# Migration of Dose Monitoring System to the Cloud

## **Client Requirement**

Client is one of the world's leading pharmaceutical and life sciences companies. Client offers a proprietary radiation dose monitoring platform to hospitals and diagnostic service providers.

This platform was available only as on-premise offering, which limited it's reach and adoption. Client wanted to migrate it to the cloud for easier accessibility and wider user coverage. It also wanted to continue with the on-premise model for existing customers. CitiusTech was selected for this initiative, given its expertise in Cloud migration and deep understanding of medical imaging products.

# **CitiusTech Solution**

CitiusTech put together a specialized team of cloud migration experts, interoperability specialists and analysts with medical imaging experience to perform a detailed analysis of the existing product architecture and critical workloads for cloud migration. The CitiusTech team worked closely with client's product owners and technology teams to:

- Create a broker and a proxy to channel the traffic between on-premise devices and client's server on cloud
- Provide two deployment configurations:
  - Cloud: Primary configuration with the client's server on cloud
  - **On-premise:** Secondary configuration where the client server is located on the same system as the broker
- Develop an HL7 / DICOM data management system in NodeJS
- Use Mirth interface to transform HL7 data to other formats
- Set up an easy-to-use portal to configure rules around DICOM / HL7 data transmission between on-premise and cloud-based systems



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Solution Schematic

### **Value Delivered**

By partnering with CitiusTech, the client was able to:

- Enchance reach, accessibility and support to enterprise users through a scalable and configurable solution
- Build a robust cloud infrastructure that effectively handles the complexity of data transmission between cloud-based and on-premise systems
- Create an aggregated data repository to get meaningful insights from DICOM / HL7 data received from multiple hospitals

#### About CitiusTech

CitiusTech is a specialist provider of healthcare technology services and solutions to healthcare technology companies, providers, payers and life sciences organizations. With over 4,000 professionals worldwide, CitiusTech enables healthcare organizations to drive clinical value chain excellence - across integration & interoperability, data management (EDW, Big Data), performance management (BI / analytics), predictive analytics & data science and digital engagement (mobile, IoT). CitiusTech helps customers accelerate innovation in healthcare through specialized solutions, platforms, proficiencies and accelerators. With cutting-edge technology, world-class service quality and a global resource base, CitiusTech consistently delivers best-in-class solutions and an unmatched cost advantage to healthcare organizations worldwide.

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