



Intelligent MDM SaaS

Digital Business Requires Intelligent Master Data Management

Businesses in every industry feel today's pressure to innovate their products and services, transform business models and operations, and improve customer experience to stay competitive in a digital-first world. Yet, the critical data necessary to improve business outcomes is fragmented across line-of-business applications and analytical data stores on premises and in multiple cloud ecosystems.

Master data management helps you ensure the consistency and quality of multiple domains of master data such as customer, product, supplier, cost centers, locations, and more. With multidomain MDM, you can build a 360-degree view across the business and get insights into how activities and relationships in different functional areas of the business impact overall business performance.

Your ability to manage multiple domains of master data and build a 360-degree view across your business value chain is critical to be able to achieve strategic business objectives such as customer experience, digital commerce, supply chain optimization, and finance transformation, improving key metrics such as:

- **Revenue Growth.** Drive growth by managing customer, product, and channel data to improve marketing analytics and commerce operations
- **Cost Optimization.** Control costs by managing material, supplier, and purchase order data to improve procurement analytics and logistics management
- **Business Innovation.** Adapt to changing market conditions by managing sales, operations, and finance data to improve scenario analytics and introduction of new products and services

Key Benefits

- A modern cloud experience that increases adoption, productivity, and agility
- An easy-to-manage solution that speeds deployment and reduces the cost of ownership
- A comprehensive solution that accelerates business outcomes

Key Capabilities

Informatica® Intelligent Master Data Management is the only offering that manages all domains of master data in a single SaaS solution, supported by the Informatica Intelligent Data Management Cloud (IDMC). We provide market-leading capabilities built on a modern microservices architecture and make extensive use of AI to automate and scale the practice of mastering data. Preconfigured domain and industry content and low-/no-code configuration simplify administration and stewardship tasks, speeding deployment and streamlining ongoing management. AI-powered automation and modern user interfaces increase productivity and efficiency, and the ability to manage multiple domains ensures long-term return on investment.

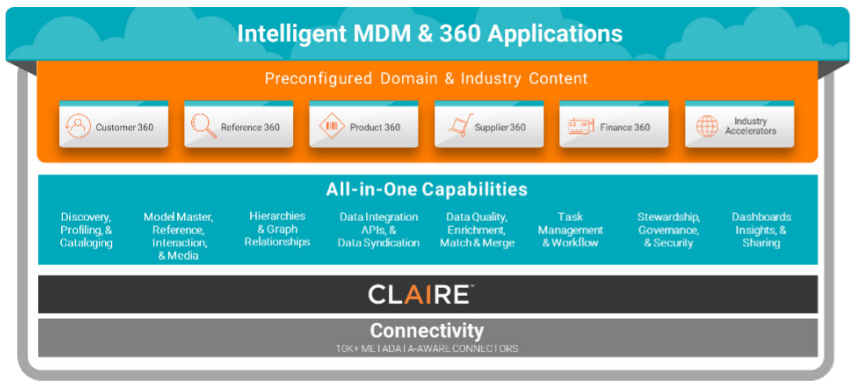


Figure 1: Everything you need to modernize the practice of master data management.

Connectivity

Connectivity is important for master data discovery, third-party enrichment, replication across applications, syndication to data pools, and sharing across cloud, on-premises, mobile, and social processes. With Multidomain MDM SaaS on the Informatica Intelligent Data Management Cloud, you can choose from an extensive list of prebuilt connectors or join hundreds of customers who have configured thousands of custom connectors using low/no code development to integrate and share your master data anywhere it's needed.

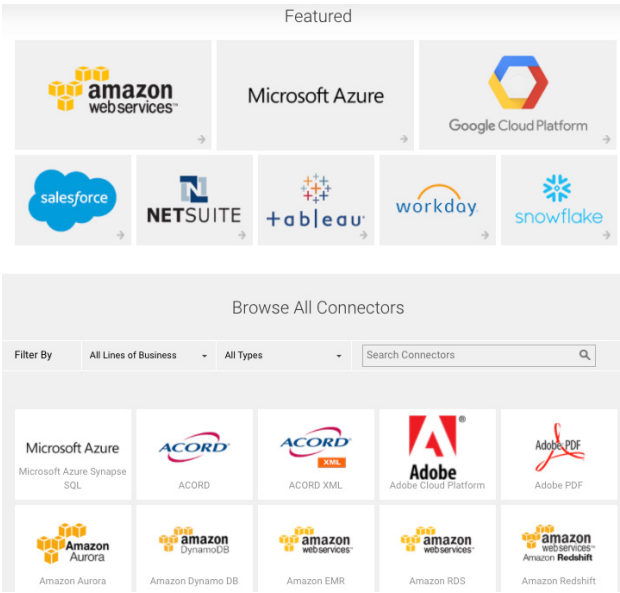


Figure 2: Informatica Intelligent MDM SaaS out of the box connector examples.

Data Discovery, Profiling, and Cataloging

The data and application landscape has become increasingly complex and fragmented. Master data is siloed across line-of-business applications and analytical data stores on premises and in multiple cloud ecosystems. The Informatica CLAIRE AI engine helps you automate master data discovery, determining domain type, identifying personal and sensitive data, mapping lineage, and cataloging master data assets.

Informatica Data Governance and Catalog

Unity CDGC Generic Customer Retail Demo v1

V_FACT_ALL_SALES_ORDERS_UPDATED

Overview | **Columns** | Lineage | Relationships | Data Quality | Stakeholders | Properties | Tickets | History

Columns (41)

Name	Glossaries	Classifications	Ref Defect Non-Defect %	Source Data Type	Inferred Data Type	Description
AddressLine1	Corporate Address	Address		VARCHAR	String (99.68%)	
CompanyName	Company Name			VARCHAR	String (32.80%)	
CustomerKey				NUMBER	Num(26, 71%) +4	
Education				VARCHAR	String (46.72%)	
FirstName	First Name	First Name		VARCHAR	String (47.20%)	
Gender	Gender			VARCHAR	Fixed Length String(46, 72..	
HouseOwnerFlag				VARCHAR	Integer(46, 72%) +3	
LastName	Last Name	Last Name		VARCHAR	String (47.20%)	
NUMBER_VISITORS_PER_DAY				NUMBER	Integer(100.00%) +2	
Occupation				VARCHAR	String (46.72%)	

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Items Per Page: 50

Figure 3: Discover, profile, and catalog master data across the enterprise.

Data Modeling

Informatica Intelligent Multidomain MDM SaaS is a true multidomain solution, and provides prebuilt, extensible, and customizable data models for any type of master data, including but not limited to customer, material, supplier, employee, product, location, asset, and cost centers, along with verticalized variations of those domains. We've also created "Smart Fields," which leverage the CLAIRE AI engine and allow you to quickly add and map new data sources for common data types like addresses, phone numbers, and emails. All aspects of data modeling are easily managed from a single pane of glass.

Informatica Business 360 Console

Locations | Valid

Model | Data Flow | Consumption

Attributes | Data Quality | Match | Survivorship | Events

Show: Enabled Fields

Basic Fields

Address

Default Indicator | Address Type | Integer Type | Address Line 1 | Address Line 2 | Address Line 3 | City

Country | State | Country 2 | Postal Code | Postal Code Extension | Coordinate System | Location Coordinate Data

Address Status | Latitude | Longitude | Start Date | End Date | Enabled Indicator

Properties: Address

General

Status: ☒ Enabled ☐ Disabled

Data Quality

Display Name: Address

Survivorship

Internal ID: Address

Description: Define all the fields in a standardized, global address. When you want to support more than one address in a record, select

Figure 4: Informatica MDM SaaS intuitive low/no code model configuration interface.

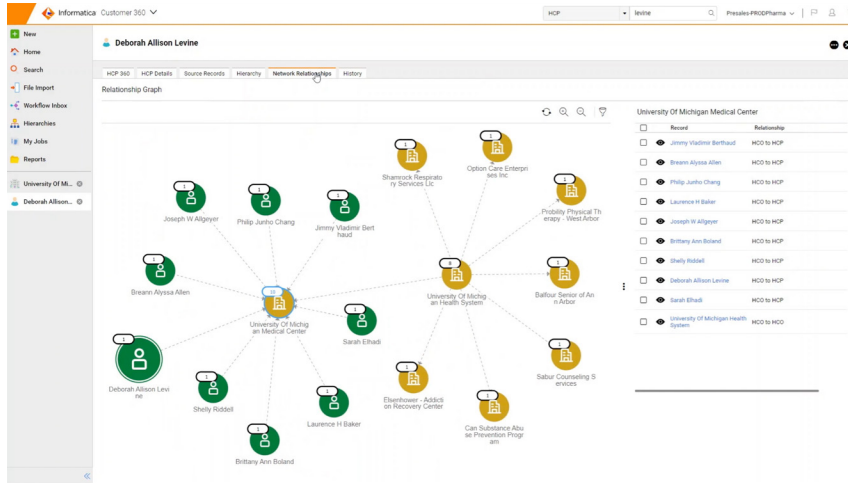


Figure 5: Informatica Intelligent MDM SaaS master data knowledge graph.

Data Integration, APIs, and Synchronization

Once data models, hierarchies, and relationships are defined, you'll need to onboard data. Informatica Intelligent Multidomain MDM SaaS leverages the integration services of the IDMC to support multiple patterns for both ingress and egress of master data such as bulk, batch, and real-time ETL, SOAP, EJB and REST APIs, and message queues. These messaging, API, and event-based publishing capabilities help you seamlessly orchestrate the exchange of master data at any latency across cloud, mobile, and on-premises applications used in business processes.

We simplify data integration mappings using a canonical staging model, and our "Smart Field Mapping" functionality uses the CLAIRE AI engine to automate onboarding of master data by identifying source fields and field types and mapping them to master data models.

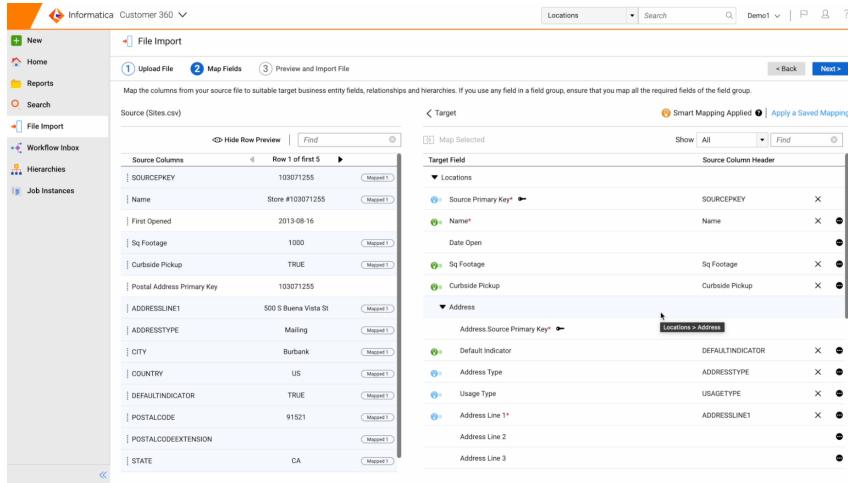


Figure 6: Accelerate master data onboarding with AI-powered “Smart Field Mapping.”

Data Quality and Enrichment

The primary goal of master data management is accurate, complete, and consistent data about the core business entities used to run your business. Through embedded Cloud Data Quality services, Informatica Intelligent Multidomain MDM SaaS supports batch and real-time modes of profiling, parsing, standardization, validation, and enrichment. Additionally, with reference data management capabilities, validation rules and reference data lookups can be embedded into operational processes, and API calls can be made to external data providers like D&B and Acxiom.

Blended machine learning techniques like deterministic, heuristic, and probabilistic are used to automate profiling, cleansing, and standardization. The CLAIRE AI engine can also recommend and associate data quality rules with master data fields and automate execution of those rules across all the master data sources in an enterprise.

An additional benefit of “Smart Field” capabilities, context-aware fields within the data model means the system automatically knows how to standardize and verify address, phone number, and email data. With Informatica’s Data as a Service, a simple click of a checkbox allows this information to be automatically validated against authoritative sources such as a national postal database.

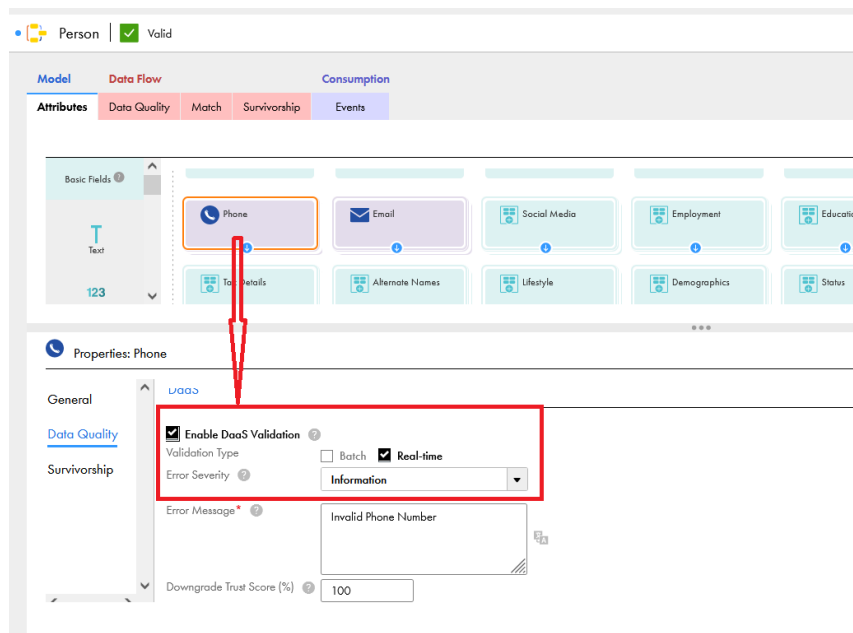


Figure 7: Informatica Intelligent MDM SaaS “Smart Fields” automate data validation.

Match, Merge, and Survivorship

Unique to MDM is the accurate and highly precise consolidation of multiple different records of a domain in the best version of the truth. Consistent master data is much easier to maintain once master data has been deduplicated and records have been consolidated into a single golden record. Informatica uses a combination of declarative rules and AI algorithms to improve data matching accuracy. The Intelligent Match feature of the CLAIRE AI engine enables business subject matter experts to use machine learning to train the match engine by simply going through a few rounds of matching records. Full transparency is provided into the calculation behind the match score for any given match pair.

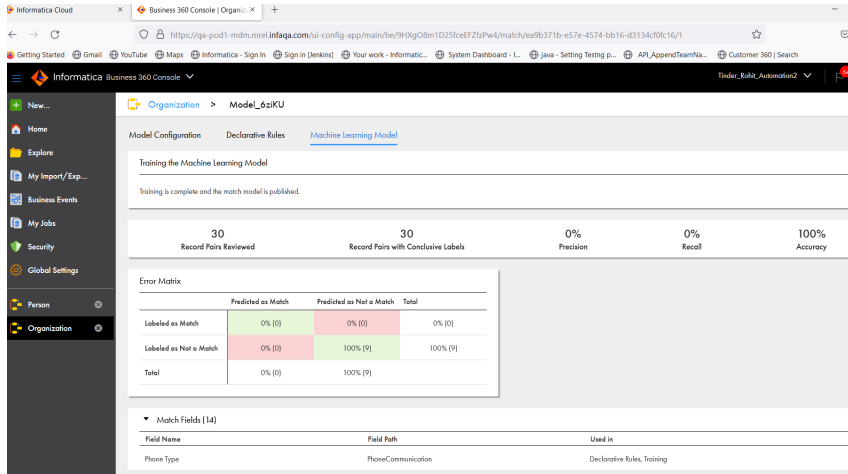


Figure 8: Train match algorithms in hours instead of days with our “Intelligent Match” feature.

Our patented Trust Framework defines survivorship rules and calculates trust scores at the attribute level, allowing you to pick the most recent, correct, and trusted source for each field. For example, CRM is usually a good source of phone numbers and email addresses, but a shipping system is usually a better source for address fields. Trust rules are applied automatically when two records are merged, when any source record is updated, and when records are unmerged.

Process Management and Workflow

Embedded Cloud Application Integration services within the IDMC provides a full BPM engine within MDM that implements WS-BPEL 2.0 and BEPEL4People-compliant process models and encompasses event processing, service orchestration, and process management. The product covers all applicable business functions internal to MDM, such as task management and conditional routing, along with integrating MDM into large business processes such as delivering personalized offers into specific customer touchpoints and track-and-trace in product recalls.

The product also provides out-of-the-box workflows with preconfigured multi-step approval processes, “Save the Draft” functionality within workflows, and out-of-the-box dashboard measuring workflow progress. Prebuilt functions include create and update, as well as domain-specific workflows. Workflows are easily customized with a user-friendly, low/no code interface.

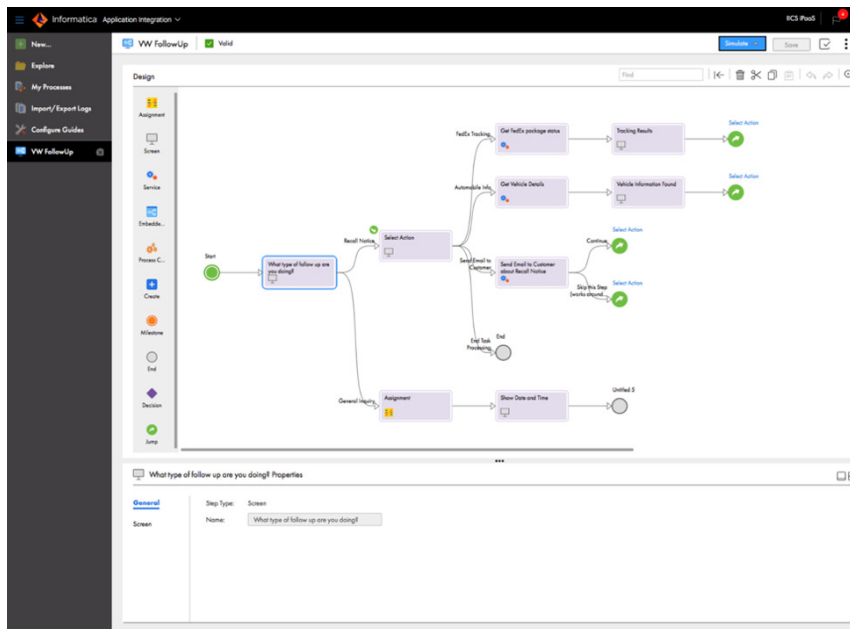


Figure 9: Integrate master data into larger business processes like order tracking.

Stewardship and Task Management

A configurable task inbox shows data stewards their list of current tasks and the status of each task, with drilldown to the underlying subtasks. Data stewards (or a task administrator) can reassign tasks to other users to complete. Conditional notification and routing capabilities speed identification and remediation of issues.

Workflow Inbox

Quick Filters ▾		Open Tasks (3)		
Task ID	Title	Task	Priority	Status ▴
683690390687477760	Prospects for 2021 Summer Campaign	Final Review	Medium	Unassigned
683690470089846784	CRM Customers	Final Review	Medium	In Progress
683690537114824704	NSE Customer	Final Review	Medium	In Progress
...				
↑ Final Review Prospects for 2021 Summer Campaign				
Task:	Final Review	Assigned To:	Due By:	
Status:	Unassigned	Created By:	Created Or	
Priority:	↑ Medium	Modified By:	Modified O	

Figure 10: Informatica Intelligent MDM SaaS configurable task inbox.

The CLAIRE AI engine helps data stewards and business users improve data quality at the point of entry. The “Similar Records” recommendation panel slides onto the screen when records are trying to be entered that are like existing records. This help prevent data duplication and the need for matching and merging records later.

Business Entity Services APIs allow you to embed master data stewardship into business applications and processes. You can make REST calls to create, update, delete, and search for base object records and related child records in a business entity, as well as create, update, and delete attachments to tasks and records.

Data Governance

Informatica Intelligent MDM SaaS maintains a highly governed set of core attributes that are the basis of a common definition of master data entities to ensure completeness and consistency across the enterprise. Master data policies are enforced to stay compliant with internal standards and external regulations. For example, we can execute internal controls for separation of duties by enforcing the creator of changes and the approver of changes must be different people. The product keeps a full audit trail of changes including, who, what, and when. This audit trail includes a timeline capability to search for, view, and compare per effective dates.

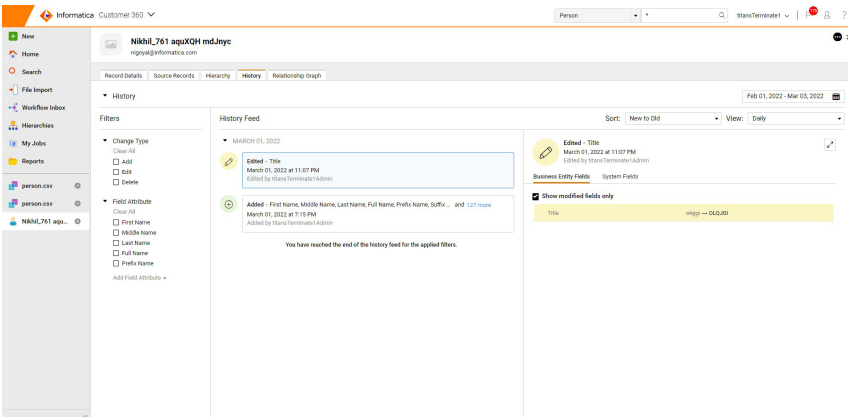


Figure 11: Easily track and audit changes to master data.

Data Privacy

Master data may also contain sensitive data about customers, employees, and partners that is subject to a variety of data privacy regulations. As part of the master data discovery process the CLAIRE AI engine can identify and classify sensitive and personal data, allowing you to associate privacy policies and map rules for enforcement. You can also master consent—including where the consent was given, when a consent has been revoked, and what types of data can be used for which purposes—as an attribute of the master data record, to better understand how you should use the data.

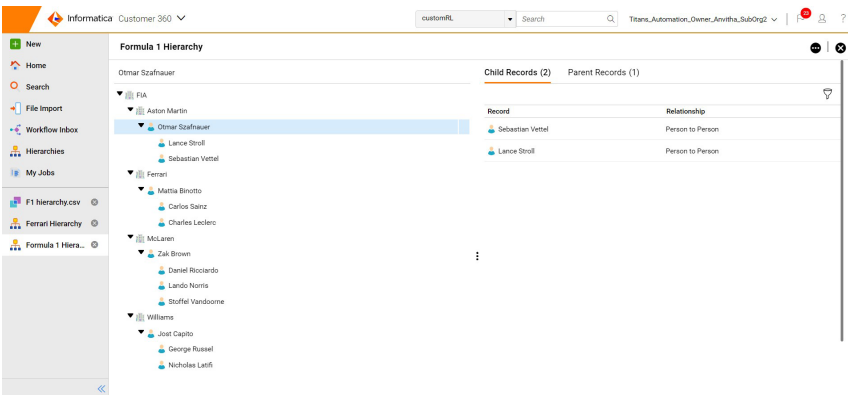


Figure 12: Examples of privacy policies that are applicable to personal data.

Access controls are enforced based on policies and user authorizations that you set, and master data can be dynamically masked at query time. Multidomain MDM SaaS provides real-time monitoring and protection as part of API-based master data exchange in business processes. You can audit, record, and block sensitive data leakage in API requests and responses. You can also select the type of information to protect—such as credit card numbers, personally identifiable information (PII), and tax identification numbers—as well as the level of protection for each information type to requests, responses, or both.

Security

With increased global connectivity and cyber-attacks on the rise, it's critical to protect your master data. We built our cloud with security as a primary design principle, and our product development incorporates Informatica's Secure Development Lifecycle to ensure that we eliminate security defects while we develop our products.

Informatica maintains the most stringent **cloud security certificates**. Data at rest is encrypted using an AES-128 key, while data in transit uses TLS-1.2 or greater protocol. Our **cloud security program** focuses efforts and resources across the following areas:

- Application security
- Identity and access management
- Vulnerability management
- Security incident response
- Training and awareness
- Business continuity and disaster recovery
- Governance, risk management, and compliance

Informatica Multidomain MDM SaaS supports cell-level, role-based security. Roles are highly granular and flexible, which allows administrators to implement safeguards that align with the security policies of their organization.

A user account inherits the privileges configured for any role to which the user account is assigned. Multiple authentication options are available, including password-based, SSO-based, certificate-based or token based, and master data can be dynamically masked at query time.

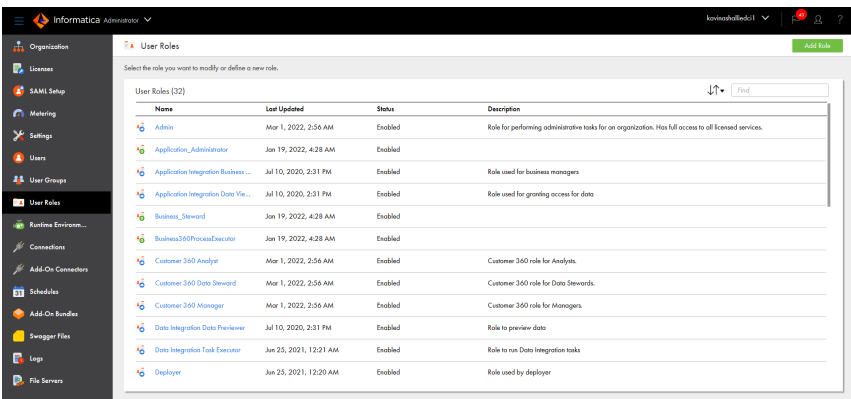


Figure 13: User account management is done centrally for all services.

Dashboards and Insights

The business user's experience is critical to the success of master data management programs. After studying the context in which different people—such as business users, data stewards, application administrators, and analytics teams—use master data management solutions (including their end-to-end interaction processes), we were able to design intuitive interfaces, guided workflows, and machine learning recommendations that increase adoption, productivity, and agility.

Configurable, role-based dashboards summarize information and present an easily digestible view that is contextualized for the person who is using it. And in addition to ensuring the core master data is correct, you can enrich it and link it with other information, such as activity data, to enable drill down for detailed analysis and insights. Alerts highlight changes, and recommendations from the CLAIRE AI engine help guide user actions. Additionally, calculated fields, such as churn scores, and data from non-mastered and other external sources, such as social media, can be inserted into the dashboards for a comprehensive, single view of a record.

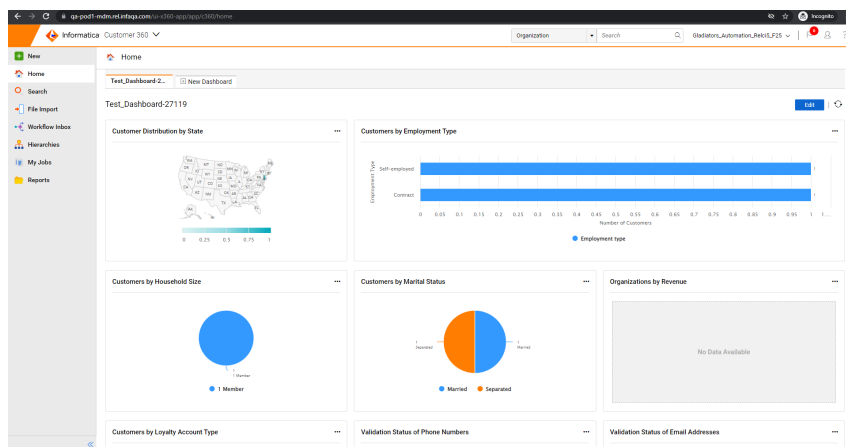


Figure 14: A modern cloud experience that increases adoption, productivity, and agility.

Data Sharing and Marketplace

Broad and consistent use of master data throughout the organization improves analytics, operations, and decision making. We enable self-service access to master data through a data marketplace that provides create and publish, search and shop, and fulfill and track capabilities to help you build a data-driven organization. The CLAIRE AI engine uses content-based filtering, user ranking, and data similarity to make recommendations about master data to use.

Data usage terms and conditions are applied based on the type of master data being accessed, to provide guidance to data consumers regarding how to use sensitive and personal information compliantly and ethically. Once usage policies have been accepted, users can automate provisioning (for example, into cloud data lakes for AI projects) of master data.

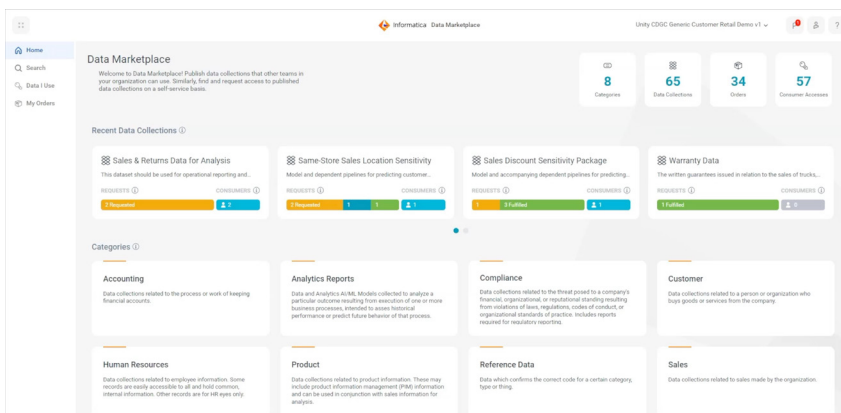


Figure 15: Easily find and access master data through the data marketplace.

Summary

With Multidomain MDM SaaS, we've created the most modern and all-in-one MDM solution using a cloud-native microservices architecture delivered through the Intelligent Data Management Cloud, user-centric design principles, and AI-powered automation of the CLAIRE AI engine. Like all technology-enabled business disciplines, the capabilities required for the practice of master data management are constantly evolving to address changing business needs. By modernizing the practice of master data management, we're able to provide customers with:

- **A modern cloud experience that increases adoption, productivity, and agility.** By studying the context in which different people—such as data stewards, application administrators, business analysts, and analytics teams—use master data management solutions (including their end-to-end interaction processes), we've been able to design intuitive interfaces, guided workflows, and machine learning recommendations that simplify the discovery, curation, and consumption of master data for analytical and operational use.

- **An easy-to-manage solution that speeds deployment and reduces the cost of ownership.** Integrating all the data management capabilities required for the practice of master data management—such as data and process integration, API management, data quality, data modeling, hierarchy and graph relationship management, workflow and task management, and security—in a single solution with pre-configured domain and industry content, simplifying implementation and administration of multidomain master data management.

- **A comprehensive solution that accelerates business outcomes.** An ability to manage multiple domains of master data and the relationships between domains such as customer to product and product to supplier, as well as connecting master data and other types of data like transactions and interactions supports a broad range of digital transformation use cases such as customer experience, digital commerce, supply chain optimization, and finance transformation. This ability to scale across functional areas of the business ensures long-term value.

For More Information

Learn more about Informatica AI-powered Master Data Management at <https://www.informatica.com/products/master-data-management.html>.

Get a faster return on your investment with Informatica Professional Services

Talk to our experts in cloud data management.

Check out our services.

Informatica (NYSE: INFA) brings data to life by empowering businesses to realize the transformative power of their most critical assets. When properly unlocked, data becomes a living and trusted resource that is democratized across your organization, turning chaos into clarity. Through the Informatica Intelligent Data Management Cloud™, companies are breathing life into their data to drive bigger ideas, create improved processes, and reduce costs. Powered by CLAIRE®, our AI engine, it's the only cloud dedicated to managing data of any type, pattern, complexity, or workload across any location — all on a single platform. Informatica. Where data comes to life.

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