

Clinical Trial Laboratory, USA

A leading US based global clinical trial laboratory services organization that helps customers achieve better clinical trial outcomes.

Business Objectives

Customer wanted to modernize existing LIMS system to

- deliver end-to-end services across clinical trial continuum
- leverage data assets to improve trial design and execution
- serve as hub-and-spoke to the industry - CRO Agnostic, Sample Management Offering (Real-time track & trace technology), External lab management

Challenges

- Absence of a unified platform providing end to end coverage from quote to cash leading to overlap and redundancy
- High manual intervention due to LIMS integration issue with various subsystems
- Lack of scalability & highly manual data handling
- Higher cost of service due to manual study set up impacting competitiveness

Technology Spread

- Azure Service Fabric, Azure App Service
- Azure APIM, Logic App, Azure Service Bus
- Cosmos DB, SQL DB
- Azure Log Analytics, Azure Monitor
- Azure Key Vault, Azure Storage

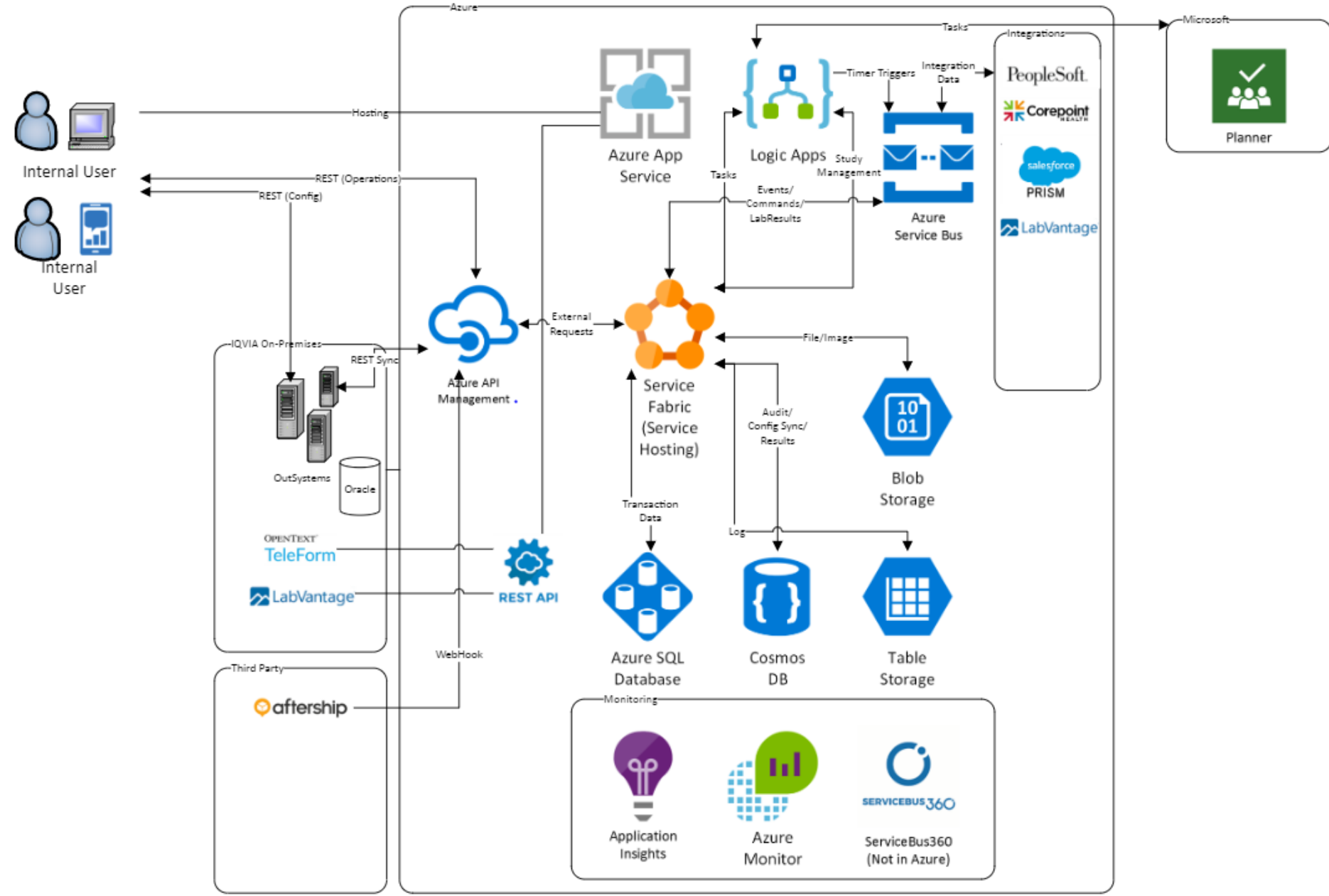
HCLTech Solution

- Microservice on Azure PaaS Services
- Clear distinction of User Interface using Angular JS, Business Processes using WEB API (.Net Core) deployed on Azure Service Fabric with Data Persistence functionalities using Cosmos DB
- Seamless integration of existing sub-systems (Outsystems for study set-up, Peoplesoft for supply chain & billing, LabVantage for sample storage, Prism for contract management) utilizing Azure service bus and Queue
- Indirect integration of third-party systems through core point interface
- 5 years program with peak team size of 150 resources using scrum based agile methodology.

Benefits

- Process improvement
- 30% productivity gain
- Zero downtime
- Better monitoring & logging using Azure Log Analytics and Azure Monitor

LTMS Architecture



Integration snapshot

