Some content has been intentionally redacted (proprietary information and screenshots).

This documentation was created using docs-as-code, with a Static Site Generator (SSG) seamlessly converting Markdown content into HTML. The SSG took charge of formatting, while shortcodes were used for callouts and code blocks. Links between internal applications and documentation have been removed.

This snippet is a glimpse of an internal product's landing page; the full document includes Use Cases (with Mermaid diagrams), Tutorials and Guides, Hadoop Guides, and Support.

Enterprise Data Analytics Platform

The Enterprise Data Analytics Platform supports large-scale analytics and enables organizations to derive insights from high-volume, multi-year transaction data. Designed to be flexible and scalable, the platform integrates multiple data processing technologies to support a wide range of analytical workloads and business use cases.

By leveraging a combination of modern data warehouse and big-data processing technologies, the platform enables teams to select the most appropriate tools for each analytical need, helping deliver timely, high-quality insights across the business.

Use Cases

Fraud Analysis and Risk Mitigation
Supports advanced analytics used to detect and investigate unusual transaction patterns that may indicate potential fraud or data compromise. By analyzing large volumes of transaction data, analytics teams can identify anomalies, assess potential sources of risk, and support efforts to reduce future fraud.

Merchant Offers and Loyalty Programs
Enables analytics that support merchant loyalty and rewards initiatives. This includes integrating reference data such as currency exchange rates and normalizing values to support consistent reporting and downstream consumption by business partners.

Decision and Event-Driven Analytics
Supports both large-scale data processing and analytics on streaming datasets. This enables near-real-time insights from transaction events and supports use cases that rely on timely data to inform business decisions.

Retail Performance Insights
Enables analysis of recent transaction trends to assess changes in retail performance over time. Historical transaction data can be used to identify shifts in consumer behavior, compare performance across periods, and support market-level insights.

How It Works

Internal applications and analytics tools access the platform through controlled service interfaces that manage authentication, authorization, and request handling. This approach helps ensure secure and reliable access while maintaining separation between consuming applications and underlying data infrastructure.

At a high level, the interaction flow includes:

1. **Secure access initiation**

   Applications connect to the platform through approved access points designed to support enterprise-scale usage.

2. **Authentication and authorization**

   Access requests are validated using enterprise security controls to ensure that only authorized users and systems can access data.

3. **Request submission**

   Applications submit requests to retrieve or process data based on approved use cases.

4. **Request handling and coordination**

   Platform services validate requests and coordinate with underlying data processing systems to fulfill them.

5. **Data processing**

   The platform processes requests using appropriate analytics engines and data storage systems, depending on the workload.

6. **Response delivery**

   Results are returned to the requesting application in a controlled and secure manner.

This architecture supports scalability, security, and flexibility while enabling a wide range of analytics use cases.

Tutorials and Guides

Here is a snapshot of the guides created for this product. Full details have been omitted, as they contain proprietary screenshots and code snippets.