

Prefetching Clinical Imaging Information for Timely Point-of-care



Client Requirement

Using Google Cloud Platform and Google Healthcare APIs, CitiusTech enabled client to aggregate and retrieve imaging data from multiple Google Cloud Healthcare DICOM stores, to ensure physicians get instant and complete access to imaging information at the point-of-care.

Member medical record data, especially medical imaging related information takes significant time to retrieve due to its large size. Also, physicians need to download large volumes of imaging information during a patient encounter. This process takes up a significant share of the time the physician spends with the patient, adversely impacts both physician productivity and patient experience.

Owing to the distributed and multi-format nature of PACS, securing and retrieving imaging information pertaining to a single patient and making it usable becomes a challenge.

CitiusTech Solution

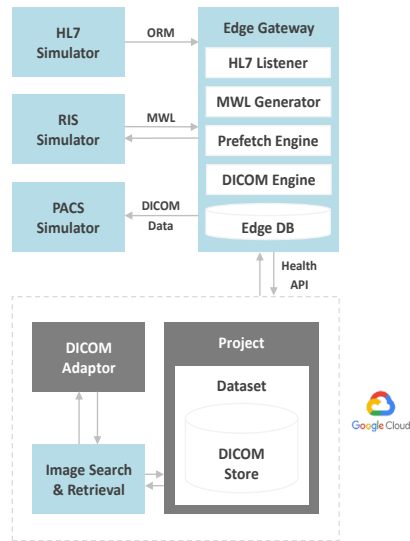
An information management solution on Google Cloud Platform was developed to aggregate PACS information and accelerate the fetch process during a patient visit.

Google Healthcare API enabled Vendor Neutral Archive (VNA) gateway identified and pre-fetched imaging data for each patient. The application was designed to auto-download the information on-premise and make it available to a local PACS.

This allowed physicians to effortlessly access a patient's imaging information on a visualization workstation and analyze imaging data from multiple PACS.

Products:

- Google Healthcare API DICOMSTORE
- Google MLLP Adapter
- Google Pub/Sub
- HL7STORE



Prefetching Clinical Imaging Information: Schematic

Value Delivered

By partnering with CitiusTech, the client was able to:

- Create a centralized, scalable and interoperable repository for medical images from multiple hospitals and PACS
- Achieve platform and technology independence across its test processes
- Physicians now can remotely access patient images, any time, and through multiple devices

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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