

Druid and Telefonica Brazil Campaign management platform



Executive Summary

“Telefônica Brasil is a company of the Telefonica Group, one of the main communication conglomerates in the world. It is known for the commercial use of the Vivo brand and has been operating since 1998.” Vivo is the leader of the Telecom market with 33% of market share in Brazil and more than 80 million customers. The Campaign Management platform is responsible for sending voice and text messages to Telefonica Vivo customers and it is part of the Domestic Message Broadcast Project. This platform exists since 2014, on-premises, it has the capacity to handle 12.5MM messages per day and it is based on Oracle Communications Service Gatekeeper.

Customer Challenge

Engaging and monetizing customer relationships involves marketing campaigns that utilize voice and text. Due to the pandemic and restricted physical stores, the demand for electronic channels has increased considerably. Vivo sends a volume of 12.5 million messages (MM) per day, using unstructured and unconsolidated information, which did not leverage economies of scale, duplicated efforts, and did not allow for efficient analysis of results. The forecast was to double capacity at peak times in the near future to 25MM/day, which required an initial heavy investment in networking, processing, and storage in its on-site infrastructure.

To achieve the goals, the platform was redesigned through a Cloud Native architecture on AWS. The platform was to be scalable, resilient and elastic, centralizing all SMS campaign initiatives. Previously without data analysis tools, now with multiple dashboards and reports, with performance metrics. Besides this, it was Vivo's first Cloud platform that would work.

Partner Solution

The Data Analytics environment aiming at presenting the user with the operation of the platforms through information that will be visualized in QuickSight reports and dashboards. Data collection covered three different sources:

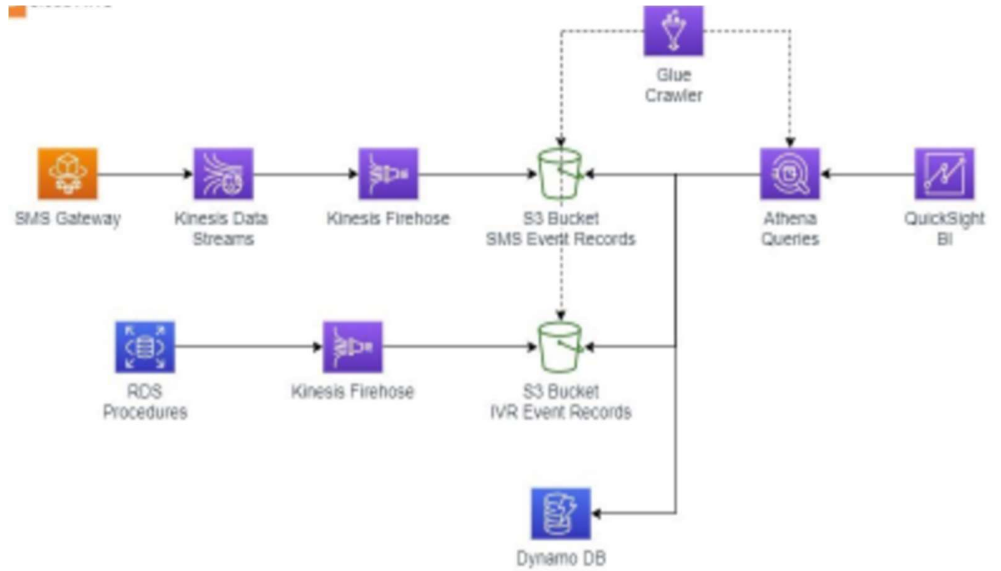
- 1- **SMS Events:** All events related to the SMS Gateway (Submit, Submit Response and Delivery Receipt) are processed by Kinesis Streams due to the high volume of data. Next, the data is sent to Kinesis Firehose, either every 15 minutes, or every 128MB, whichever comes first. Finally, the files with the generated events are stored in S3.
- 2- **IVR Events:** All events related to the procedures performed by the IVRs are processed by Kinesis Firehose, following the same time/size rules of SMS Events. These events are aggregated into files and sent to buckets in S3.
- 3- **DynamoDB:** Registered campaigns properties and metadata.

About Druid

Druid is a technology company established in 1998 focusing on the development and integration of complex, high performance, and scalable systems.

We have delivered successful projects to dozens of customers. Our high skilled team already delivered more than 500 projects.

Since 2019, we are focusing on the AWS Cloud, enabling our clients to overcome the limitations of traditional on-premises business applications and unlock the power and flexibility of Cloud.



The crawlers are configured in Glue that extract the metadata and create the table definitions. It is then possible to access and query this data through Athena as if it were a relational database, also allowing correlational queries to be performed between different data sources, enriching the available data. Finally, with QuickSight, you can create dashboards and reports providing a customizable and effective analysis of the environment.

Results and Benefits

The new platform is elastic, scalable, resilient, easy to monitor, and easy to troubleshoot. In addition, creating new features is easier and faster, dramatically reducing time to market. Druid created the new platform in only 4 months while the original platform was created in 18 months. The annual OPEX cost was reduced by about 30%. The CAPEX spent on this new version was 20% cheaper than the capacity expansion and hardware renewal they were planning before we offered this new solution. The on-premises platform was limited to 0.5 MM per hour, migrating to AWS using a serverless application allowed this messaging service to become unlimited. In addition, this platform migration allowed the customer to save on database license costs.

Conclusion

Druid and Telefonica worked together to create a platform where the customer could send unlimited messages. The Campaign Management platform became a more efficient and responsive system. Druid's experts implemented methodologies, such as serverless and this make possible no more limitations