



Redesigning subscriber analytics

Home security company

Redesign and optimize subscriber analytics and activations data for simplisafe

Home security company needs redesigning subscriber analytics

Picture this...

You're looking to diagnose, redesign, and rebuild the architecture to better support the reporting requirements of its cross-functional teams and improve customer journey tracking. Currently, you are encountering significant challenges with its current Data Architecture and Design for storage and data analysis. It employs a complex concepts, hampers the accurate tracking and logging of changes in subscriber records. These issues not only impact the effectiveness of analytics and reporting but also impedes the ability to monitor critical customer journey aspects such as application dropouts and customer drop points in subscriptions.

You turn to Accordion.

We partner with your team to Redesign and optimize Subscriber Analytics and Activations data for SimpliSafe, including:

- 1) Redesigning the SA and Activations tables enabled client to accurately track the entire customer journey, including application dropouts and subscription drop points, allowing for effective issue mitigation. The redesigned tables ensured accurate capturing and logging of subscriber changes, facilitating reliable analytics and deeper insights into customer behaviors and preferences.
- 2) Simplified data extraction and the creation of useful features for analytics empowered cross-functional teams with timely and accurate information, enhancing their ability to produce comprehensive reports and make informed decisions.
- 3) A normalized structure and new schema made the solution robust and scalable, capable of handling increased data volumes and complexity without sacrificing performance. Automation of table updates reduced manual intervention, saving time and reducing errors.
- 4) The creation of mapping tables between source systems and the new schema standardized data across the organization, facilitating seamless tracking and reporting, and making it easier to analyze subscriber data.

Your value is enhanced.

You were able to make data-driven decisions based on accurate and up-to-date information, improving strategic planning and operational efficiency with incorporating additional ~30% metrics. By accurately tracking customer journeys, application dropouts, and subscription drop points, addressed issues proactively, leading to improved customer satisfaction. Standardized processes and comprehensive documentation enabled client to adapt quickly to future changes and requirements. This agility helped the company respond to plan changes and monitoring requests more effectively, reducing response times by ~20% in near term. The reduction in manual intervention and the improvement in process efficiency led to cost savings in terms of time and resources. The robust design minimized the need for frequent overhauls, reducing long-term maintenance costs by ~25%.

KEY RESULT

- Additional ~30% metrics
- Reducing response times by ~20%
- Reducing long-term maintenance costs by ~25%

VALUE LEVERS PULLED

- Assessment and diagnostic
- Design and recommendation
- Change management and documentation

Data modeling for home security company

Situation

- Client is encountering significant challenges with its current Data Architecture and Design for storage and data analysis. It employs a complex concepts, hampers the accurate tracking and logging of changes in subscriber records.
- These issues not only impact the effectiveness of analytics and reporting but also impedes the ability to monitor critical customer journey aspects such as application dropouts and customer drop points in subscriptions.
- Client is considering partnering again to diagnose, redesign, and rebuild the architecture to better support the reporting requirements of its cross-functional teams and improve customer journey tracking.

Accordion Value Add

- Redesigning the SA and Activations tables enabled client to accurately track the entire customer journey, including application dropouts and subscription drop points, allowing for effective issue mitigation. The redesigned tables ensured accurate capturing and logging of subscriber changes, facilitating reliable analytics and deeper insights into customer behaviors and preferences.
- Simplified data extraction and the creation of useful features for analytics empowered cross-functional teams with timely and accurate information, enhancing their ability to produce comprehensive reports and make informed decisions.
- A normalized structure and new schema made the solution robust and scalable, capable of handling increased data volumes and complexity without sacrificing performance. Automation of table updates reduced manual intervention, saving time and reducing errors.
- The creation of mapping tables between source systems and the new schema standardized data across the organization, facilitating seamless tracking and reporting, and making it easier to analyze subscriber data.

Impact

- Client was able to make data-driven decisions based on accurate and up-to-date information, improving strategic planning and operational efficiency with incorporating additional ~30% metrics.
- By accurately tracking customer journeys, application dropouts, and subscription drop points, client addressed issues proactively, leading to improved customer satisfaction. Standardized processes and comprehensive documentation enabled client to adapt quickly to future changes and requirements. This agility helped the company respond to plan changes and monitoring requests more effectively, reducing response times by ~20% in near term.
- The reduction in manual intervention and the improvement in process efficiency led to cost savings in terms of time and resources. The robust design minimized the need for frequent overhauls, reducing long-term maintenance costs by ~25%.

Methodology/Approach

STABILIZE

- Collaborated with multiple stakeholders from different departments to understand the requirements of the data that should be present in SA tables
- Screened through all reports and the downstream dependencies to separate the required fields from redundant fields
- Consolidated all the requirements from all the business users

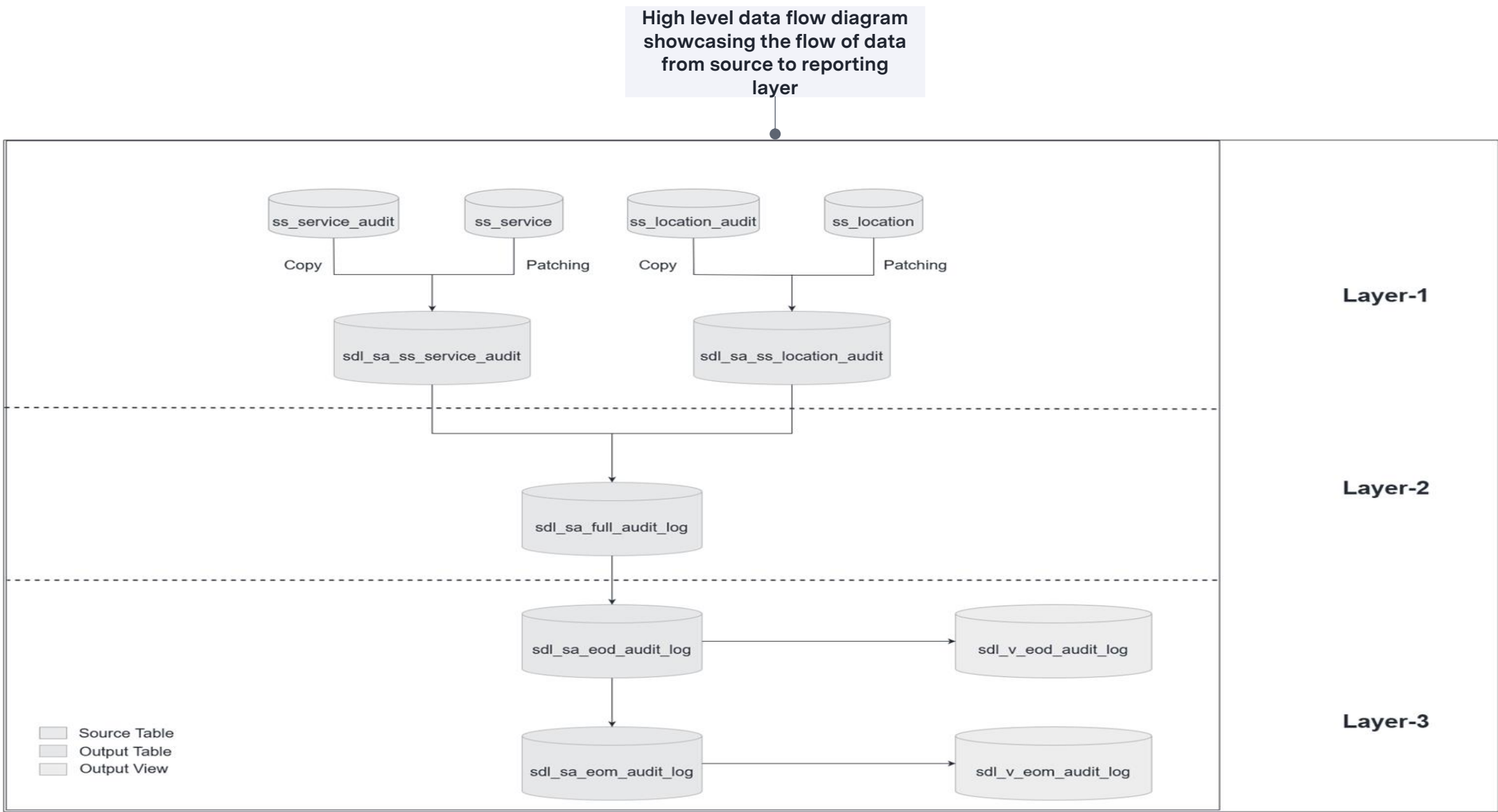
OPTIMIZE

- Based on the requirements designed the tables in few steps with optimal solution
- Performed cleansing activity on the tables for deduplication, avoiding data leakage after finalizing the definitions of columns and auditing the columns
- Migrated one of the Python to SQL code and formatted to run the queries on dagster instead of legacy scheduler for periodic refresh of table as per the business requirements


STANDARDIZE

- Utilized the existing SDL processes and followed the same standards across all the tables
- Created an extensive documentation explaining high level data flow, existing vs redesigned changes and data dictionaries
- Parameterized certain scripts to enable the same to run across different environments like Production/ QA

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 Confluence

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Analytics / ... / Subscriber Analytics (SA)

sdl_sa_ss_service_audit Table Data Dictionary

S

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Created by [redacted]
Last updated: Jun 08, 2023 [redacted] 4 min read • 6 people viewed

Summary

- Database Name (post production) - datalake_agg
- Table name - sdl_sa_ss_service_audit
- Primary Key - vid
- sdl_sa_ss_service_audit table is a part of the redesigned SA (subscriber Analytics) tables having all the key historical subscription related information.

Data dictionary of a redesigned service table highlighting the key information and published over Confluence as part of the documentation