InterSystems HealthShare Health Connect

High Availability, High Performance Integration Engine

InterSystems HealthShare® Health Connect™ integration engine delivers high-volume transaction support, process management, and monitoring for your mission critical applications. It's all delivered as a light-weight Platform-as-a-Service offering so your team can focus on making connections, rather than managing infrastructure.

Health Connect delivers:

- Intuitive HL7® V2 message transformation, routing, durable process orchestration, and workflow.
- Support for high transaction volumes between systems that scales with the most demanding integration tasks.
- A powerful bridge from legacy standards to HL7 FHIR® (Fast Healthcare Interoperability Resources), the next-generation standard for healthcare data sharing.
- An add-on enterprise grade, scalable FHIR server, which enables users and developers to store and retrieve FHIR resources. The server supports all the common FHIR interactions as well as advanced search capabilities.

Reliability and Management

A Health Connect database stores every message moving through integrated systems. The database enables guaranteed message delivery and provides a complete audit trail of all messages for improved troubleshooting. InterSystems also delivers several options

InterSystems HealthShare®

for high availability (HA) and disaster recovery, including clustering, virtualization HA, and an elegant, easy-to-implement technology for database mirroring. Mission critical capabilities include:

- Mirroring with fast failover recovery, critical for an always-on business.

- Visual diagnostics and auditing. Industry-leading message trace capabilities, a powerful test harness, and robust auditing facilitate the creation, debugging, and support of all your interfaces.

- Event detection, alerting, and real-time monitoring to ensure that information continues to flow even when source systems pause or fail. Messages are never lost, and an interrupted business process can always restart from the point of interruption.

High Performance

At the heart of Health Connect is a high performance, multi-model data engine that seamlessly handles multiple forms of data at high speed. Health Connect easily scales from serving small clinics to handling the transaction volumes of the largest and most complex healthcare delivery systems in the world.

Interoperability – Standard by Design

Healthcare organizations worldwide use InterSystems products for interoperability and improved workflow across the care continuum. Our support for global and national standards and certifications is one reason for this success. As global healthcare information protocols and standards evolve or new ones emerge, InterSystems keeps pace with these changes so you can take advantage of them easily.
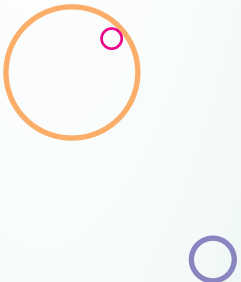
In addition to FHIR R4, STU3 and DSTU2, Health Connect implements many IHE profiles, and supports HL7 V2, HL7 V3, CDA® and CCD®, C-CDA®, DICOM, X12, ADHA (Australia), ASTM, DMP (France), EDIFACT, ITK (United Kingdom), and xDT (Germany).

You can use Health Connect pre-built data transformations to convert between most standard healthcare data formats. These transformations can be customized to address special cases, such as proprietary or legacy formats.

The depth of Health Connect standards support, and its ability to translate between health data representations — for example HL7 V2 and FHIR, or a non-standard format and FHIR — gives you unmatched interoperability power and flexibility.

InterSystems API Manager
InterSystems API Manager, a component of Health Connect, handles the entire application programming interface (API) life cycle from planning and design to versioning and retirement. API Manager enables you to deliver business value faster, including monetization of API usage, while you focus on your core capabilities.

Key features include:

- Publishing: designed with the embedded administrator dashboard, a command line interface (CLI) or REST APIs. All your APIs are discoverable.

- Developer Portal: APIs can be listed on a customizable portal web marketplace which allows developers to sign-up, explore, and subscribe to APIs. The system supports self-signup and multi tenant environments.

- Traffic Control: allows administrators to manage, throttle, and restrict inbound and outbound API traffic.

- Analytics & Security: API publishers can monitor APIs and detect unusual activity. InterSystems API Manager supports TLS and SSL at transport level, OAuth2 at the protocol level, and role-based access control.

FHIR Capabilities

FHIR is the future of healthcare interoperability, and InterSystems is actively engaged in creating that future as an HL7 benefactor member and standards-committee participant. We invest time and resources to stay on the cutting edge of the HL7 standards and build HL7 FHIR into a common technology stack for all our products.

Health Connect provides all the technology interface engineers need to handle FHIR requests as easily as they now work with HL7 V2 and integration flows. Health Connect includes a FHIR client, a FHIR message model, and translation between FHIR and other health information interchange standards, such as HL7 V2 and C-CDA.

For customers interested in data storage and access, an optional add-on FHIR server and repository is available which supports FHIR R4. Or you can use our pay-as-you-go FHIR Accelerator service. It is a reliable, fully managed solution for storing and retrieving FHIR data running on major public cloud marketplaces, such as AWS.

Health Connect receives or sends FHIR resources via the FHIR RESTful API, in JSON or XML formats. This allows applications based on the latest technology to use FHIR data – new or mapped from legacy systems.

Leverage FHIR to Integrate with Legacy Systems

Today, thousands of integrations using HL7 V2, HL7 CDA, and other standards form the backbone of interoperability and workflows in healthcare. Health Connect is your bridge between these formats and the FHIR standard, transforming their data into a FHIR representation. Examples include:

- Decomposing CDA document data into FHIR resources

- Converting HL7 V2 messages into a FHIR representation for consumption by a decision support system

- Transforming a FHIR message into an HL7 V2 message, such as an order, to send to a legacy system

New applications can access legacy data, and represent this data as FHIR messages, to expand their use for value-based care, quality improvement, and research.
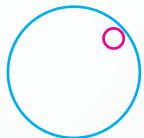
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InterSystems®
Creative data technology

Higher Productivity for Interface Engineers

Healthcare organizations may manage hundreds of different specialized applications, systems, and devices that must work together efficiently, securely, and without interruption. Health Connect provides features that make it easier for interface engineers to create, manage, and troubleshoot such systems, including:

- Drag-and-drop HL7 schema editing, data-mapping, business rule creation, and workflows
- Source control for HL7 schemas, including custom schemas
- Drag-and-drop managed file transfers using popular data storage services such as DropBox, Box, and Kiteworks, or the dropping of files into other applications for processing
- DevOps-ready containerized deployment in public or private clouds
- A Java Business Host that runs Java apps as efficiently as native components within integrations and workflows
- Unit testing of routing rules and data transformations
- Smart search that reveals all locations in a production where a given component is used, and routes that a message can take
- Interface converters for legacy interface engines, such as eGate and Cloverleaf

Security

A flexible, adaptable security model with enterprise-wide provisioning capabilities makes it easy to protect data both "at rest" and "in motion" across even the largest deployments, while minimizing the burden on application performance. Authenticate and authorize users via passwords, OAuth, two-factor authentication, and other means.

Fully Managed Service

InterSystems designs, hosts, and delivers the platform so there is no need to purchase, operate, secure, and maintain the infrastructure yourself. Services include:

- All data center resources, including hosting, hardware, and network capacity needed to run the solution
- Ongoing maintenance of all solution components
- 24/7 support for the solution including real-time monitoring
- Seamless upgrades
- Sophisticated security and data protection programs

Health Connect can also be licensed for on prem/private cloud deployment if you wish to manage the service yourself.

Customer Support and Education

When you select HealthShare, you get more than technology. You also get our acclaimed customer support and extensive educational opportunities. Search for HealthShare education resources at **Learning. InterSystems.com**. Learn more about HealthShare and its family of products at **InterSystems.com/HealthShare**.