

White Paper



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### Increase Differentiation and Boost Business Results with InterSystems IRIS for Health™



# **Versatile Platform Supports a Wide Array of Healthcare Applications and Architectures**

#### Why Healthcare Integration is Hard

The healthcare industry is awash in data—electronic patient records, wearable device data, public-health surveillance data, clinical data, research data, and more. Digital health solution providers (SPs) can move up the value chain and gain a competitive edge by transforming this abundance of data into meaningful and actionable insights.

Data-driven applications and services can help clinicians enhance care delivery and improve patient outcomes. They can help researchers streamline investigations and accelerate discoveries. The list of possibilities goes on and on. But system interoperability barriers and data integration challenges can hinder application development efforts, impede innovation, and impair business results.

Most healthcare applications leverage data from a variety of diverse sources. Healthcare data formats and protocols vary from source to source and vendor to vendor. Collecting, managing, and analyzing large, divergent datasets is a significant challenge. Development teams must find efficient and cost-effective ways to gather, unify, clean, and analyze vast volumes of distinct data at speed and scale.



### InterSystems IRIS for Health™ Overcomes Complex Healthcare Integration Challenges

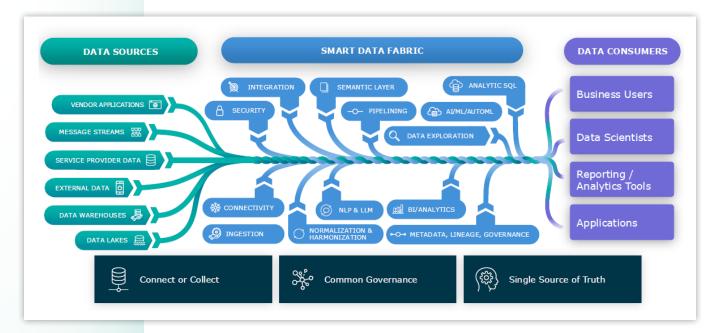
InterSystems IRIS for Health is a comprehensive, cloud-first digital health development platform that provides all the building blocks needed to work with almost any healthcare data standard. Digital health SPs can use InterSystems IRIS for Health to bring differentiated applications and services to market, quickly and cost-effectively.

The InterSystems solution makes it easy to connect to disparate healthcare systems and manage diverse healthcare data with built-in support for HL7® FHIR®, HL7 v2, C-CDA, IHE, DICOM, X12, and other national and global standards. The solution provides out-of-the-box connectivity for a wide range of applications, databases, and technologies. It lets you efficiently collect, integrate, and manage dissimilar healthcare data scattered across diverse environments.

InterSystems IRIS for Health includes a multi-model, multi-workload database management engine that supports vertical and horizontal scalability, and advanced vector search functionality for faster, more accurate queries. The ultrahigh-performance engine ingests, processes, and stores transactional data at high rates while simultaneously processing high-volume analytic workloads involving historical and real-time data.

### Smart Data Fabrics Efficiently Connect Diverse Sources and Consumers

InterSystems IRIS for Health provides many of the critical capabilities needed to implement a smart data fabric including built-in analytics, machine learning (ML), and generative AI facilities. Smart data fabrics lay a solid foundation for digital health and healthcare AI initiatives by providing a uniform, extensible, secure, and scalable data architecture. They help overcome interoperability barriers, simplify application development and maintenance efforts, reduce implementation cost and complexity, avoid data duplication and movement, and improve data quality and accessibility. They help organizations manage data gravity and contain costs by breaking down data silos and unifying data.<sup>1</sup>



Smart data fabrics lay a solid foundation for digital health and healthcare AI initiatives

<sup>&</sup>lt;sup>1</sup> Data gravity describes the effect that as data accumulates, additional services and applications are attracted to the data. Ultimately, data becomes concentrated and too expensive to copy or move.

Smart data fabrics include real-time data processing and in-memory computing functionality to accelerate data analysis, embedded ML and AI functionality, self-service analytics, reporting tools to streamline discoveries, and data governance to protect confidential information and ensure compliance.

## InterSystems IRIS for Health Supports a Wide Variety of Applications and Architectures

InterSystems IRIS for Health is highly flexible and extensible. Developers, businesses, and users can add new features, functions, or integrations without altering the core system. This adaptability ensures the platform can evolve and scale to meet new requirements, making it future-proof and versatile.

You can reuse and repurpose InterSystems IRIS for Health building blocks to efficiently address common architectural patterns including:

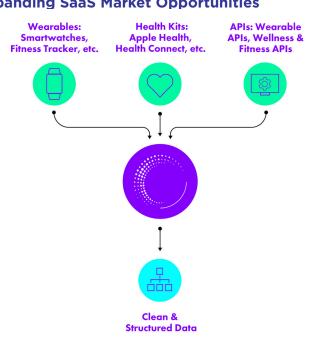
- Interoperability Connect disparate systems and interwork dissimilar healthcare protocols and data formats. Enable seamless communication between healthcare providers to improve coordination and continuity of care. Standardize data exchange to reduce the risk of errors and ensure patients' medical histories are accessible across different platforms.
- Analytics Gather and analyze large volumes of diverse healthcare data at speed and scale for advanced analytics solutions and AI and ML applications. Use real-time data insights to improve diagnosis and personalize treatment plans. Leverage predictive modeling to identify health risks early, accelerate interventions, and improve patient outcomes.
- IT simplification and optimization Consolidate systems and harmonize data to eliminate inefficiencies and overhead, reduce latency, and optimize application performance, availability, and economics. Reduce maintenance costs and improve scalability by streamlining IT infrastructure. Accelerate data processing and respond to critical healthcare needs more quickly.

### InterSystems IRIS for Health in Action: Expanding SaaS Market Opportunities

ROOK, an innovative healthcare data API service provider, uses InterSystems IRIS for Health to collect, clean, unify, and manage diverse data from hundreds of distinct wearable devices.

The InterSystems solution helps the SaaS provider expand market opportunities and accelerate revenues by breaking down interoperability barriers and streamlining development and integration efforts.

ROOK helps digital health and wellness companies efficiently connect to biomarker data from wearables, smartwatches, fitness trackers, and other data sources. A universal API supports over 300 different digital health devices.





Healthcare integration is hard. InterSystems IRIS for Health is specifically designed to remove integration barriers and streamline development efforts. The platform supports a wide range of healthcare information protocols and standards. And InterSystems continuously updates the solution to keep pace with the evolving standards landscape.

InterSystems IRIS for Health reduces development cost and complexity, helping APs and SPs deliver value-added, data-driven applications and services, quickly and profitably. The versatile platform supports a wide array of uses and architectures, helping software companies and service providers expand markets, accelerate investment returns, and improve competitive differentiation.

To learn how InterSystems IRIS for Health can help your company streamline development and integration efforts, increase differentiation, and boost business results please visit <a href="https://www.intersystems.com/products/intersystems-iris-for-health/">https://www.intersystems.com/products/intersystems-iris-for-health/</a>.

Ready for a free trial? Try it here!

#### InterSystems IRIS for Health: The InterSystems Difference

#### **InterSystems Knows Healthcare**

As a longstanding leader in healthcare data technology and standards-based interoperability, InterSystems has the experience to solve real-world healthcare challenges.

#### **Industry-Leading Support**

We're focused on making our customers successful and ready for any challenge, which is demonstrated by some of the highest customer satisfaction ratings in the category.

#### **Comprehensive Healthcare Interoperability**

Seamless integration connects you into the greater health and care ecosystem.

#### **Unique Architectural Approach**

Our integrated, interoperable, multi-model, multi-lingual engine provides the highest performance and resiliency with the lowest TCO.

#### **Highly Flexible**

InterSystems IRIS includes the tools to solve unfamiliar problems and adapt as business needs change. Every aspect from data transformations to workflow can be tailored, and low-code tools let you put some customization in the hands of business users.

#### Powering the World's Most Important Applications

Our software powers mission-critical applications in almost every industry — from healthcare and financial services to supply chain and space exploration.

#### **About InterSystems**

InterSystems, a creative data technology provider, delivers a unified foundation for next-generation applications for healthcare, finance, manufacturing, and supply chain customers in more than 80 countries. Our cloud-first data platforms solve interoperability, speed, and scalability problems for large organizations around the globe to unlock the power of data and allow people to perceive data in imaginative ways. Established in 1978, InterSystems is committed to excellence through its award-winning, 24×7 support for customers and partners in more than 80 countries. Privately held and headquartered in Boston, Massachusetts, InterSystems has 39 offices in 28 countries worldwide.

For more information, please visit InterSystems.com.



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