

BLOOD CULTURE SYSTEM: SIMULATION & UPGRADING

Datasheet

Project objective

Provide precise desktop control for the hardware simulator of one existing one new product to streamline their development and further enhancement. Modernize the current blood culture system, while also finalizing the development of the updated one in terms of software.



Result

Our client gained a precise testing and validation environment for both products. The provided desktop application repeats the functionality of the original one, but runs connected to a hardware simulator. This allowed our client for optimization of the product lifecycle costs of the blood culture system, considering its development, maintenance, and the launch of new product variations.

The new product—a compact blood culture system—was fully prepared for its market debut.

Scope of work

- ❖ Porting the VxWorks-operated application to Windows OS to run on a hardware simulator. Business logic modifications and Zinc-based interface migration
- ❖ Ensuring the simulation of printing, barcoding, communication ports, reports, and dynamic screen sizing functionality
- ❖ Modifying the source code and GUI screens of the blood system application to operate with the new compact system version
- ❖ Modifying the hardware simulator to serve the new compact system version
- ❖ Multi-language support, safe reboot, an on-screen keyboard, and a debug console functionality implementation. Improvements in alert and barcoding functionality
- ❖ Onsite testing and fixing defects relating to debug console, reports printing, GUI, and normalization functionality

Activities

- ❖ Requirements Clarification
- ❖ Proof of Concept
- ❖ Software Porting
- ❖ Features & Drivers Implementation
- ❖ Onsite Testing & Bug Fixing

About the project

Technologies

- ❖ C++
- ❖ SVN
- ❖ Visual Studio
- ❖ Zinc



Project size

- ❖ 4 Software Engineers

Duration



Platform

- ❖ VxWorks
- ❖ Windows