Better Connectivity, Faster Growth for Medtech in The Age of IoT

Medtech companies face growing demand for connected health devices and support for IoT. As a result, companies need better connectivity, better storage, and the ability to scale quickly. To address those needs and prepare for rapid growth, a leading global supplier of smart intravenous patient-controlled analgesia (IV-PCA) infusion pumps conducted a head-to-head performance evaluation of InterSystems IRIS for Health™ vs. its current SQL Server-based cloud platform. They found that InterSystems delivered in three key areas:

CONNECTING IOT DEVICES

Nearly 3 out of 4 healthcare providers have already deployed an IoT solution,[1] and the global IoT healthcare market is projected to expand at a compound annual growth rate of 19.9% through 2025.[2]
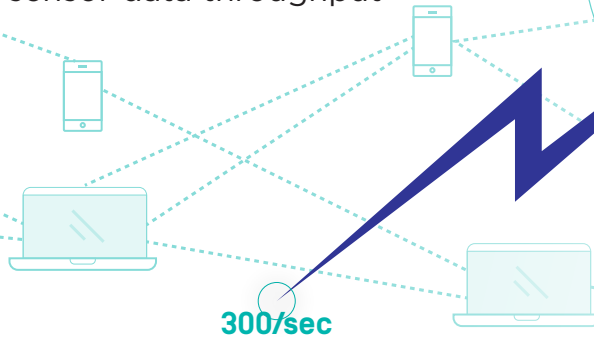
CHALLENGE

Connect 20,000+ IoT devices to monitor status and safety of analgesia patients

SOLUTION

Increased expected sensor data throughput

19,600/sec

300/sec

EFFICIENT STORAGE FOR DEVICE RECORDS

Medical device companies face strong pressure to seamlessly connect devices and host a growing amount of data.
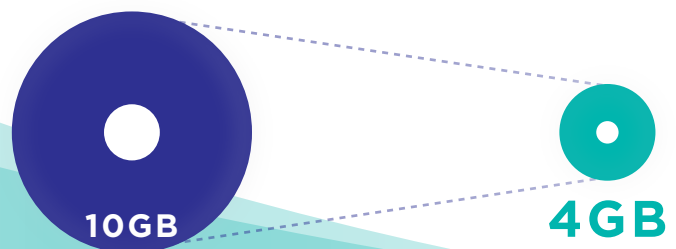
CHALLENGE

Store 200+ million device records

SOLUTION

Reduced hardware footprint using only 55.5% of the disk space to store records
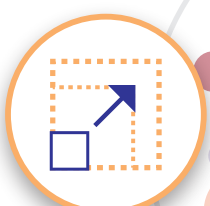
10GB

4GB

SCALE TO SUPPORT PROJECTED GROWTH

Medtech companies must be able to rapidly create and scale innovative new solutions without sacrificing speed and performance as they take in more data from IoT/connected devices.
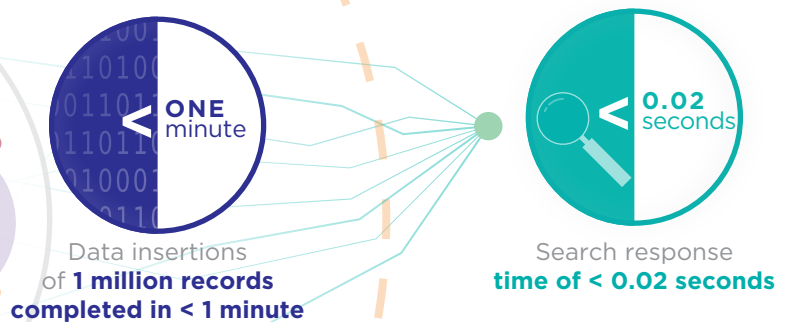
CHALLENGE

Scale to support projected growth

SOLUTION

Improved query performance by 6,500%

< ONE minute

Data insertions of **1 million records completed in < 1 minute**

< 0.02 seconds

Search response **time of < 0.02 seconds**

"Using InterSystems IRIS for Health, we will be able to perform intelligent computing and gain real-time feedback for AI, Principal Component Analysis (PCA), and real-time quality control."
– Medical Technology Customer

InterSystems®
Health | Business | Government

1. 2017 Global IoT Decision Maker Survey. IDC. September 2017.
2. IoT in healthcare market worth $534.3 billion by 2025. Grand View Research. March 2019. https://www.grandviewresearch.com/press-release/global-iot-in-healthcare-market