

Cognizant® Data Unification Framework

Accelerating Unified Customer Intelligence with Azure

Cognizant® Data Unification Framework is a custom built and domain agnostic data unification framework to ingest data from multiple source systems and build a unified view.

It has been built keeping in mind both NoSQL data store as well as traditional RDBMS databases making it well suited for small enterprises as well as large scale systems.

CDUF (Cognizant® Data Unification Framework)

CDUF integrates multiple Azure services to deliver a single source of truth for customer data, enabling:

- Master Data Management (MDM)
- Customer 360° profiling
- Real-time data sync
- Entity de-duplication & survivorship
- API-based data publishing

Core Deliverables

- **Unified Data Store:** Azure PostgreSQL for golden customer records.
- **Real-Time Ingestion:** Azure Event Hub for streaming from CRM/ERP.
- **Microservices Layer:** Spring Boot services on AKS/ Container Apps for match & merge logic.
- **Stewardship UI:** Azure Static Web Apps for CRUD and profile views.
- **Search & Caching:** Redis & Elasticsearch for performance.
- **Analytics & Processing:** Azure Data Lake & ACA for batch/real-time workflows.

Implementation Phases

- Assessment & Design: Source analysis, architecture blueprinting.
- Development: Microservices, ingestion pipelines, UI.
- Deployment: Container orchestration, CI/CD setup.
- Validation & Go-Live: Data accuracy checks, production rollout.

Key Components

- Open Source based Architecture which is independent of any platform
- Rule based data transformation and matching service
- Configurable data structures using JSON and RDBMS
- PWA based data stewardship UI providing rich user experience
- Supports any NoSQL and RDBMS

Business benefits of the Cognizant® Data Unification Framework

- Remove duplicate entity records
- Boost cross-sell and up-sell potential
- Enhance service and loyalty with a 360° customer view
- Improve marketing ROI through better targeting
- Prevent digital leaks to retain customers
- Personalize engagement using multi-touchpoint insights
- Use a reusable, metadata-driven framework
- Build a foundation for customer data analytics



Ready to transform your associate experience?

Contact our experts today for a personalized demo.

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