



Cognizant FHIR Data Integration ETL Framework

Microsoft Azure Offering

March 2022

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Cognizant

Key Drivers for Healthcare Data Interoperability

“A Member / Patient Owns Their Own Healthcare Data”

“...Without an **enforced standard of interoperability**, data exchanges are often complicated and time-consuming. We believe patients should have the ability to move from payer to payer, provider to provider, and have **both their clinical and administrative information travel with them** throughout their journey..”

Goal of CMS-9115-F Final Regulation

Business Drivers

Industry is moving fast and seeing rapid adoption...



Varying Compliance Needs

The adoption of FHIR is very difficult as FHIR HL7 standard layout and structure change rapidly as per varying compliance requirements



High Cost of Adoption

Cost of adoption increases when internal organization domain model differ from FHIR interoperability standard model

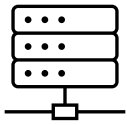


Varying Data processing needs

Adoption is very slow due to varying data processing needs (Big data volume) and less scalability

Cognizant's FHIR Data Integration ETL Framework

How does **Cognizant's Solution** solve the pain points?



Metadata driven Framework

The solution is driven by quick start configuration drive metadata integration framework setup that minimizes changes needed due to rapid FHIR standard layout changes

90%

Metadata Driven



Seamless FHIR transformation

Framework supports FHIR transformation and terminology normalization of acquired data in any delimited/fixed width format to create and store FHIR profile in JSON format efficiently

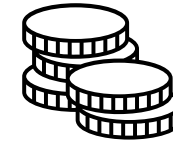


Cloud Enabled

It is cloud enabled and is highly scalable as per big data volume

95%

Cloud Enabled & Scalable

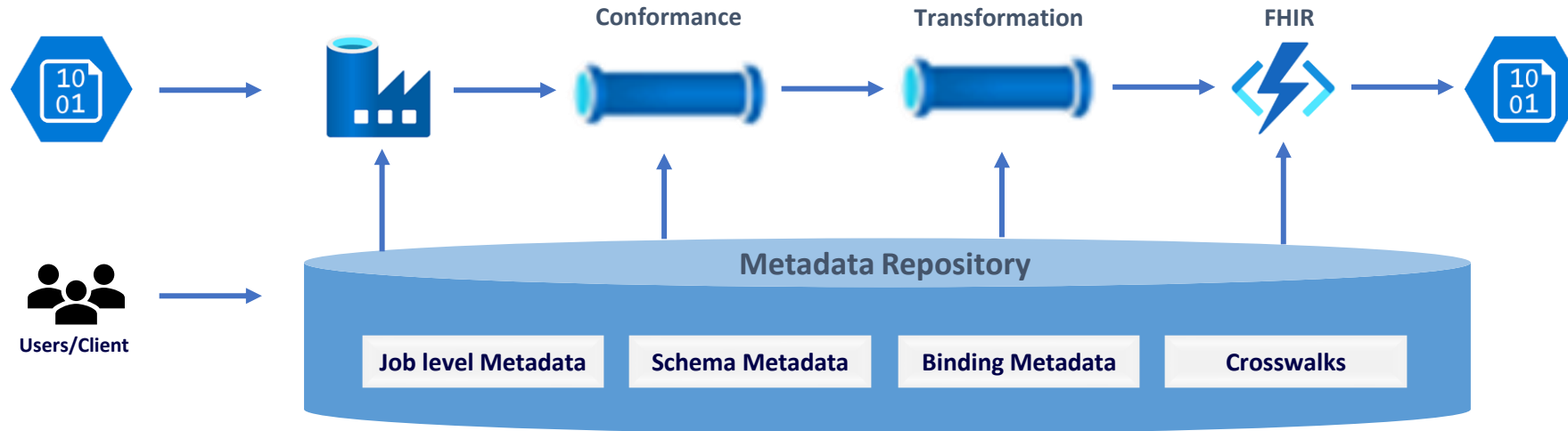


Reduced Cost of Care

The cost of adoption is less as it's a cloud solution and it consumes resources only when the process runs

A scalable quick start the "FHIR Data Integration" ETL framework ingests and transforms data into FHIR standards in a cloud data store for interoperable consumption

FHIR Data Integration Framework – Explained...



Components & Benefits:

- 1 Job Metadata**
Enable to create reusable pipelines
- 2 Schema Metadata**
Enable the pipeline to perform dynamic schema mapping
- 3 Binding Metadata & Crosswalk**
Enable the Terminology Binding lookup component reusable and process lookups dynamically

Enables Pipelines to run metadata driven with minimum Config changes including one time configuration setup

- Event Triggers (Job scheduler)
- Linked a Service (Blob Configuration)
- Metadata Table Setup
- Crosswalk Tables Setup
- Azure Function Setup