



Medical Device Simulation System

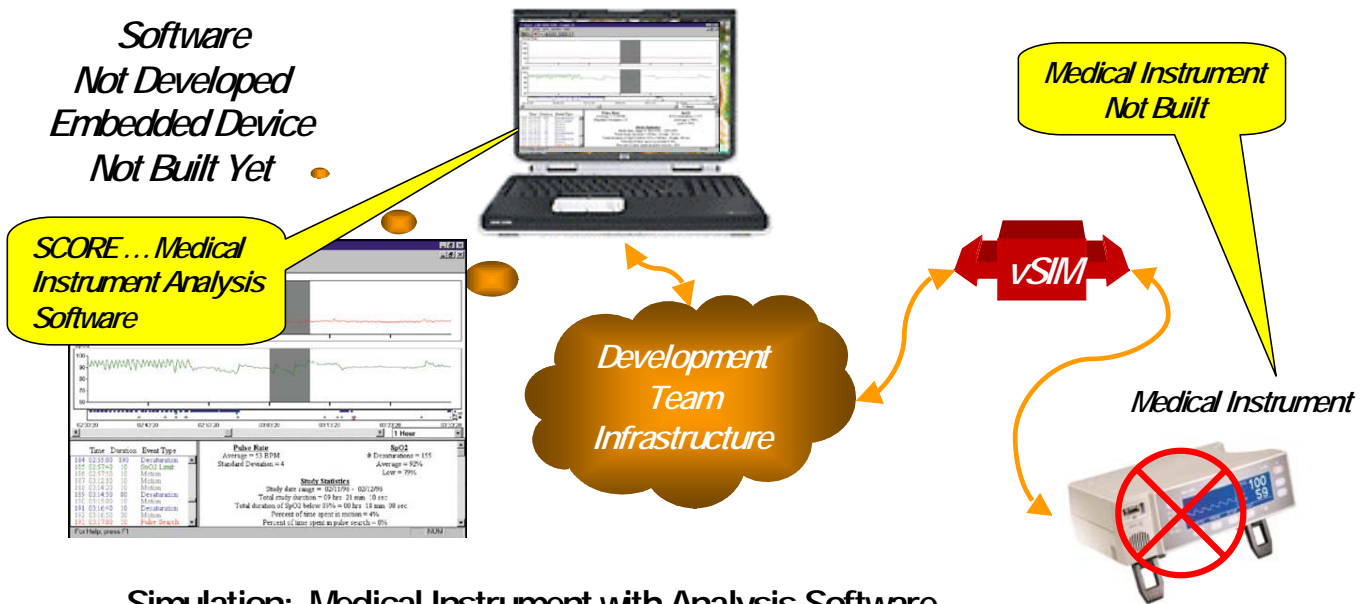
*vBiz.Device for Embedded*

DISCOVERY → SIMULATION → VIRTUALIZATION → LAB AUTOMATION → GOVERNANCE

**MEDICAL DEVICE SIMULATION:**

*vSIM* is used to simulate the software, device and networked system for a medical instrument for the vendor during the design and development phase prior to scheduled, production level deployment. However, the product schedule is in danger of significant delay and any possible way to improve the schedule is of critical importance. In addition, a separate product that would use the collected medical instrument information is being developed to provide deeper level analysis and reporting of instrument data by way of a serial communications interface to/from the medical instrument. The schedules for both products were dependent on each other and, as a result, of critical importance.

However, the interfaces to/from each product, along with the interface request/response formats were well specified and understood from prior product development efforts and were not expected to require significant change.



**Simulation: Medical Instrument with Analysis Software**

*vSIM* is used to simulate all product interfaces. Every functional requirement of the software for each product is simulated, by fooling the software into thinking it is talking to the real software and systems over these interfaces. When the hardware is built, and the software is installed on the computer and medical instrument device, it will likely run, because functional simulation is used as part of the design/development process and completed per the interface specifications.