# Case Study: Cloud-Based Multi-Tenant Integration Engine

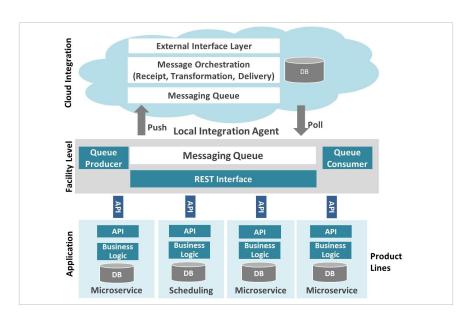
# **Client Requirements**

Client is a leading provider of EMR platforms and provides software and services across multiple healthcare facilities nationwide. Client had a requirement of enabling migration of its on-premise integration engine to a secure and scalable cloud platform. In addition, the client sought to reduce deployment costs and also needed large data storage.

CitiusTech was selected to perform the migration, given its expertise in cloud computing (Amazon Web Services), clinical workflows and healthcare interoperability.

#### **Solution Design**

- Architected, designed and developed cloud-based microservices hosted on AWS platform
- Containerized microservices
- Ensured continuous integration and deployed entire application on AWS
- Ensured encryption of data at rest and in-transit, HIPAA compliance using AWS BAA and audit logs (21 CFR)
- Implemented fault-tolerant message delivery
- Provisioned auto-horizontal scaling, high availability and disaster recovery
- Provisioned persistent storage of clinical documents on Amazon S3



## CitiusTech Solution

### **Requirement Analysis**

- Migrate on-premise application to AWS cloud
- Loosely couple mutiple services with zero downtime
- Ensure high availability of application
- Horizontally scale to support high IOPS
- Ensure durable and highly-scalable cloud storage of clinical documents
- Support backup and disaster recovery

#### Value Delivered

By partnering with CitiusTech, the client was able to:

- Leverage CitiusTech's strong cloud expertise for full application lifecycle management on AWS
- Build a secure platform by; server hardening, settingup address space and subnets,
- Elevate performance by code and query optimization
- Provide online storage capabilities using AWS S3

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## About CitiusTech

CitiusTech is a specialist provider of healthcare technology services and solutions to medical technology companies, providers, payers and life sciences organizations, with over 2,700 professionals worldwide. CitiusTech's services and solutions include healthcare software development, healthcare interoperability, regulatory compliance, Bl/analytics, consumer engagement, care coordination and population health management. CitiusTech helps customers accelerate innovation in healthcare through a number of solutions and accelerators for clinical quality reporting, healthcare big data, cloud computing, mobile health and predictive analytics. With cutting-edge technology expertise, world-class service quality and a global resource base, CitiusTech consistently delivers best-in-class solutions and an unmatched cost advantage to healthcare clients worldwide.

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