Symphony helped a top US-based integrated e-commerce and order management solutions provider to transition their legacy application to .NET platform to bring total automation of mail, phone and web order taking and processing for small businesses.

The Client

The client in focus is a leading US based ISV specializing in business automation software for ecommerce, multichannel merchants, traditional retailers and catalogers. For the last 15 years, they have been serving the direct marketers with total order management and integrated ecommerce solutions. Their client base, approaching over 10,000 installations worldwide, consists of e-commerce, mail order, fulfillment, distribution and call-center companies.

The Challenges

The client's popular Order Management application was developed in FoxPro. With the withdrawal of support for FoxPro by the technology vendor, the immediate need was to transition the core product to a new technology platform. The client looked to capitalize the competitive advantage offered by new technology platform and fulfill the current and future needs of the customers through re-engineering of the legacy application.

The Solution

Symphony's solution to the client included designing and developing an N-tier application to provide end-to-end re-engineering solution using .NET framework. The application was re-architected to support both single-user and enterprise versions.

Symphony's re-engineering effort involved building and extending Windows desktop on the client side and delivering highly scalable WCF services on the server side. Further, this also allowed drawing the powers of SQL server 2008 in moving and managing the data.

Product Development
Re-engineering

Platform
Microsoft.NET

Industry / Domain
Retail / Online Merchants / ecommerce

Engagement Key Points
- Engagement started in 2009 and ongoing
- Ramp Up Time from SOW sign off – 15 days
- Peak Team Size –12
- Engagement Model: Fixed Cost
- SDLC: Agile
- Release cycle – short iterations

Technology and Tools Used
- .NET Framework 3.5
- WPF, WCF
- NHibernate, Log4Net
- Telerik RAD Controls, Odyssey Controls
- Team City, WIX Installer, SQL Server 2005/2008
- SVN for Source Control

Major Product Features include
- n-tier architecture using WCF framework with Support for Multi-Tenancy
- Supports multiple languages thereby allowing the vendor to sell this software to larger customer base
- PCI PA DSS compliant order management software
- Highly scalable that grows and changes with today's business landscape

Using SQL Server Express for the single user version enabled development of the application without much code changes. The user interface underwent total re-vamp to support Office 2007 look and feel with additional ability to change themes.

On the server-side, the WCF based services helped manage order, purchase, customer, inventory, shipping, packaging, pricing, payments etc. Integration with third party tools allowed validation of customer address, credit cards and other Point of Sales.

A dedicated WCF service managed shipping details – printing packing slips and shipping labels, maintain shipping manifest. Automated shipping manifest supported third party logistics software via flat file transfer. There was also support to record buyer return and consolidation of inventory.

The system had extensive third-party integration capability for gift registry, payment gateways and many back-office applications. A dedicated service provided address validation to ensure there is no breakdown in dispatch of product. Dashboard support was available for different departments like warehouse, packing, shipping and sales. The system also supported generation of several types of reports for sales, inventory, performance, accounting etc.

The Benefits

Symphony's Microsoft OPD expertise helped achieve the following benefits to the client:

• Accelerated product development with effortless transitioning of legacy application to .NET platform
• A robust architecture allowed flexible deployment with easy server management while reducing maintenance cost of the software
• Re-engineering the product enhanced professional 'look and feel' with improved usability