Case Study: iBasis Improves Network Performance

Telco Enables Real-Time Network Monitoring and Analytics with Visualizations

Summary

To gain real-time visibility of various metrics for 3G and 4G networks, and use that knowledge to make timely, informed decisions can have profound business impact to Telco providers. iBasis, one of world's largest carriers of international voice traffic with revenue over $1B, chose Striim's real-time analytics platform to monitor every transaction on its network, and drive business decisions based on those real-time insights. With Striim's platform, iBasis can not only monitor and analyze the network traffic data continuously, but also proactively address alarming events before they cause material damage to the business.

Business Needs

For iBasis, a global leader in delivering voice traffic solutions for many large service providers, ensuring the highest quality of network service for its customers is top of mind. Telco space is highly competitive, for iBasis, any network failure could lead to millions of dollars of revenue loss and impact its future business. To maintain the service quality and ensure customer SLA, iBasis needed a new data management platform that helps:

- Provide real-time visibility of the transactions on various networks

- Detect network issues and send warnings to the technicians in real-time

- Enable immediate response and action to resolve potential network degradation

Capturing and gathering insights from the real-time transaction data on the cellular network will have paramount impact to iBasis. Such capability will allow iBasis to identify and resolve network issues before they cause expensive consequences; in addition, those real-time insights provide iBasis deeper understanding of the customer usage pattern at any point in time, which helps the company make informed business decisions to deliver targeted offerings and overall better service to its customers.

Challenges

However, to capture real-time network insights was not possible with the existing technology iBasis was using. The batch oriented ETL solution would take hours to integrate data from various sources, hence delaying

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Industry:
Internet Software & Services

Region:
North America

Solution:
Detect and Alert, Monitor Metrics

About:
Global leader in voice traffic solutions both domestically and internationally.

"Offline data has lots of value, but you can't affect it.

What you can actually affect is the data that just happen in the last 5-10 minutes. You can affect both margin and quality. Quality in network business is very important, company may see you not operating well, it will switch to someone else and getting them back is very difficult."

Leon Shaigorodsky
Director of Business Solutions at iBasis

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the downstream reporting and analytic projects. Most importantly, the delayed insights led to a number of business consequences, for example service issues could not be notified and addressed in time, potentially impacting customer experience and satisfaction. To ensure highest quality of service and meet demanding customer SLAs, iBasis needed an advanced real-time data platform that could capture its network traffic data the instance it's generated, and leverage those fresh data to gather immediate insights on the network performance.

Solutions and Results

After evaluating various technologies on the market, iBasis selected Striim's enterprise-grade, end-to-end real-time data integration and analytics platform to obtain immediate, deeper insights into its network operations. Striim's platform replaced iBasis's exiting ETL system, allowing the company to capture and monitor the transaction data the continuously, with little delay. Leveraging Striim's in-memory computing, iBasis can compare the incoming data stream with the baseline thresholds stored in memory to trigger warning and response to abnormal events, all in real-time. For example, when the deviation from the baseline threshold exceeds certain criteria, an alarm will be triggered and a message will be sent to the designated technician via email or the web interface.

With the Striim deployment, iBasis is now able to achieve a number of positive outcomes, including:

- Reducing the data ingest time from hours to five minutes
- Real-time monitoring of the network traffic with user friendly dashboards
- Triggering "smart alarms" for real-time alerts and fast response
- Preserving diagnostics information and analyzing the issue immediately
- Developing multiple new business applications such as personalized service offerings by leveraging the real-time data

Technology Used

Striim real-time analytics platform. See the architecture diagram below.