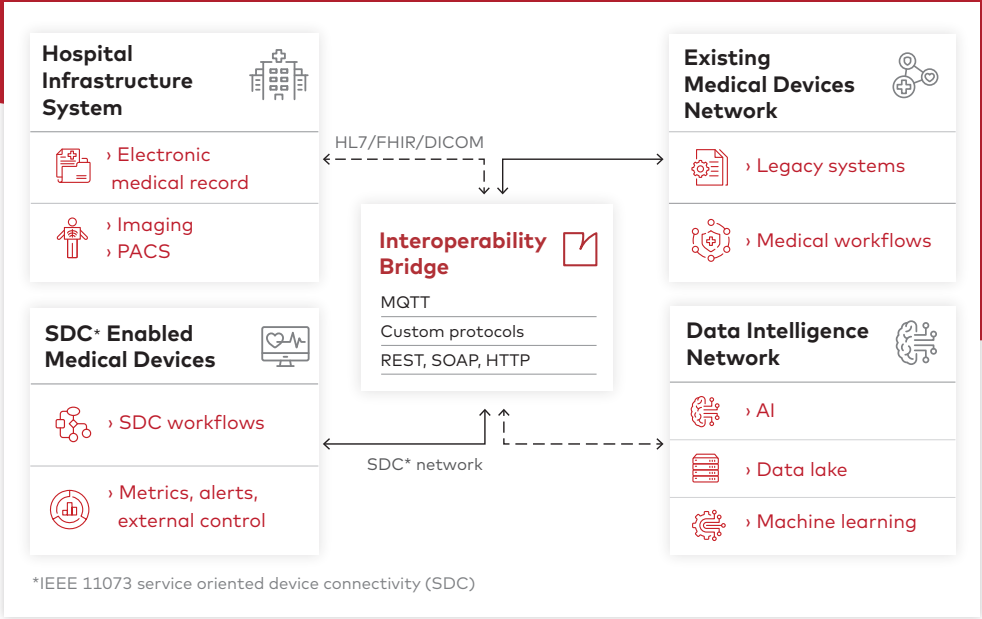


Interoperability Bridge



Connecting medical devices and hospital systems for safer, smarter care.

At Critical Software, we understand the complexity of integrating diverse medical devices and systems across modern healthcare environments. The Interoperability Bridge is our solution-driven approach to tackling this challenge, enabling smarter connectivity, more actionable data, and better outcomes for patients and professionals alike all without reinventing the wheel, every time.



Key Benefits



Improved Patient Care

Better data flow leads to more informed decisions.



Operational Efficiency

Automate workflows and reduce manual tasks.



Regulatory Compliance

Aligns with healthcare standards and protocols.



Scalability

Designed to adapt and grow with your hospital or healthcare system.



Turn-Key Interoperability

Connect industry standard protocols with little to no effort

Core Features



1. Data Integration

Connects with a wide range of medical devices and hospital systems. Supports HL7, FHIR, DICOM, and SDC to ensure robust interoperability.



2. Communication Protocols

Leverages HTTP, MQTT, Kafka, and RabbitMQ for reliable and scalable data transmission.



3. Data Security

End-to-end secure data handling, compliant with healthcare regulations and privacy standards.



4. Scalability

Handles large data volumes, easily adapting to different departments, hospitals, or networks.



5. Flexibility

Deploy it where it makes sense. On the public cloud or in the hospital private network, the Bridge will solve your interoperability challenges.



6. AI Integration

Interfaces with Data Intelligence Networks to enable advanced analytics and decision-making.

AI-driven capabilities:

- Predictive analytics
- Real-time alerts
- Clinical decision support
- Data visualisation tools

Use Cases

Patient Identity Mapping: Match and consolidate data from various devices and systems to the right patient — increasing accuracy and traceability.

Real-Time Monitoring & Visualisation:

Unify data from bedside monitors into a single dashboard for actionable insights.

Quiet ICU: Reduce noise pollution and alarm fatigue while maintaining continuous, intelligent monitoring.

Medical Imaging: Integrate imaging workflows and enable better diagnostics through centralised image handling.

Hospital System Integration: Enable seamless data sharing with existing EHRs and hospital infrastructure.

Medical R&D: Collect and analyse real-world data for research and innovation.

Get in touch!

medicaldevices@criticalsoftware.com



criticalsoftware.com

PORTUGAL · UK · GERMANY · USA

 **Critical software**