Promethium

Promethium Instant Data Fabric for Rapid Data Product Creation
Empower data teams to build data products 100x faster in a single, AI-powered workflow

Companies are adopting data products as a more agile and effective way to manage and derive value from their data. While traditional methods are manual, complex, and time-consuming, Promethium enables an end-to-end workflow that allows users to connect, discover, access and analyze data in a single workflow. With a unified, AI-powered platform, Promethium streamlines the process to build and share data products – accelerating insights, fostering collaboration, and ensuring robust governance throughout the data lifecycle.
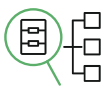
Key Benefits

Accelerated Time-to-Value
Promethium's unified platform eliminates traditional bottlenecks by allowing users to create data products end-to-end without switching tools, reducing development time and delivering faster insights. With Promethium, data teams can build data products 100x faster.

Seamless Integration Across Data Sources
Promethium connects to all your data sources, whether on-premise, cloud, and multi-cloud environments – and across structured, semi-structured, and un-structured data – without the need for data movement. This unified view simplifies data integration and eliminates silos.
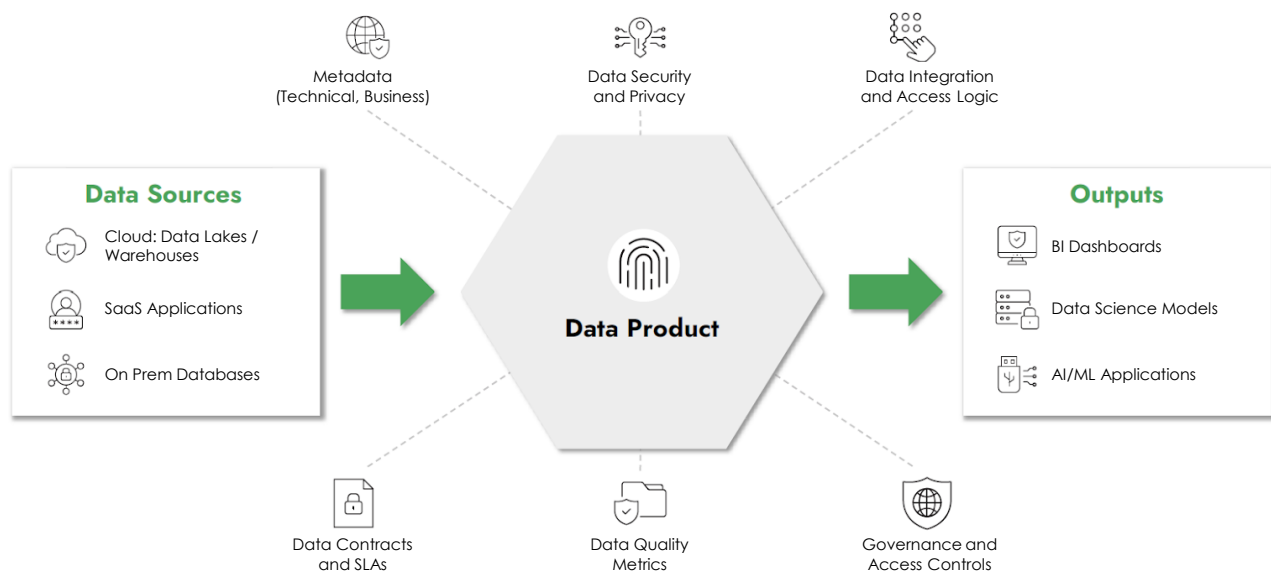
Embedded Governance and Compliance
Data products built with Promethium adhere to enterprise-grade security and governance throughout their lifecycle, ensuring compliance and trust. Promethium provides full explainability of AI-generated results, offering transparency and building user trust in outcomes.

Defining Data Products and Their Value

Data products have emerged as critical assets for organizations seeking to transform raw data into actionable insights. Unlike raw datasets or static reports, data products are refined, consumable outputs that empower business intelligence, data science, and AI/ML applications. By integrating data, metadata, semantics, and user-friendly interfaces, they offer a holistic approach to data-driven decision-making and innovation.

Data Sources
Foundational raw data collected from data lakes, SaaS applications, and on-premise databases. The diversity and quality of these sources directly impact the value of the data product.

Metadata
Provides essential context, including technical details such as data origins, formats, schemas, and lineage, as well as business definitions, rules, and metrics. This ensures transparency, traceability, and accurate interpretation across the organization.

Data Security and Privacy
Encompasses policies and mechanisms to protect data against unauthorized access, including encryption, access controls, and anonymization to maintain trust and regulatory compliance.

Data Integration and Access Logic
Integrates and transforms data from diverse sources through ETL processes, federated queries, real-time data integration, and APIs, enabling efficient and timely data access for end-users.

Data Contracts and SLAs
Formal agreements defining data delivery expectations, structure, quality, performance, and responsibilities between data producers and consumers.

Data Quality Metrics
Measures of data accuracy, completeness, consistency, timeliness, and validity, ensuring data products meet high standards for decision-making reliability.

Governance and Access Control
Policies and roles governing data product management, access, and usage, including data stewardship and compliance with organizational and regulatory standards.

Benefits of a Data Product Approach

By transforming raw data into pre-curated, easily consumable insights, data products bridge the gap between data and actionable outcomes. This approach drives better decisions, operational efficiencies, and competitive advantages, making data products indispensable in the modern enterprise landscape.

Enhanced Decision-Making
Data products provide clear, accurate, and timely insights that empower better business decisions.

Operational Efficiency
Streamlines processes and reduces the effort needed to access and analyze data, boosting productivity.

Accelerated Growth Opportunities
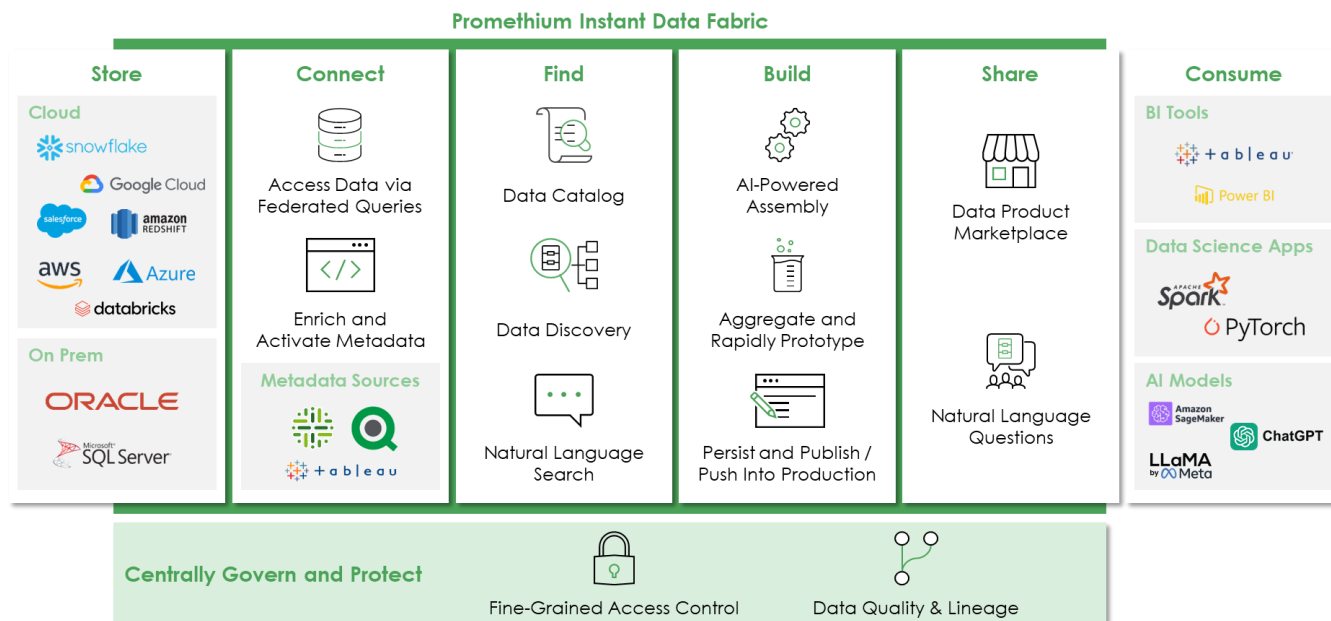Unlocks new revenue streams through data monetization and value-added services.

Innovation and Competitive Edge
Enables organizations to optimize operations, identify new opportunities, and stay ahead of competitors.
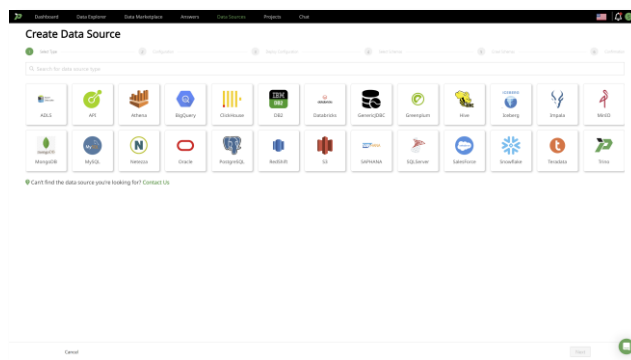
Data-Driven Culture
Promotes a culture of data-driven decision-making, reducing reliance on intuition and encouraging evidence-based strategies.

Promethium

Building Data Products With Promethium

Promethium Instant Data Fabric

Store	Connect	Find	Build	Share	Consume
Cloud snowflake Google Cloud salesforce / amazon REDSHIFT aws / Azure databricks **On Prem** ORACLE Microsoft SQL Server	Access Data via Federated Queries Enrich and Activate Metadata **Metadata Sources** +ableau	Data Catalog Data Discovery Natural Language Search	AI-Powered Assembly Aggregate and Rapidly Prototype Persist and Publish / Push Into Production	Data Product Marketplace Natural Language Questions	**BI Tools** +ableau Power BI **Data Science Apps** Spark PyTorch **AI Models** Amazon SageMaker / ChatGPT LLaMA by Meta

Centrally Govern and Protect

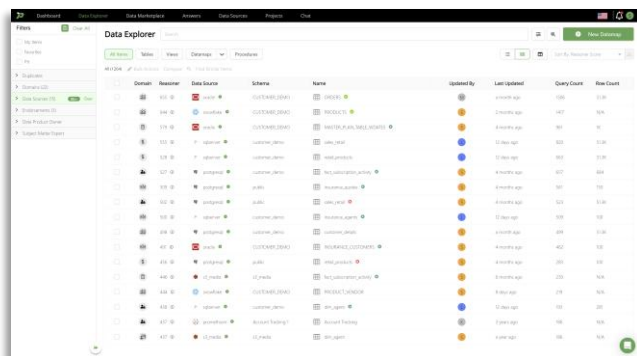Fine-Grained Access Control   Data Quality & Lineage

Connect: Seamless Real-Time Data Access

Promethium enables instant access to all data – whether in the cloud, on-premises, or hybrid environments – without moving it. By creating a unified data layer and using federated queries, users can connect seamlessly and gain real-time insights. Active metadata enriches this process, providing essential context and making data discovery simpler.
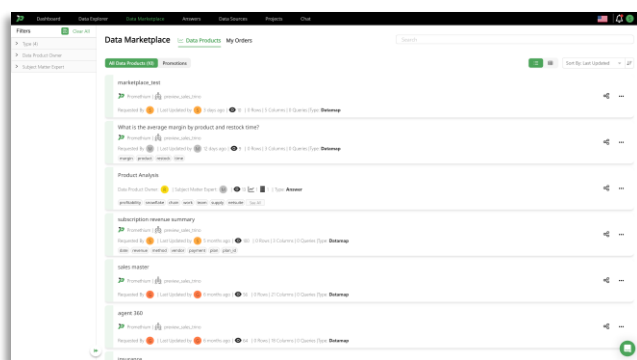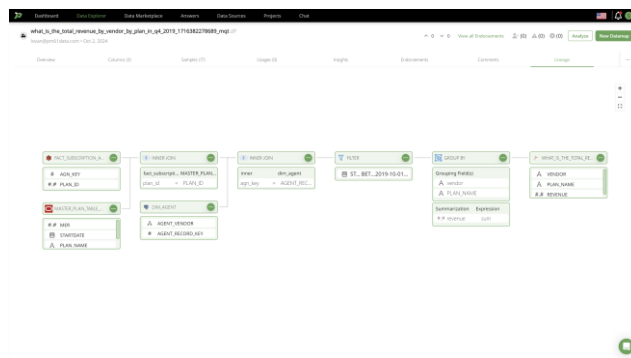

Find: Break Down Data Silos with AI

Finding relevant data quickly is critical for decision-making. Promethium breaks down data silos through AI-driven discovery and a centralized data catalog. By leveraging natural language search and active metadata, users can effortlessly locate and understand data across the organization, making it accessible and actionable for both technical and non-technical users.
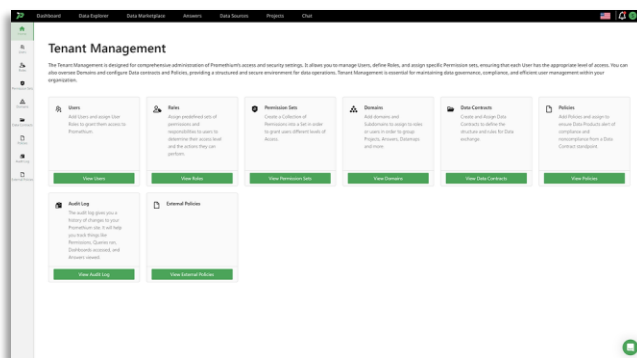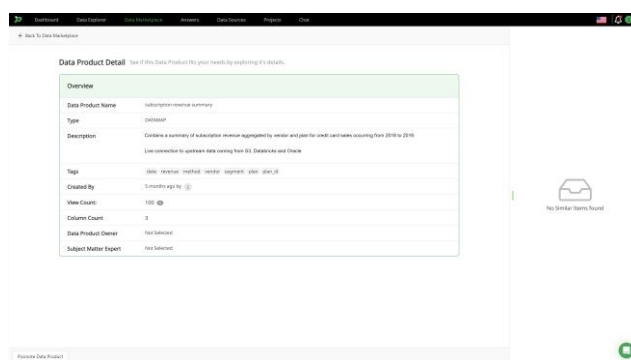
Build: Rapid Data Product Creation

With Promethium, building data products becomes fast, intuitive, and collaborative. Teams can create data products in a self-service workflow that maintains human oversight and full explainability of AI. This approach ensures data products are not only quickly assembled but also trusted and explainable, empowering users to derive meaningful insights without waiting for data provisioning support.

Share: Publish Data Products

Sharing insights and data products securely is key to fostering collaboration. Promethium provides a governed marketplace for distributing data products internally or externally, with data contracts enforcing security and compliance. This ensures that every shared data asset remains trusted, well-managed, and aligned with organizational standards.

Consume: Leverage Existing Modes

Promethium allows users to consume data products through familiar methods, including BI tools, data science applications, and AI/ML models. This ensures that existing workflows are maintained and enhanced, enabling seamless integration of insights into day-to-day operations, analytics, and advanced modeling.

Govern: Full Embedded Governance

Promethium embeds governance into every step of the workflow, balancing speed and control. Centralized access control (RBAC and FGAC), end-to-end data lineage, and the ability to interact with data in place ensure compliance, security, and transparency without compromising agility.

Providing Relevant Context to Make Gen AI Work

Data products play a pivotal role in enhancing the accuracy, relevance, and effectiveness of LLMs by providing structured data, enriched metadata, and contextual relationships. This context can be a crucial enabler for LLMs to generate more precise, meaningful, and actionable outputs tailored to organizational needs.

Structured Data Aggregation
Data products combine and organize data from multiple sources, offering a comprehensive view that LLMs can leverage for more relevant responses. This structured approach ensures consistency and reliability.

Enriched Metadata
Data products contain valuable metadata, such as data lineage, business context, and quality indicators. This information enhances LLM understanding and aligns outputs with enterprise-specific terminology.

Contextual Relationships
By revealing connections and relationships between data points, data products provide LLMs with the context needed to generate more accurate and actionable insights.

Real-Time Data Access
Data products facilitate access to up-to-date data, ensuring LLM responses are based on the latest available information depending on the requirements of the business case.

Governance and Security
Data products enforce enterprise-level governance and security, ensuring LLMs operate within established data usage policies and guidelines, maintaining data integrity and trust.

Without data products, LLMs may suffer from limited context, data silos, and inconsistent information retrieval, leading to suboptimal outcomes. By leveraging data products, organizations can ensure that LLMs are equipped with accurate, relevant, and contextual data, ultimately enhancing their ability to deliver valuable insights.

What Others Have to Say

*"Promethium provides a platform for creating a data-fabric-style architecture, which also **automates data product creation via business-led data products**. Promethium includes a broad range of features, including data pipelines for more than 200 supported sources, data modeling, automated data cataloging, active metadata management, data preparation, AI- or ML-based automation and visualization."*

Gartner COOL VENDOR 2024

nationalgrid

"Promethium gives us the ability to answer the questions of our business users with real time responses."

DOLBY

"In short, the tool is really useful, easy to use. The ability to just ask a question and get the answer is like MAGIC."

Quest Diagnostics

"Promethium lets non-technical users find and build answers without worrying about performance or cost."

Gartner COOL VENDOR 2024 — //CODiE// 2022 SIIA CODiE WINNER — CRN BIG DATA 100 2024 — CRN BIG DATA 100 2023 — cdo Best New Product — BIG INNOVATION 2021 — AI ARTIFICIAL INTELLIGENCE EXCELLENCE AWARD 2021

Promethium

Promethium
101 Jefferson Dr.
Menlo Park, CA 94025
www.promethium.ai
info@promethium.ai