Article

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Intersystems IRIS and the next applications generation

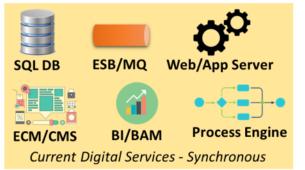
In the next ten years the applications will radically change, see my vision about it:

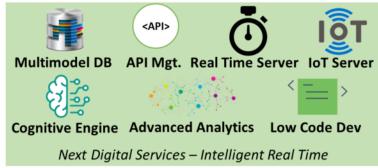




Digital Services Layer

User Experience Layer





IT Infrastructure Layer





Today, the web apps are developed using modern HTML 5/CSS/Javascript frameworks like React, Angular, Bootstrap, etc. These web apps are focused on responsive views from the laptop to tablets and mobile screens.

In the early future, new forms to interacting with the user come true, especially cognitive conversations based on voice, bots and augmented reality and IoT/Wearable conversations deployed on smart watches, clothing, shoes, glasses, portable healthcare devices and home smarts things like Amazon Alexa, smart TVs, and so on. These cognitive apps will retire current UX development and set up cognitive development kits to interact with user.

Data platforms used as backend to the next front end apps will require real time intelligent data processing on multiple formats and volumes and SQL databases will be legacy technology.

On this middleware layer or digital services layer, as I like to define, thanks to the trillion or more micro services instances operating, the current server technologies will be legacy technology too. ESB, Web App and MQ message servers will require operate like as Real Time Scalable Corporate Data Lakes with micro services API Management, not just dealing with request/response synchronous and asynchronous messages. These servers should be intelligent/cognitive data aware, understand sentiments and natural language requests.

The future is not very promising too to business processes and business intelligent management servers, like

BPMN engines, ECM and CMS repositories and traditional BI engines. Words as information will be not primary source of information, workflows will not run human tasks with HTML interfaces and automatic tasks with web services and the analytic information will be not sourced by SQL/Relational databases. In the future workflows will be cognitive and will learn at real time how to response to the user. Content will be unstructured, large, non-relational and the ownership defined by biometric identity and business decisions will be provided by machine learning, no more by prescriptive dashboards.

App development to digital services layer will not use programming languages, that will be considered the new Assembly language. In the future, the digital and business logic will be developed using low code platforms with declarative programming and high level composite digital services ready to automate continuous business changing cognitive apps.

The IT infrastructure and your assets will be dynamic, on the cloud and hyper converged to support big data scenarios, multiple elastic IT digital service instances to process, store and transmit data. Will be necessary automate the continuous deployment of the digital services developed to this new IT infrastructure, without human interaction, considering automatic QA process. For this, DevOps techniques will be mandatory, storages, network and services will have required to be digital services too. And thanks the IoT, Big Data and Cognitive Services dozens servers will be packaged on single hyper converged appliances and one VM has become dozens of Docker instances.

The Intersystems IRIS is the most prepared Data Platform on the market to this future. It has on the same server data repository to SQL, NoSQL, Object, Document and Multimedia data. On the same server has an intelligent ESB/MQ engine connected with your Big Data/Data Lake implementation operating in real-time. With IRIS it is easy implement intelligent data aware micro-services with low code implementation and IRIS has a fantastic BI engine with natural processing language exposed as REST micro service interface to consume on traditional or future digital services.

I see IRIS as a perfect central piece to deploy on the current and future digital layer and with support to Docker and cloud architecture.

For me, using IRIS today is to be in conformity and alignment with the IT present and the future, preserving, in this way, the investments already made.

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