

Smart Prefetch for Imaging Studies from Cloud

Our vision is to inspire new possibilities for the health ecosystem with technology and human ingenuity. At CitiusTech, we constantly strive to solve the industry's greatest challenges with technology, creativity, and agility. Together with the world's leading Healthcare and Lifesciences organizations and our partners, we aim to accelerate the transition to a human-first, sustainable, and digital healthcare ecosystem.

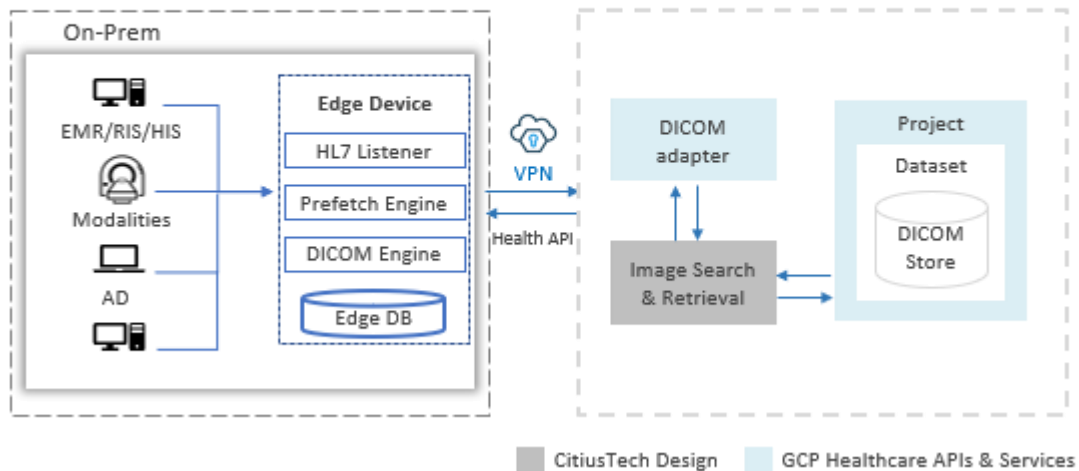
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Client Requirements

- Client is a leading provider of cloud compute & storage services.
- They wanted to demonstrate their cloud capabilities for Radiology in terms of a smart VNA solution capable of auto-fetching medical images from the cloud, based on current patient visiting list, using Google Healthcare APIs.
- CitiusTech was selected owing to its strong imaging expertise, experience in product engineering and GCP cloud platform.

Solution Schematic



CitiusTech Solution

- CitiusTech developed an information management solution on the Google Cloud platform to aggregate and auto-download PACS data, accelerating the fetch process for each patient visit.
- Fetched today's patient list from HL7 ORU or RIS MWL queries & parse patient ID
- Ran custom prefetch algorithm to identify relevant images to retrieve
- Retrieved images from VNA using APIs
- Pushed retrieved imaging data in DICOM format to local PACS for fast access
- Deidentified and enabled batch upload of new imaging data from PACS to cloud VNA
- The Google Healthcare API-enabled Vendor Neutral Archive (VNA) gateway identified and prefetched imaging data

Value Delivered:

- Provided a centralized, scalable, and interoperable repository for medical images
- Enabled a Single source of truth for all PACS and hospital data
- Provided 24x7 remote access to patient images