance and capacity planning, spam detection, fraud

detection and other uses. What is unique to the Mavenir application versus other offerings is the ability to capture and store the detailed messages and data on an individual subscriber basis, rather than aggregate and summarize the data.

Criteria for Database Selection

The need to quickly load and store large volumes of detailed data, along with the ability to make that data available for analysis within minutes, were key to determining the kind of embedded data mart was required.

Mavenir also needed a solution that could store 90 days worth of data with a small hardware footprint, and could handle a projected 70% growth rate in mobile messaging.

Additionally, cost-effectiveness including low storage and license costs was also a key consideration.

Solution

Mavenir selected Infobright Enterprise Edition to meet their current needs and future growth requirements. They can load 20,000 SMS records per second at peak capacity in the initial release, and manage massive messaging traffic for its customers on a minimal hardware footprint.

The embedding of Infobright within the application provides additional benefits Mavenir's customers – much less hardware due to the high rate of data compression, fast query response without indexes, data partitioning or manual tuning, and no need for DBA resources to manage the database on an ongoing basis.

This case study also demonstrates the value of the increasing trend toward open source, as Mavenir's ability to immediately download an open source version of Infobright enabled them to quickly assess its fit for their need. As is the case with all companies today, time to market is critical and the ability to download and test new software options shortens time-to-delivery and production.

Mavenir has successfully implemented their vision of offering a distinctive product to a highly competitive market that provides much greater insight into subscribers, traffic and network trends and issues at 20% of the cost of competitive solutions. They have won major wireless carriers such as MetroPCS and Viettel based on this solution, which is driving the growth of Mavenir's business.

“Infobright offered the only solution that could handle our current data load and scale to accommodate a projected growth rate of 70 percent, without incurring prohibitive hardware and licensing costs.”

**Payam Maveddat,
Vice President,
Product Management
at Mavenir Systems**