Article
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Top 10 InterSystems IRIS Features

The InterSystems IRIS is a great data platform and it is met the current features required by the market. In this article, you see the top 10:

Note: this list was updated because many features are added to IRIS in last 3 years (thanks @Kristina Lauer)

Rank	Feature	Why	Learning more about it
1	**Democratized analytics**	**InterSystems IRIS Adaptive Analytics:** Delivers virtual cubes with centralized business semantics, abstracted from technical details and modeling, to allow business users to easily and quickly create their analyses in Excel or their preferred analytics product (PowerBI, Tableau, etc.). There are no consumption restrictions per user. **InterSystems Reports:** It is a low code report designer to deliver operational data reports embedded on any application or in a web report portal.	Overview of Adaptive Analytics, Adaptive Analytics Essentials Introduction to InterSystems Reports, Delivering Data Visually with InterSystems Reports
2	**API Manager**	The digital assets are consumed using API REST. Is required govern the reuse, security, consuming, asset catalog, developer ecosystem and others aspects in a central point. The API Manager is the right tool to do this. So, all the companies have or want to have an API Manager.	Hands-On with API Manager for Devs
3	**Scalable Databases**	**Sharding Database** The total amount of data created, captured, copied, and consumed globally is forecast to increase rapidly, reaching 64.2 zettabytes in 2020. Over the next five years up to 2025, global data creation is projected to	Planning and Deploying a Sharded Cluster Scaling for Data Volume with Sharding

		grow to more than 180 zettabytes. In 2020, the amount of data created and replicated reached a new high (source: https://www.statista.com/ statistics/871513/worldwide-data-created/). In this scenario, is critical to the business be able to process data in a distributed way (into shards, like hadoop, or mongodb), to increase and mantain the performance. The other important thing is the IRIS is 3 times more rapid then Cache, and more rapid then AWS databases, into the AWS cloud. **Columnar storage** Changes the storage of repeating data into columns instead of rows, allowing you to achieve up to 10x higher performance, especially in aggregated (analytical) data storage scenarios.	Increasing Analytical Query Speed Using Columnar Storage Using Columnar Storage
4	**Python support**	Python is the most popular language to do AI and AI is in the center of the business strategy, because allows you get new insights, get more productivity and reduce costs.	Writing Python Applications with InterSystems Leveraging Embedded Python in Interoperability Productions
5	**Native APIs (Java, .NET, Node.js, Python) and PEX**	The US has nearly 1 million open IT jobs (source: https://www.cnbc.com/2019/ 11/06/ how-switching-career s-to-tech-could-solve-the-us-talent-shortage.html). Is very hard find an Object Script developer. So, is important be able use IRIS features, like interoperability with the developer team official programming language (Python, Java, .NET, etc.).	Creating Interoperability Productions Using PEX, InterSystems IRIS for Coders, Node.js QuickStart, Using the Native API for Python
6	**Interoperability, FHIR and IoT**	Businesses are constantly connecting and exchanging data. Departments also need to work connected to deliver business processes with more strategic value and lower cost. The best technology to do this, is the interoperability tools, especially ESB, Integration	Receiving and Routing Data in a Production, Building Basic FHIR Integrations with InterSystems, Monitoring Remotely with MQTT, Building Business Integrations with InterSystems IRIS

		Adapters, Business Process automation engines (BPL), data transformation tools (DTL) and the adoption of market interoperability standards, like FHIR and MQTT/IoT. The InterSystems Interoperability supports all this (for FHIR use IRIS for Health).	
7	**Cloud, Docker & Microservices**	Everyone now wants cloud microservices architecture. They want to break the monoliths to create projects that are smaller, less complex, less coupled, more scalable, reusable, and independent. IRIS allows you deploy data, application and analytics microservices, thanks IRIS support to shards, docker, kubernetes, distributed computing, DevOps tools and lower CPU/memory consumption (IRIS supports even ARM processors!). But microservices requires the microservice API management, using API Manager, to be used aligned to the business.	Deploying InterSystems IRIS in Containers and the Cloud Deploying and Testing InterSystems Products Using CI/CD Pipelines
8	**Vector Search and Generative AI**	Vectors are mathematical representations of data and textual semantics (NLP), and are the raw material for generative AI applications to understand questions and tasks and return correct answers. Vector repositories and searches are capable of storing vectors (AI processing) so that for each new task or question, they can retrieve what has already been produced (AI memory or knowledge base), making everything faster and cheaper.	Developing Generative AI Applications, Using Vector Search
9	**VSCode support**	VSCode is the most popular IDE and InterSystems IRIS has a good set of tools for it.	Developing on an InterSystems Server Using VS Code
10	**Data Science**	The ability to apply data science to the data, integration and transaction requests and responses, using Python, R and IntegratedML (AutoML)	Hands-On with IntegratedML Developing in Python or R within InterSystems IRIS

enable AI intelligence at the moment is required by the business. The InterSystems IRIS deliver AI with Python, R and IntegratedML (AutoML)	Predicting Outcomes with IntegratedML in InterSystems IRIS

#Adaptive Analytics #Best Practices #Interoperability #InterSystems API Manager (IAM) #Python #InterSystems IRIS