Article
[Yuri Marx](#) · May 20, 2021   4m read

Data Fabric Architecture with InterSystems IRIS

What is Data Fabric?

"It is a set of hardware infrastructure, software, tools and resources to implement, administer, manage and execute data operations in the company, including, acquisition, transformation, storage, distribution, integration, replication, availability, security, protection, disaster recovery, presentation, analysis, preservation, retention, backup, recovery, archiving, recall, deletion, monitoring and capacity planning, across all data storage platforms and enabling application use to meet the company's data needs company".

(Alan McSweeney)

The Data Fabric is a new way to operate the data using all resources and technology innovations available to get business value, including multimodel databases, Analytics, AI, ESB/SOA, microservices and API Management.
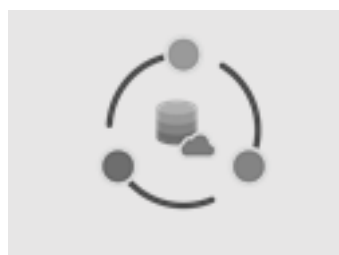
Data Fabric principles

Alan McSweeney listed the following principles when using Data Fabric:

Administration, management and control - maintain control and be able to manage and administer data, regardless of where it is located

Security - Security standards across the Data Fabric, governance automation, compliance and risk management

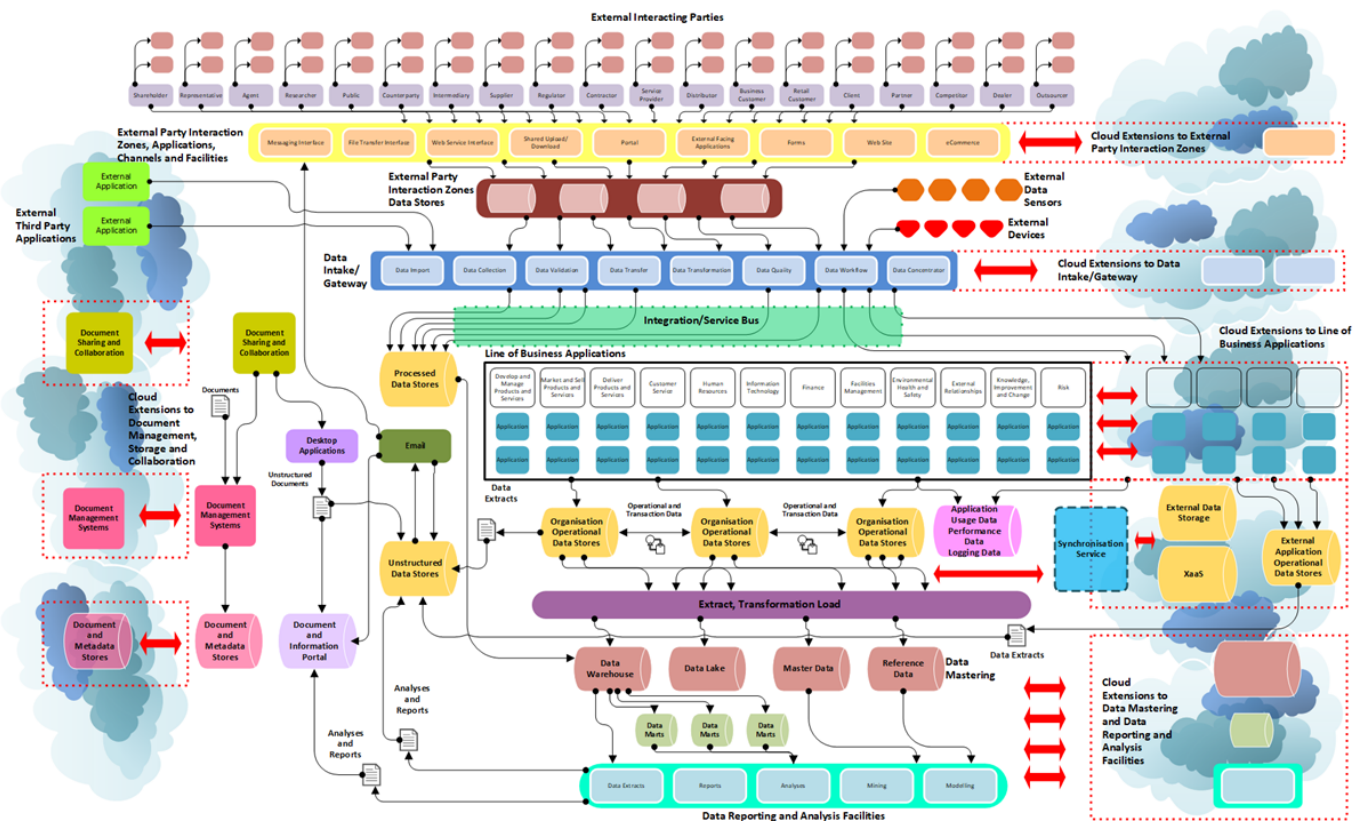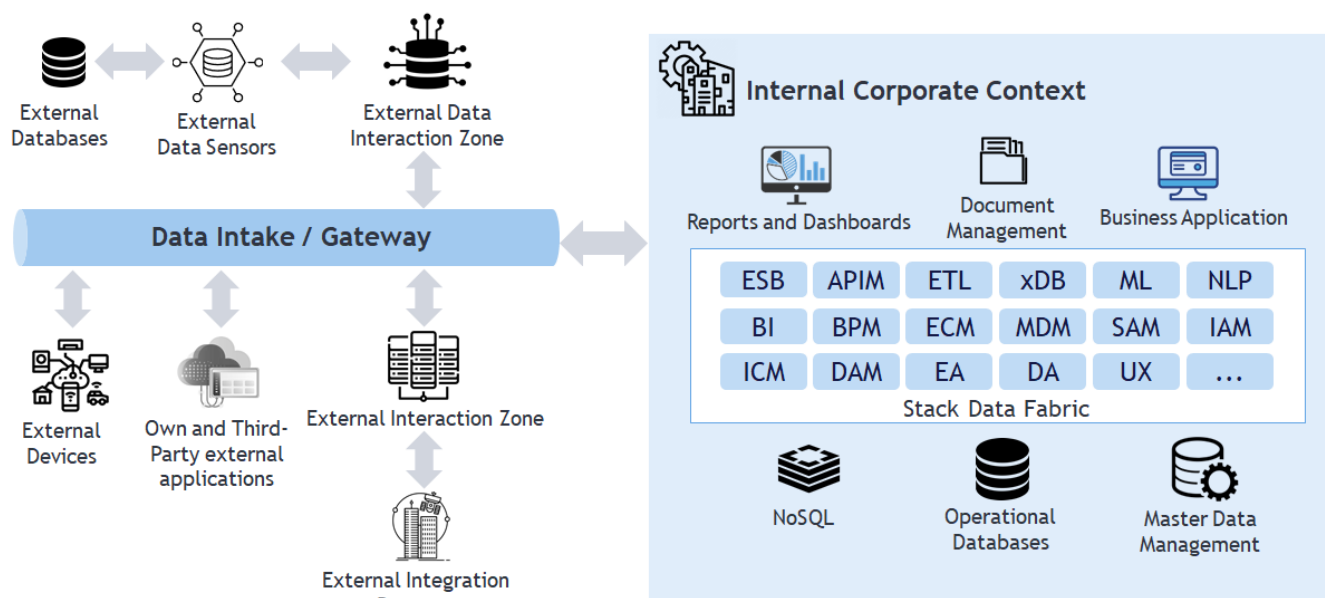**Automation** - automated management and maintenance activities, DevOps

and DevSecOps

Integration - All
components
interoperate together
at all layers

Data Fabric Architecture

McSweeney designed a conceptual diagram to detail Data Fabric into an organization, see:

You can see that is needed some technologies to get a fluid data input, processing and output operating togethether to "fabric" the data and deliver business value to the data consumers. These elements can be resumed by this diagram:

The operation of the data is in Data Intake Gateway, using ESB and API Gateway technology to capture, orchestrate, transform, enrich and integrate data assets into to corporate data assets.

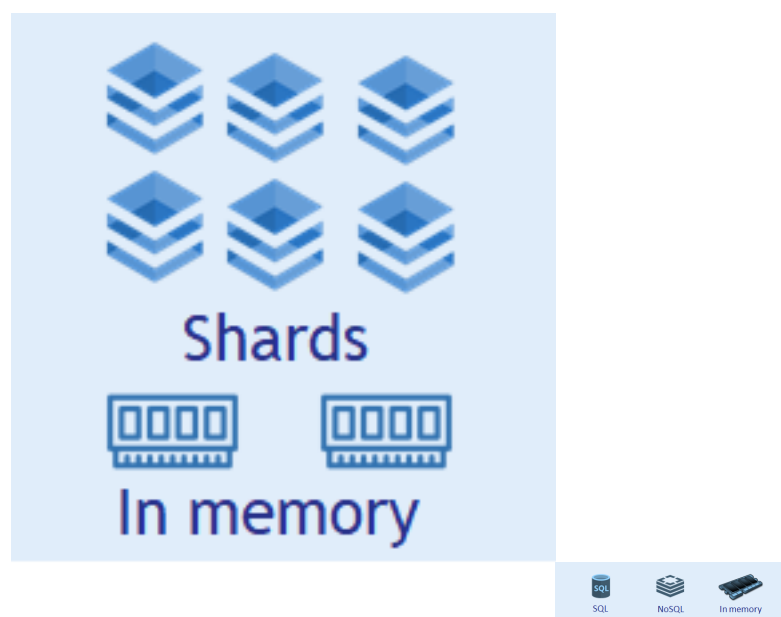The result of the data operation is consumed using Analytics and AI to allows data consumers to get the insights.

The multimodel repositories are key player too, because the volume and variety of the data and the requirement of "golden data", the "single channel of truth".

InterSystems IRIS and the Data Fabric

The InterSystems IRIS is a Data Fabric platform thats enable a Data Fabric architecture into the organizations, see:
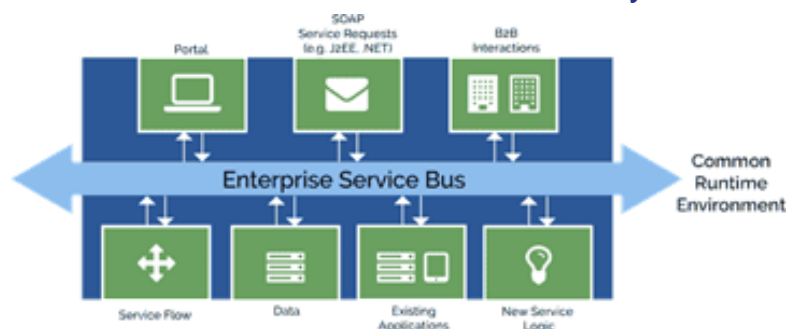
DATA FABRIC COMPONENT

Multi-Purpose Repository
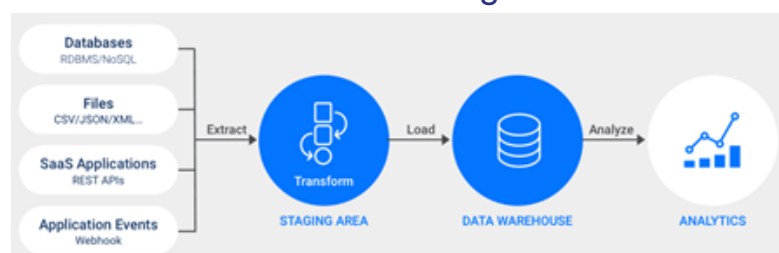

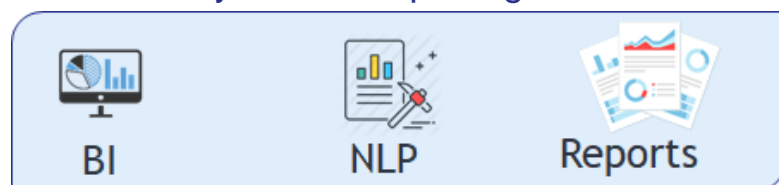### Data Intake /Gateway via Integration Bus /
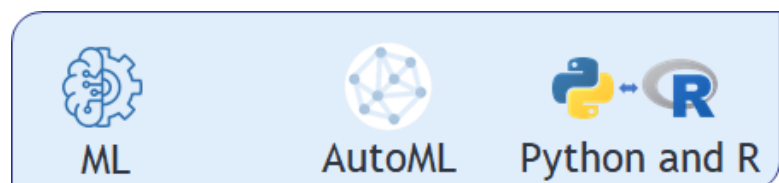
Service Bus and API Gateway

Data Extraction /Ingestion, Transformation and Loading

Analysis and Reporting Utilities

AI utilities

Conclusion

The InterSystems IRIS is not a simple database, or interoperability platform, it is a central player to get your Data Fabric. If you use another solutions from other companies, you need buy 4 to 7 solutions, but with InterSystems you create your Data Fabric with only solution, composed by multimodel DB, ESB/APIM, Analytics and AI. It is cheaper and more simple to you.

Learn more in: https://pt.slideshare.net/alanmcsweeney/designing-an-enterprise-data-fabric

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