

## e-Auction Platform

### Abstract

A multi-screen, multi currency Internet Auction platform, which combines the essence of traditional auction and online auction over Internet through use of technology. The platform revolutionized the way auctions are conducted over Internet, where users could simultaneously bid on more than one sessions, either on Internet or at auction site and helped client sell more luxury watches in auction in a day.

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### Client Overview

One of the leading global auction house of luxury watches. The client has, with over several decades of experience in the field of antique and collector's timepieces, has established itself as a brand amongst watch collectors worldwide.

### The Business Need

Client engaged SDG to develop an integrated, multi-session, multi currency online e-auction platform to facilitate them to showcase their horological expertise in industry and offer their potential customers chance to participate in exclusive online auctions of luxury watches, simultaneously over internet and in-room in multiple sessions.

- A Corporate website which will showcase the expertise of client in horology and display collector's timepieces.
- A platform to display collection of luxury watches in form of online digitized catalogues, thereby increasing accessibility to globally spread users and reducing cost.
- A multi-screen online e-Auction platform that will facilitate users to participate real-time in auction of luxury watches, over Internet and from auction venue, in multiple simultaneous sessions and in currency of their choice. This is a blend of traditional auctions and online auctions over Internet.
- An offline traditional Auction over Internet platform, which allows users to bid over days.
- A self-service portal for users to manage their auction accounts; this is integrated with Payment Gateway of Credit Card issuing agency and SMS gateway for alerts & notifications to users.
- A platform to help Horological experts, spread across globe, to update the digitized catalogue content online.

- An Inventory Management platform integrated with Bar Code readers/printers for stock management.
- Governance: Seamless integration of invoicing, accounting and shipping systems with the e-auction system. Additionally, provide a clear audit trail for transactions and inventory management.
- Integration with third party software for accounting.

### Key Challenges

- Real-time guaranteed execution of bids, with least or no delay.
- Handle 5000+ simultaneous users bidding and/or watching auction sale in multiple sessions.
- Redundancy to be built in system with 0% failure at the time of auction.
- Handle rich digital content in digitized catalogues as well as while auction is in progress without causing delays in bidding process.

### The SDG Solution

- Use of Open source technologies over licensed or hybrid technologies keeping in mind performance, management, scalability, support, flexibility and cost.
- Open source CMS was used for content management for online digitized catalogue.
- E-Auction platform designed in Flex as its ideal for dynamic presentations. Flex would use NIO messaging services of Adobe Data live cycle product to ensure guaranteed execution of bids over Internet.
- Well clustered network with load balancers to keep traffic distributed on servers and ensure real-time failover.

## Case Study – e-Auction Platform

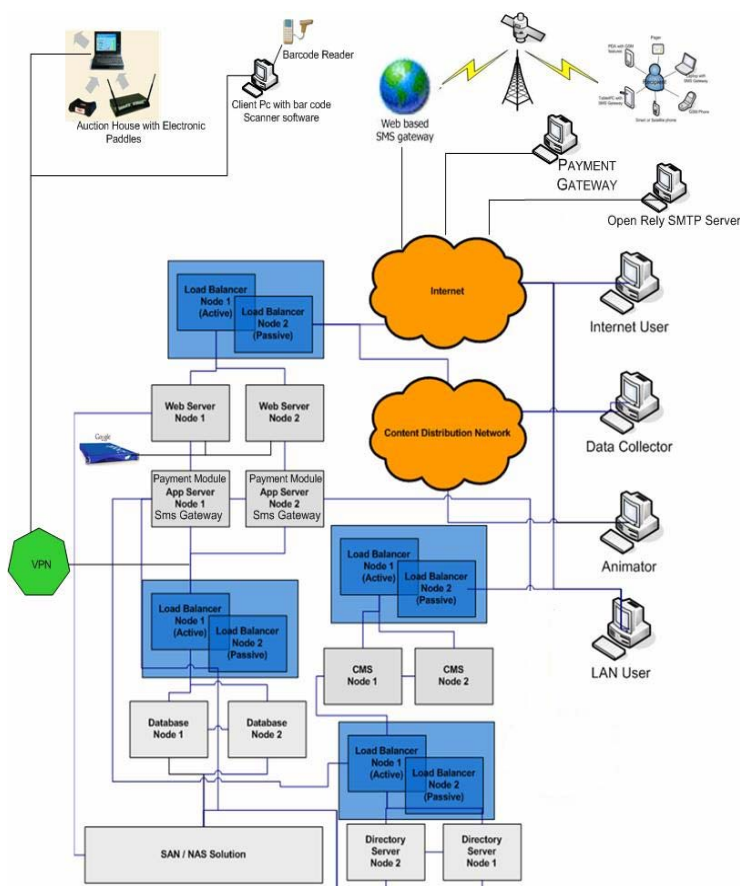


Fig. Infrastructure layout for e-Auction platform

### The Benefits

SDG's solution enabled the client to establish the foundation for a complete integrated platform to conduct business. Some significant benefits include:

- An integrated platform where the client could manage watches in stock, manage contracts with the vendors, track stock movement, assign watches for auction, create contents for digitized catalogue which is entered by horological experts across the globe, manage sale of watches along with Invoicing and connect to their accounting system etc. all from single platform.
- A multi-screen e-Auction platform that has helped client conduct simultaneous auctions of more watches at a time, rather than conducting sale of a single watch at a time, thereby increasing sales through a single day auction

- SDG's solution has helped client address needs of both online Internet auction and traditional auction thereby ensuring that client has more to offer to its users and with global access over Internet.
- A brief CRM is available to help client keep track on their user likes & wants, and is helping client to efficiently service the needs of their customers.
- SDG's solution enabled client to be able to comply with all statutory requirements implied by state laws over business of auction.
- Reduced employee time in manually generating reports.

### The Technology

Languages:	Java/J2EE, Flex
Database:	MySQL
App Server:	JBoss
Web Server:	Apache
CMS:	Open CMS
OS:	Linux
Others:	Adobe Data Live cycle NIO messaging service

### About SDG

SDG is led and managed by principals with a combined corporate and consulting experience of over 50 years in various IT disciplines. With its core competencies aligned for a value domain leadership, SDG strives to deliver best of class service and product.

From creating digital strategy to integrating legacy and enterprise applications across today's Internet and distributed processing technologies, SDG provides custom-tailored solutions to help businesses make the change to a dynamic, digital enterprise.