Aircel

Telecommunications company Aircel connects with Vertica to gain competitive advantage and manage 10-15% annual data growth.

Overview
India’s fifth largest global system for mobile (GSM) communication service provider has over 90 million subscribers across the country. Aircel Limited, headquartered in Gurgaon, Haryana, provides voice and data services, postpaid and prepaid plans, Internet and broadband wireless access, and business communication solutions.

One of India’s leading innovative mobile service providers, Aircel, is credited with the fastest 3G roll out ever in the Indian telecom space.

Challenge
Aircel has constantly been at the helm of introducing innovative and value for its money products and services for its customers—whether the Aircel Pocket Internet, taking the first step in making 3G affordable for the masses or launching revolutionary industry first data products aimed at fuelling Internet adoption.

The company counts on big data to foster knowledgeable insight for sound business predictions and decisions. In a competitive marketplace, timely data can help grow its business. Therefore, Aircel needed a reliable solution to analyze structured data, which grows 10% to 15% yearly.

In contrast to the subsequent hardware and software changes the technology mandated, the company sought stronger performance and flexibility at a lower cost.

By improving database performance and scalability, the company could create a prepaid data mart for use in processing and analyzing up to 200 GBs of summarized data and call detail records (CDRs) daily. A new solution also was required for generating reports and ad hoc analytical queries within existing run times. Company analysts also coveted a suitable development (“sandbox”) environment.

Solution
Aircel selected the Vertica Analytics Platform. “We were impressed with the phenomenal POC results, especially the query execution, data loading, and backup times within Vertica,” says Sanjeev Chaudhary, Business Intelligence Head for Aircel. “Our data size will grow year by year, so we wanted a better

At a Glance

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<th>Industry</th>
<th>Telecommunications</th>
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<tr>
<td>Location</td>
<td>Gurgaon, Haryana, India</td>
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<tr>
<td>Challenge</td>
<td>Create a data mart to harness information for marketplace advantage</td>
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<td>Solution</td>
<td>Implement a high performance, scalable, cost-effective big data solution for reporting, decisions, predictions, and analytics</td>
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<td>Results</td>
<td>+ Reduces the company’s total cost of ownership for managing 10-15% annual data growth</td>
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<td>+ Supports a large customer base in a competitive market by enabling the creation of a data mart for analyzing up to 200 GBs of summarized data daily</td>
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<td>+ Provides faster data loading and querying performance than the company’s previous solution with improved backup, scalability, and operational ease</td>
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<td>+ Achieves reporting, backup, and ad hoc querying within existing runtimes</td>
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“We chose Vertica as our solution of choice for the short term and for the longer term as we scale. We count on this big data platform to help us innovate and solve business problems.”

SANJEEV CHAUDHARY
Business Intelligence Head
Aircel Limited
performing system to handle the various workloads, processes, and queries faster, even if it is a larger database size. Vertica satisfied our strict requirements."

For instance, data off-loading over one month of testing was much faster compared to Aircel’s previous solution. Additionally, Aircel calculated that now support costs were in line with its budgetary goals for a premier data analytical platform.

“They also hosted a workshop and provided best practices on how to maximize Vertica, which helped tremendously in our migration and deployment,” Chaudhary notes. Additionally, Technology Services assisted the installation and supported Aircel in loading prepaid customer data into Vertica.

Results
While easing management tasks, the solution integrates effortlessly with several custom ETL scripts that load data into Vertica and the SAP BusinessObjects visualization tool. Chaudhary says, “We achieved our entire integration requirements with the solution.”

In selecting Vertica, Aircel addressed both its short-term needs and long-term data growth projections. To scale the analytical environment, Aircel system administrators will simply add another server to the cluster or more storage capacity.

“We expect this solution to be capable of allocating certain storage sizes to our sandbox users so that they can use storage within their data size limits and have better archiving options,” Chaudhary says. “If we expand this in the future, it can be a single enterprise data warehouse source for other data marts having similar workloads.”

For now, business users appreciate the exceptional speed, performance, and analytical features in Vertica that enable them to gather intelligence from structured data. Management information system (MIS) reporting and sandbox users access the solution concurrently for various ad hoc queries, reports, and analyses. The company’s data scientists investigate theories with the solution, enabling Aircel to explore new opportunities and monetization streams as a GSM mobile service provider.

Aircel’s goal of creating a prepaid data mart is well underway. Chaudhary explains, “Our prepaid customer base is large and growing. In a competitive market, our objective is to manage this area with the best TCO and a stable, high performing data analytical system. Vertica has helped in all these aspects.”

In summation he notes, “As a result of the Vertica implementation, we’re achieving our goal of being innovative in using data to solve our business problems.”

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