Totango

Totango Data Source

Description

Totango serves as a valuable data source within our data pipeline, providing insights into customer engagement, product usage, and customer health scores. This documentation comprehensively explains Totango as a data source, including its importance, data access methods, and data processing within our data pipeline.

Data Importance

- **Customer Success Insights:** Totango data is instrumental in tracking customer success, identifying at-risk customers, and improving overall customer satisfaction.
- **Product Adoption:** We utilize Totango data to assess product adoption rates, identify feature usage patterns, and guide product development efforts.
- **Churn Prediction:** By analyzing Totango data, we can predict and mitigate customer churn, ensuring customer retention and growth.

Data Pipeline Architecture

Integration Overview

Totango is seamlessly integrated into our data pipeline, enabling real-time data retrieval and analysis. Here's an overview of how Totango fits into our data pipeline architecture:

Integration of Totango Data into Our Data Pipeline

Components

- **Totango API:** We leverage the Totango API to retrieve customer engagement data, usage metrics, health scores, and user interactions.
- **Data Transformation:** Totango data may undergo transformations to align it with our standardized data format and schema.

Workflow

1. **Data Retrieval:** Totango data is fetched every 24 hours through the Totango API.
2. **Data Transformation:** Data is transformed as necessary to ensure consistency and compatibility with our data pipeline.
3. **Data Ingestion:** Transformed Totango data is ingested into our data storage solutions.

Data Processing

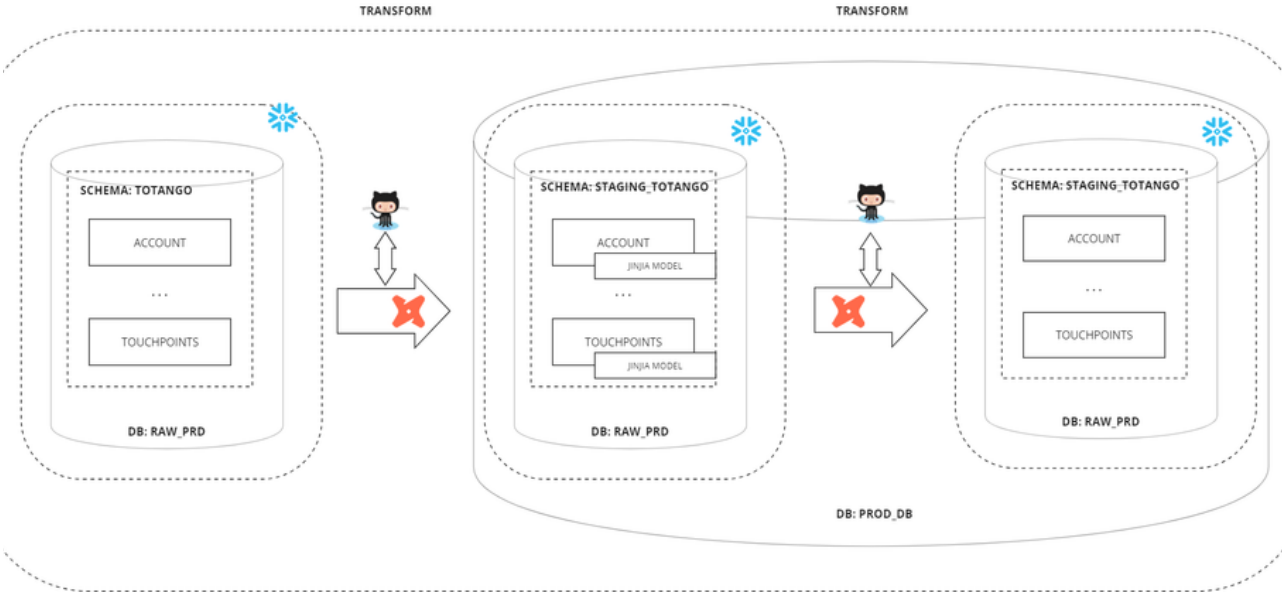
Data Ingestion

- Totango data is ingested into our data pipeline every 24 hours to ensure our analytics are always up-to-date.

> All the columns from API will be replicated in Snowflake. If a column is still missing, reach out the the data engineering team.

Data Transformation

- Data may be transformed during ingestion to standardize formats, enrich with additional data, e.g. Jason fields Totango data will be transformed and normalized as different columns in STAGING_TOTANGO over DBT.
- Every day, a DBT job is run to create or update views with light transformations. This results in staging views which are stored in the STAGING_ZENDESK schema.



Transformation of Totango Data into Our Data Pipeline

Data Storage

- Totango data is stored in the MART_TOTANGO schema, where it's available for analysis and reporting.

Data Governance and Security

Data Privacy

- Totango data is handled in compliance with data privacy regulations, with any sensitive information anonymized or encrypted.
- **Personally Identifiable Information (PII) Hashing:** To further enhance the security and privacy of PII data sourced from Totango, we utilize Fivetran to hash PII data fields. Hashing irreversibly transforms PII data into cryptographic representations, preserving data privacy while permitting analysis. Access to the hashed PII data is tightly controlled and restricted to authorized personnel only.

Access Control

- Access to Totango data and related integration components is restricted to authorized personnel.
- The contacts provided below pertain to the data ingested into the Business Systems Data Hub.

Type	Scope	Primary Contact	Secondary Contact
Data Owner	Makes decisions about the data's permissible use, its classification, and its criticality.		
Data Steward	Ensures that data governance policies are implemented and followed. Understands the business context and use of the data and bridge the gap between IT and business units.		
Data Custodian	Handles the technical aspects of storing, securing, and maintaining data, ensuring that the data is available, reliable, and secure.	@Rutvij Sharma	@Rainy Li

Compliance

- Our Totango data integration complies with relevant data protection regulations and industry standards.

Deployment and Scaling

Deployment Strategy

- The Totango integration is deployed within our existing data pipeline infrastructure.

Scalability

- The integration is designed to scale horizontally to accommodate increased data volumes as needed.

Objects Display

Object	Pipeline (Heroku)	Pipeline (Snowflake)	History Migration
account_health	Lambda - Fivetran	Lambda - Fivetran	
accounts	Lambda - Fivetran	Lambda - Fivetran	
activity_types	Lambda - Fivetran	Lambda - Fivetran	
events	Lambda - Fivetran	Python - EC2 Linux	yes
totangousers	Lambda - Fivetran	Lambda - Fivetran	
touchpoints	Lambda - Fivetran	Lambda - Fivetran	
users	Lambda - Fivetran	Python - EC2 Linux	yes

Documentation and Maintenance

Versioning

- **Version Control Mechanism:** Our Totango integration captures version changes using GitHub as the version control system. GitHub allows us to track changes and maintain a history of modifications made to the integration scripts and configurations.

Change Log

- **Change Log Documentation:** The change log for the Totango integration is maintained using Jira tickets. Each change, enhancement, or bug fix is associated with a Jira ticket, which serves as a reference point for tracking and documenting changes. This ensures transparency and accountability in our change management process.

Runbook

- A runbook is available for troubleshooting common issues and performing routine maintenance tasks related to Totango data integration.