



## Summary

### CUSTOMER

Guerbet

### CHALLENGE

Improve performance of the Contrast&Care® imaging injection management solution, while integrating with the vast array of health information systems in clinical imaging centers

### OUTCOME

Using InterSystems IRIS for Health™ platform deployed on Microsoft® Azure, Guerbet provides clinicians with a flexible, easy-to-use solution for injectable contrast media management with streamlined workflows, improved clinical decision making, and enhanced analytics for process and outcomes optimization

## Guerbet + InterSystems

# Guerbet Turns to InterSystems to Create Flexible, Cloud-Deployed Contrast Media Management Solution for Imaging Centers

Modern imaging centers use multiple advanced technologies to provide leading edge diagnostic care to patients. But the challenges involved in data sharing between these systems can complicate workflow, impede care efficiency, and make it difficult to analyze comprehensive patient and procedure information. Moreover, the volume of data generated is growing exponentially, exacerbating the problem.

To overcome these challenges, [Guerbet](#), a global specialist in contrast agents and solutions for medical imaging, partnered with InterSystems to optimize its Contrast&Care solution for deployment into the complex IT footprint of imaging facilities. InterSystems IRIS for Health™ is the world's first and only data platform specifically engineered to extract value from healthcare data. It empowers medical technology companies to rapidly create and scale the healthcare industry's next breakthrough applications. Importantly, it also enables powerful approaches to analytics that can unlock significant clinical and efficiency improvement opportunities.



**“OUR PARTNERSHIP WITH INTERSYSTEMS AND THE DATA MANAGEMENT TECHNOLOGY BACKBONE OF THE INTERSYSTEMS IRIS FOR HEALTH PLATFORM GIVE US WHAT WE NEED TO ACHIEVE OUR PRODUCT VISION GOING FORWARD.”**

*Adan Martin, Head of Strategy for New Business, Guerbet*

## Solving for Complexity and Interoperability

There is a plethora of data in a typical imaging center. Computerized tomography (CT), magnetic resonance imaging (MRI), and other modalities each have their own data types and standards, as do other technologies such as PACS for digital archiving and RIS for patient data collection and workflow management. Additionally, all care provided must be documented in the patient’s electronic medical record which has even more types of data flowing in and out. In short, the technology environment and interoperability requirements in an imaging center are extremely complex – and critical to patient care and safety.

Just as critical is the diagnostic imaging process itself, and the effective and appropriate use of injectable contrast media is a key component. The Contrast&Care offering from Guerbet is a leading injection management solution that enables imaging centers to collect, archive, review, and share injection and patient data. This includes information on contrast media, adverse events, injector activity, and alerts. Contrast&Care improves traceability and efficiency while simplifying the pre-procedure decision-making process at imaging centers.

For its new generation of Contrast&Care Guerbet turned to InterSystems to enhance data management and interoperability resources used within the application.

## A Foundation of Technical Strength and Partnership

Guerbet’s Contrast&Care is a solution designed to effectively manage data and workflow associated with the contrast injection process in medical imaging. But Guerbet’s product development and engineering teams are appropriately laser-focused on the requirements associated with the use cases for injectable contrast management. Guerbet’s technology leaders realized they would need an expert partner to enhance the technical capabilities of Contrast&Care and embed it seamlessly in the imaging center environment.

According to Adan Martin, Guerbet’s head of strategy for new business, “When I joined the company a few years ago, I realized how our technology could be improved to meet our needs for the future, especially with regard to the huge growth in volume of data and cloud deployment.”

After considering available healthcare data management technologies, Guerbet chose to partner with InterSystems and use InterSystems IRIS for Health, the world’s first and only data platform engineered specifically for the rapid development of healthcare applications. InterSystems IRIS for Health has a broad set of features that allow data management and interoperability in a single, comprehensive, standardized, reliable, and easy-to-use platform.

“We wanted one of the best partners in the world in terms of database technology, interoperability, and security,” said Martin. “And this partnership allows us to accelerate the movement of our solution onto the cloud, which is a critical go-forward strategy for us.”

Guerbet initially chose InterSystems for its advanced technical capabilities, but after the work got underway, Guerbet teams quickly came to appreciate the value of the InterSystems approach to customer service and support.

“When our developers began interacting with the InterSystems team, they realized InterSystems offers a unique high quality customer service and support”

## **A Simpler Architecture That Speeds Response Time**

Through its partnership with InterSystems, Guerbet has achieved a radical simplification of its deployment architecture for Contrast&Care that has resulted in a significant reduction in system response time.

According to Isabel Gomes, R&D Digital Manager: “The use of InterSystems technology allowed us to significantly reduce the technical requirements such as RAM memory and containers, and the start-up time has also been reduced to a few seconds.”

## **Secure and Compliant Cloud Deployment with Microsoft Azure**

Guerbet is deploying the Contrast&Care solution on the Microsoft Azure public cloud. In addition to its robust platform capabilities, the Azure cloud supports compliance with French and other global regulatory standards for data residency, privacy, and security.


The Azure cloud was among the first to adopt the world’s first code of practice for cloud privacy, ISO/IEC 27018. Microsoft Azure has achieved the rigorous HDS (Health Data Hosting / Hébergeurs de Données de Santé) certification in France, which requires that service providers implement measures that keep personal health data secure, confidential, and accessible by patients.

## **Making a Difference in Care Delivery**

The ultimate measure of success for Contrast&Care is the difference it makes to the patients receiving imaging studies and to the clinical teams providing them. The advanced connectivity and interoperability provided by the InterSystems IRIS for Health platform enables Contrast&Care to optimize contrast media injection while simplifying clinical decision making.

Physicians are the primary users of Contrast&Care. When choosing the injection contrast protocol, the integration of Contrast&Care with patient data in other systems provides a comprehensive view of the patient ahead of time, enhancing decision making and saving time.

Imaging technologists and staff are also key users of Contrast&Care. The InterSystems IRIS for Health connectivity underpinning the solution not only gives them that single view of patient information but also



streamlines their workflow and enhances patient safety by eliminating the need for manual entry of contrast media, patient ID and technician ID information. This enhances patient safety by reducing opportunities for error and gives technicians more time to focus on their patients.

Finally, with InterSystems IRIS for Health, Contrast&Care leverages the data to generate powerful analytics that give imaging centers valuable insights into a wide range of performance metrics – everything from clinical quality factors such as injection protocol effectiveness and adverse event monitoring to procedure efficiency measures.

### A Future-Ready Approach to Product Strategy

Guerbet's mission is to provide healthcare professionals with contrast media, medical devices and innovative solutions that are vital for diagnostic and interventional imaging, to improve patient prognosis and quality of life. For this reason, Guerbet has consistently pursued leading-edge technologies to achieve its product strategies through the years. The onset of the digital age has led to an explosion of data in volume and complexity, but Guerbet has embraced the new realities of imaging environments with an eye towards staying on the forefront of whatever comes next in technology.

Learn more about [InterSystems IRIS for Health](#) and how it can empower you to rapidly create and scale the healthcare industry's next breakthrough applications.