



Symphony helped a leading US Healthcare Information System service provider to build a distributed Client-Server model based Fire Incident Reporting System with shorter release cycle to market.

The Client

The client is one of the leading technology solution providers in the healthcare information system in the US. They offer a variety of applications to meet the needs of Home Health, Hospice, Private Duty and Personal Care Agencies. They focus on providing single vendor solutions to home health agencies that cover most aspects of operating a healthcare agency's business - from financial to clinical to point-of-care.

The Challenges

The client has rich experience and expertise in the Healthcare domain. They specialize in making systems with features that help to streamline a healthcare agency's processes. Their idea was to build a comprehensive records management system for fire agencies – part of healthcare eco-system - that helps track calls for service, fire investigations, station inspections, and inventory, transactions, and personnel information.

The client preferred to outsource the software development work and maintain lower TCO.

The Solution

Symphony's solution to the client included designing, developing and deploying a Fire Incident Reporting System (FIRS) in a distributed Client-Server environment – supported by Smart Client and MS SQL server - using .NET framework.

The application had a customizable form layout with flexibility to add / update / delete input fields and change field properties. The security features included secure authorization process for web access and data transfer, public key encryption methodology and exhaustive audit trail. There was also provision for digital signature capture.

Product Development

Platform

Microsoft .NET

Industry / Domain

Healthcare eco-systems

Engagement Key Points

- Project duration – 6 months
- Engagement model: Fixed Cost
- Ramp Up Time from SOW sign off – one week
- Peak team size - 8
- Team composition: Project Manager, Team Lead, Software Developers, QA Engineer
- SDLC: Agile
- Release cycle – monthly iterations

Technology and Tools Used

- .NET Framework 2.0
- Visual Studio .NET 2005
- SQL Server 2000/2005
- C#, Win Forms
- Windows Services
- MS Enterprise Library
- Infragistics UI Controls
- Spring .NET
- Active Reports
- Log4net for logging

Major FIRS Product Features include

- Calls for Service
- Fire Investigations
- Station and Company Inspections
- Inventory and Transactions for Departments, Positions and Persons
- Building, Business, Hydrant and Hose locations and inspections
- Personnel information
- Equipment and supplies inventory



An intuitive touch-screen functionality enhanced user interactivity.

The application's built-in rule engine allowed creation of National Fire Incident Reporting System (NFIRS) compatible validation rules for processing. Data export in NFIRS5.0 format enabled the healthcare agencies to synchronize data with the state Fire Department database. Data can be indexed, archived and stored offline on portable devices.

The application had rich reporting options to generate both user-defined and analysis-based reports. Other options included report export in various formats, report delivery by Email/FAX and report scheduling at specified time interval. Finally, the system had full-scale integration with Emergency Medical Services (EMS) suite.

The Benefits

Symphony's superior software R&D skills helped achieve the following benefits for the client:

- Comprehensive FIRS system compliant with National Fire Incident Reporting System (NFIRS) 5.0 specifications
- Faster-to-market release cycle