Automating Legacy Systems:

How Holograph Transformed TechMah CMF's DevOps Workflow

Client Overview

TechMah CMF LLC is a leading innovator in craniomaxillofacial (CMF) surgical solutions, specializing in personalized medical devices and software for trauma and reconstructive procedures. With a strong focus on precision and patient-specific care, TechMah CMF leverages advanced technology to develop the tmCMF Solution—a comprehensive suite of FDA-cleared surgical planning tools, including the Surgeon Review Tool (SRT) and custom surgical instruments. By integrating CT and dental scan data, TechMah CMF enhances surgical accuracy, efficiency, and outcomes. Committed to transforming CMF surgery, the company provides cutting-edge solutions that empower surgeons and improve patient care across maxillofacial and mandibular procedures.

→ Challenges

Before partnering with Holograph, TechMah CMF faced significant challenges in managing its application deployment processes, which relied entirely on manual workflows:

Lack of Automation:
Manual build and deployment processes led to inefficiencies, delays, and increased operational overhead.

Legacy Applications:
Many of TechMah CMF's applications were developed using legacy languages like C and C++, posing challenges in adopting modern DevOps tools.

Process Inefficiencies:
The absence of automation resulted in slower time-to-market and limited traceability.

→ Solution Provided by Holograph

Holograph partnered with TechMah CMF to implement a robust DevOps framework, ensuring automation, efficiency, and scalability:

1 DevOps Tool Implementation:
Introduced and supported the use of TeamCity to automate build and deployment processes.

2 Customized Automation:
Automated the build processes for multiple legacy applications, including those developed in C and C++, by creating tailored TeamCity jobs.

3 Streamlined Deployment Pipelines:
Designed and implemented deployment workflows for improved manageability and traceability.

4 Collaborative Process:
Holograph worked closely with TechMah CMF's team, including key stakeholders, to understand manual workflows and seamlessly transition to automation.

5 Tool Integration:
Utilized tools like JIRA, TeamCity, and SonarQube to optimize pipelines and enhance code quality monitoring.

Implementation Process

Requirement Gathering
TechMah CMF raised JIRA requests detailing the need for automation for specific applications.

Manual Process Analysis
Collaborated with TechMah CMF's teams to understand existing workflows and challenges.

Automation Execution
Developed and validated automated build and deployment pipelines for four to five applications over a timeline of approximately one month per application.

Technical Problem-Solving
Addressed challenges related to legacy code compatibility with modern tools like SonarQube.

Results Powered by Holograph

The primary challenge was automating legacy applications written in C and C++, which required innovative configurations and close collaboration with TechMah CMF's technical team. Despite these hurdles, Holograph delivered a robust and efficient solution tailored to TechMah CMF's unique needs.

Process Automation:
Replaced manual build and deployment workflows with automated pipelines, significantly reducing operational effort.

Improved Efficiency:
Streamlined processes resulted in faster time-to-market and enhanced productivity.

Enhanced Traceability:
Automated pipelines offered better manageability and traceability across all applications.

Scalability and Future-Readiness:
Established a scalable DevOps framework that can support TechMah CMF's future growth and modernization efforts.

Holograph's expertise in DevOps not only resolved TechMah CMF's immediate challenges but also laid the foundation for long-term operational excellence.

Holograph's tailored solutions have driven measurable results—let us help your business achieve the same success. Contact our sales team to get started.

Get in Touch: sales@holographtechnologies.com