



Irion Premium Data Quality & Governance





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1. UNIFY GOVERNANCE, DISTRIBUTE EXECUTION, TRUST YOUR DATA

Discover a game-changing product designed to elevate Data Governance and Data Quality to new heights.

Designed for organizations that see data as a strategic asset, it blends advanced methodologies with cutting-edge AI technologies, turning complexity into clarity, control, and value.

At its core lies a powerful balance: centralized decision-making combined with distributed, specialized execution. This synergy enables centralized governance with operational autonomy, empowering each business unit to contribute consistently and securely to enterprise-wide data quality and governance initiatives.

Powered by a robust data management engine augmented with advanced AI capabilities, the product streamlines the most complex data governance and quality processes, cutting time and costs, enabling smarter and more proactive data usage, ensuring scalability, flexibility, and compliance even in highly regulated environments.

Cloud-native, open, modular and fully metadata driven, it integrates seamlessly with existing ecosystems. Its architecture ensures fast, easy deployment across cloud and hybrid environments, while delivering a lower TCO and accelerating your digital transformation journey.

2. MODULAR. SCALABLE. INTELLIGENT.

Irion Premium Data Quality & Governance is a comprehensive product featuring flawlessly integrated modules, each of which can be adopted independently or combined into a fully integrated governance and quality solution, evolving in steps with your data maturity.

Designed for Data Owners, Data Stewards, Data Engineers, and Data Consumers, it offers ready-to-use modules that accelerate governance, control, and information sharing, enabling teams to create value from data faster and more effectively.

Modules for End-to-End Governance and Quality

- ▶ **Data Marketplace:** To promote the sharing and reuse of trusted data products across the organization.
- ▶ **Data Governance & Catalog:** To manage business glossaries, catalog data assets and AI models, and enrich your information portfolio.
- ▶ **Data Quality Hub:** To govern and orchestrate data quality processes, collect and consolidate results, justify and certify outcomes, and publish clear dashboards with KQIs and indicators.
- ▶ **Technical Data Lineage:** To capture lineage within systems, analyze and visualize the flow of data from source to consumption, end-to-end and at the field level.
- ▶ **Data Discovery & Classification:** To uncover data semantics through connectors and an AI-powered discovery engine.
- ▶ **Data Quality & Observability Engine:** To automate and personalize quality checks, integrating sophisticated business rules where context, semantics, and explainability matter most.

Intelligent architecture for control and agility

Irion Premium Data Quality & Governance enables the implementation of a modern **Hub & Spoke** architecture, designed to deliver both governance and flexibility.

This model combines a **central supervision hub** with **decentralized operational**



spokes, ensuring **performance**, **consistency**, and **strong control** — while preserving maximum agility in operational processes.

Advanced modeler for total customization

The **Advanced Modeler & Development Toolkit** enables deep configuration and customization, allowing organizations to:

- ▶ extend models and processes,
- ▶ build dedicated UIs and dashboards,
- ▶ implement specialized engines and deploy proprietary AI algorithms.

With the **composable architecture** of Irion Premium Data Quality & Governance, organizations can adapt the product to their governance and quality policies, models and strategies and evolve quickly and securely.

Irion Premium Data Quality & Governance

GOVERNANCE LAYER

Data Marketplace

Publish and share your “data assets” within your company. Browse, analyze, select, and “purchase” data products in a user-oriented marketplace that is easy to use and manage for business users.

Data Governance & Catalog

Create a business glossary, catalog your data assets and AI models, enrich and analyze your information assets through AI-based semantic search functions, defined roles, and clear, collaborative processes.

Data Quality Hub

Govern and orchestrate DQ processes in a unified way. Collect and consolidate results, justify and certify outcomes, calculate KQIs and publish statistics and indicators through clear and effective dashboards.

EXECUTION LAYER

Technical Data Lineage

Detect lineage within your systems using advanced catchers. Analyze and visualize the flow of your data from source to consumption, both end-to-end and at field level.

Data Discovery & Classification

Identify the most valuable information for your business, analyze semantics, detect patterns and relationships and classify your data for governance and compliance purposes, thanks to connectors and the powerful AI-driven discovery and classification engine.

Data Quality & Observability Engine

Identify your critical data assets and monitor their quality. Configure business rules to go beyond mere technical and formal controls, make informed and context-aware decisions by leveraging our powerful AI-powered engines.

Advanced Modeler & Development Toolkit

Unlock the full potential for customization of your governance & quality system with modeling and developer toolkit capabilities. Extend the model, add roles, create workflows, build custom data pipelines, and design dashboards.



3. THE POWER OF MODULARITY

3.1. DATA MARKETPLACE

The Data Marketplace module acts as a central showcase for Data Products, enabling seamless and governed data sharing across the organization.

With an intuitive, e-commerce-like interface, it promotes true Data Democratization:

- ▶ Data creators can publish and manage their data products.
- ▶ Data consumers can easily discover, explore, and access the information they need autonomously and with full traceability.

Each Data Product is enriched with technical and business metadata, usage statistics, data quality metrics, access contracts, and user feedback. This ensures transparency, trust, and reliability, empowering data-driven decision-making and accelerating AI/ML initiatives.

Key Features

- ▶ Centralized management of the Data Product catalog and associated delivery formats
- ▶ AI-powered search and advanced filtering capabilities
- ▶ Subscription to data contracts and automatic purchase order generation
- ▶ Management of requests for new Data Products
- ▶ Full traceability of subscriptions and monitoring of consumption

3.2. DATA GOVERNANCE & CATALOG

The Data Governance & Catalog module provides a centralized and intelligent framework for managing and governing your organization's information assets.

It enables the creation of business glossaries and data dictionaries, the cataloging of data assets and AI models, and the analysis and enrichment of your information portfolio through a unified catalog enhanced by AI-powered semantic search, role definitions and clear collaborative processes.

The module comes with an out-of-the-box governance model built on best practices and globally recognized methodologies, significantly accelerating the adoption phase and reducing implementation effort. It is ideal for organizations looking for a structured, robust, and comprehensive approach to data governance without having to build their framework from scratch.

By supporting multiple metadata scopes, such as Business Glossary, Data Dictionary, and Data Product Catalog, the module ensures end-to-end governance of the data lifecycle, from individual physical elements to complex data products. It fully integrates with organizational structures, enabling the operational assignment of roles and responsibilities defined in internal policies.

Key Features

- ▶ Predefined governance models and ontologies
- ▶ AI-powered search and semantic discovery tools
- ▶ AI-assisted chatbot navigation
- ▶ Dedicated logic for business data lineage representation
- ▶ AI-powered navigation maps for visual exploration of the semantic graph
- ▶ Personalized home pages and role-based dashboards with KPIs
- ▶ Collaborative workflows to manage the evolution of the information portfolio
- ▶ Metadata Mapper: a visual editor to map source models to target models
- ▶ Versioning and change tracking across versions



3.3. DATA QUALITY HUB

Data quality must not be only verified but also measured, maintained over time using clear metrics - such as accuracy, completeness and consistency - and supported by governance processes that combine technology with business accountability.

The Data Quality Hub module provides a centralized and intelligent framework to orchestrate, monitor, and govern data quality processes across the organization.

Within the Hub & Spoke architecture, this module allows the cataloging and classification of data quality rules in a centralized dictionary, integrating all business-relevant information. It also consolidates outcomes and statistics from multiple execution engines, whether powered by Irion or third-party tools, into a single, transparent view.

The module supports justification workflows, measurement of the effectiveness of control systems, calculation of quality indicators, presentation of results through **clear, interactive dashboards**, enabling proactive and data-driven issue management.

Key Features

- ▶ **Unified Rules Catalog**: integrated with Business Glossary and Data Dictionary
- ▶ **Unified Outcome Repository & Monitor**: collecting and consolidating outcomes from distributed nodes
- ▶ **KQI Engine**: definition and monitoring of key quality indicators and summary metrics
- ▶ **Structured cut-off threshold management**: to enable proactive issue resolution
- ▶ **Home page and interactive dashboards** with role-tailored KPIs and reporting
- ▶ **AI-powered Justification Desk** and incident management tools

3.4. DATA QUALITY & OBSERVABILITY ENGINE

To truly empower AI initiatives and drive digital transformation, traditional data quality tools focused only on formal checks, are no longer enough. Organizations need solutions that ensure end-to-end business data quality, combining intelligence, automation, and contextual understanding.

The Data Quality & Observability Engine module provides a true “control factory”: a smart environment where data can be observed, profiled, and quality-checked through advanced, fully automated, and customizable AI-powered engines.

Unlike conventional tools, this module enables the creation of any type of control, from basic validations (formal, trend, ...) to complex business logic-driven checks, by:

- ▶ Understanding the semantics and context of data to interpret meaning and relationships.
- ▶ Building dedicated pipelines for data preparation, enrichment, and validation.
- ▶ Justifying discrepancies: data quality is not only about identifying errors; it also means being able to trace and explain by tracing and explaining the processes behind the data and documenting exceptions when data doesn't align.

With a powerful engine capable of running millions of checks per minute in parallel, and intuitive UIs designed for operational efficiency, it enables organizations to design production-grade pipelines, streamline deployment, integrate seamlessly with Hub processes, optimize execution supporting continuous improvement.

Artificial intelligence assists at every step:

- ▶ Recommendation engines suggest relevant checks,
- ▶ Natural language wizards simplify rule checks creation,
- ▶ Automated documentation speeds up governance and traceability.

Key Features

- ▶ Smart Data Profiling & AI Recommendation Engine
- ▶ AI-powered Rule & Pipeline Wizard
- ▶ User Lab for design and testing



- ▶ Support for technical and business rules
- ▶ High-performance Rule Execution Engine
- ▶ Configurable Rule Details Repository
- ▶ Natural language verbalization for documentation and explainability

3.5. DATA DISCOVERY & CLASSIFICATION

The Data Discovery & Classification module enhances the understanding and cataloging of the information portfolio, enabling the identification, classification, and categorization of data and metadata across multiple applications and environments.

Powered by advanced AI technologies, the module rapidly identifies the most business-relevant information, recognizes semantics, detects patterns and relationships, and classifies data according to governance policies such as **Personal Data**, **Sensitive Data** and more using fully configurable rules. This ensures that information is consistently structured, secure, and ready to support compliance, governance, and analytics initiatives.

Key Features

- ▶ Automatic and continuous scanning of data across multiple sources and environments
- ▶ Intelligent and automatic classification and powered by AI and pattern matching
- ▶ Automatic tagging based on configurable policies
- ▶ Interactive dashboards and reporting to monitor the data portfolio
- ▶ Collaborative workflows to validate and refine classifications
- ▶ Intelligent detection of sensitive and critical data
- ▶ Native integration with the Data Governance & Catalog module
- ▶ Vertical link suggestions to enhance context and discover relationships

3.6. TECHNICAL DATA LINEAGE

The Technical Data Lineage module provides full visibility into data flow across systems, processes, and transformations, enabling organizations to trace the origin, movement, and evolution of each data element, from source to consumption, with end-to-end and field-level granularity.

Using specialized **advanced catchers** and preconfigured capabilities, the module automatically detects and manages technical lineage, supporting data source mapping and interactive visualization of links. Its intuitive UI allows users to explore complex data flows clearly and immediately, accelerating impact analysis and decision-making.

The module integrates natively with the Hub, transferring only relevant metadata to business users and enhancing semantic navigation within the Data Governance & Catalog module. It also supports third-party connectors, making it flexible and adaptable to even the most sophisticated lineage requirements.

Key Features

- ▶ Lineage Catcher for automated metadata retrieval
- ▶ Lineage Analyzer for parsing transformations
- ▶ Interactive UI for visualization of technical lineage and impact analysis
- ▶ Versioning and change tracking across lineage versions
- ▶ Native integration with the Data Governance & Catalog module
- ▶ Open integration with third-party connectors

3.7. ADVANCED MODELER & DEVELOPER TOOLKIT MODULE

The Advanced Modeler & Developer Toolkit is the product's most powerful module, giving organizations full control to shape and extend out-of-the-box functionalities with unmatched flexibility and customization.

Leveraging the flexibility of the composable architecture, it allows for deep customization



both at the UI/UX level and in the underlying engine logic.

For governance-related modules, it enables:

- ▶ The definition of the governance model in every aspect.
- ▶ Granular configuration of data and metadata access policies.
- ▶ The design of collaborative workflows that reflect organizational processes and responsibilities.

For operational modules, the toolkit offers advanced configuration options for:

- ▶ Engines and control processes for data validation and verification.
- ▶ Dataset integration, enrichment, and transformation logic.
- ▶ Tools for technical lineage harvesting, ensuring traceability and governance alignment.

This module is ideal for organizations that aim to unlock advanced capabilities and build fully tailored solutions that perfectly fit their data strategy, governance frameworks, and operational workflows.

4. Connectivity and APIs

Beyond its core capabilities, the product ensures full interoperability and seamless integration within any technological ecosystem through a non-disruptive approach, maximizing the value of existing investments in systems and platforms.

The product offers an **extensive library of over 200 connectors**, enabling access to data from virtually any external source or format, on-premises or in the cloud. Supported sources include:

- ▶ Relational databases (e.g., Oracle, Teradata, MS SQL, SAP Hana)
- ▶ Data lakes and data warehouses
- ▶ Cloud data platforms (e.g., Google BigQuery, Snowflake)
- ▶ Flat files (.csv, .txt, parquet, etc.)
- ▶ Open table formats (Iceberg, Delta Lake)
- ▶ Applications Rest API

In addition, the product includes a suite of Metadata Catchers, purpose-built for retrieving metadata at rest and detecting cross-source technical lineage.

No matter the source, data and metadata are collected and standardized in a tabular format, making them easy to use as a foundation for transformation pipelines, data discovery, and catalog enrichment.

All product functionalities are also exposed through REST APIs, enabling straightforward integration with external applications and platforms. An integrated roles and privileges system simplifies and secures access management, ensuring centralized control over data and metadata access policies.

5. Designed for every role

The product is designed to deliver a **personalized experience** for different user profiles, ensuring each role has access to the right tools, interfaces, and capabilities to contribute effectively to data governance and quality initiatives.

Business User

With dedicated interfaces and guided workflows, even users without technical expertise can navigate and leverage the platform with ease. They can consult, validate, and enrich information, configure out-of-the-box modules, and make informed decisions through AI-powered search and intuitive dashboards.



Data Personas (e.g., Data Modelers, Data Stewards)

Data governance and data quality professionals can access advanced configuration and customization features, both through out-of-the-box modules and the Advanced Modeler & Developer Toolkit. A no-code/low-code approach enables them to efficiently configure, manage, and orchestrate data pipelines and data management processes, accelerating delivery and reducing dependency on IT.

Developer

For technical users accustomed to modern development environments (VS Code, Git, Python, YAML, scripting), the product offers the freedom to build and extend functionalities. Leveraging the composable architecture and API, developers can seamlessly integrate custom engines and bespoke UIs into the product.

6. Business value at a glance

Seamless integration between governance and execution

Thanks to the Hub & Spoke architecture, information flows effortlessly between all product components. This eliminates data silos and ensures a consistent and controlled data flow across the organization, combining a centralized and unified vision with distributed execution across domains.

End-to-End traceability and quality

Every piece of data and metadata is fully traceable from its origin to its point of consumption. This end-to-end approach guarantees not only data quality but also the ability to reconstruct its complete history, including every transformation applied, giving users maximum trust in their information.

Full auditability

All activities and decisions are logged, making processes fully auditable and supporting compliance with regulatory requirements. This strengthens transparency, supports governance frameworks, and simplifies reporting.

AI-Powered intelligence

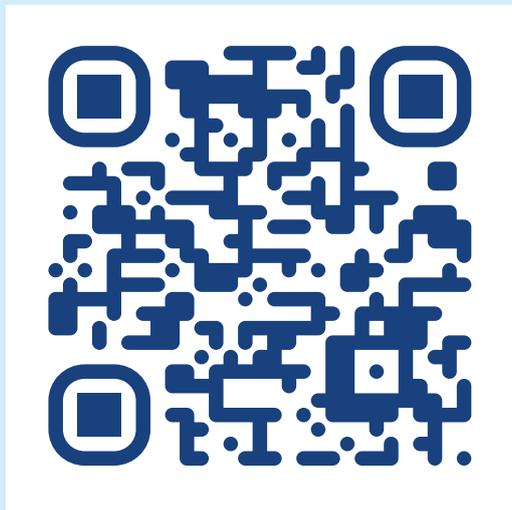
AI accelerates and automates time-consuming activities, from data discovery to rule generation and justification management, drastically reducing manual effort and increasing operational efficiency. Advanced agentic AI capabilities support all user types in their daily tasks.

Cloud-ready and hybrid architecture

The product supports hybrid deployment models, distributing workloads across on-premises and public/private cloud environments to optimize costs and performance. By bringing the engine closer to the data, it reduces latency and boosts scalability.

Effortless adoption and fast time-to-value

A rich set of out-of-the-box configurations enables rapid implementation and adaptation to business needs. End users benefit from streamlined deployment, immediate operational results, and a scalable, flexible solution significantly shortening delivery timelines and accelerating business value realization.



ABOUT

Founded in 2004 and headquartered in Turin, Italy, Irion is a leading software company specializing in Data Governance, Data Quality, and solutions for **Enterprise Data Management (EDM)**. With a strong presence in banking, insurance, energy, and manufacturing, and trusted by leading enterprises, Irion has established itself as a leader and pioneer in the data management landscape. The company was included in the **2025 Gartner® Magic Quadrant™ for Augmented Data Quality**, further strengthening its market position and underscoring its commitment to excellence and technological leadership. Irion's mission is to help enterprises **unlock the full value of their data** through innovation, ensuring trust, compliance, and operational efficiency in increasingly complex and regulated ecosystems.



www.irion-edm.com