



Elite Software R&D Services
Since 1990

Drägermedical
A Dräger and Siemens Company

Central Patient Data Monitor for Large Hospital-Scale Network

Client

Dräger Medical, A Dräger and Siemens Company, is one of the world's leading providers of innovative high-tech medical equipment offering the complete solutions for the point of care throughout the whole patient care process—from emergency care and anesthesia to critical care and perinatal care. Headquartered in Lübeck (Germany), Dräger Medical is represented in over 190 countries around the world with subsidiaries in 40 countries. Dräger Medical Systems, Inc, a division of Dräger Medical, is located in Danvers (USA).

Project Scope

Complex porting of a central patient data workstation, integrated with life-supporting medical equipment, for a medical hospital-scale network from AIX/PowerPC to Linux/x86.

Solution

The core product was designed to provide real-time centralized management of patients by displaying comprehensive patient data (real-time vital signs and hemodynamics, respiratory and ventilator data, and laboratory values, etc) for both telemetry and bed-ridden patients at one single point.

Auriga received the original code and performed porting as well as full-cycle integration testing. As the result, a newly ported product with limited functionality was built. While proceeding with porting- and testing-related tasks, Auriga's engineers discovered a considerable amount of non-portable code as well as some system and compiler bugs, reported them to Dräger Medical Systems and fixed. Among other tasks, successfully completed within this project, Auriga developed and integrated sound features (alarms, etc.) for the Linux version, simultaneous support of 2 monitors, as well as watchdog support, a critical insurer against software faults and hang-ups.

Tools and Technologies

- Mandrake Linux
- C++, GCC
- MOTIF
- Valgrind