



### Client Problem:

Our client is a New York based financial software startup company, focused on building and customizing online fully functional trading platforms for securities brokers in emerging stock markets, with capabilities of portfolio management, asset management, and accounting. The client sought to establish themselves as a leading provider of online brokerage solutions to the existing brokers. The client founder team consisted of business and functional experts who could anticipate and articulate the market demand and product requirements. However, they needed a technology delivery partner who would offer the expertise, reliability, flexibility and cost effectiveness.

### Client Requirements:

The client needed a delivery partner who could deliver a strong, robust and scalable platform, with highly modular functional modules. The system had to be highly functional, expandable to incorporate future functionality enhancements, and flexible to incorporate local operational and regulatory requirements of multiple countries and regions. It also needed very intuitive and effective user interfaces, and an ability to link to different data sources and stock exchanges depending on the local conditions. The time to market was very critical since the client had an implementation order with a major stock brokerage house in Dubai.

### Our Solution:

Xoriant assembled an experienced team of architects, designers and developers who had worked in similarly challenging environments. After evaluating various technology stacks, we decided to use Microsoft® technology environment because of its functional richness and rapid development capability. The Microsoft® suite was very useful building a fully functional trading and broking platform within a very short time frame. We met the timeframe requirements by initially building and releasing three distinct modules for online trading, accounting, and trade capture operations with requisite quality, performance and multi-lingual capability.

### Client Results:

Our client was able to deliver a functional broking system with the basic functions like online trading, accounting, and trade capture well within the required timeframe. They were able to effectively marry their functional and business expertise with the technology delivery capabilities of our team to deliver a highly functional product without having to go through the investment and risk of building their own product engineering team.

## Xoriant approach and its benefits

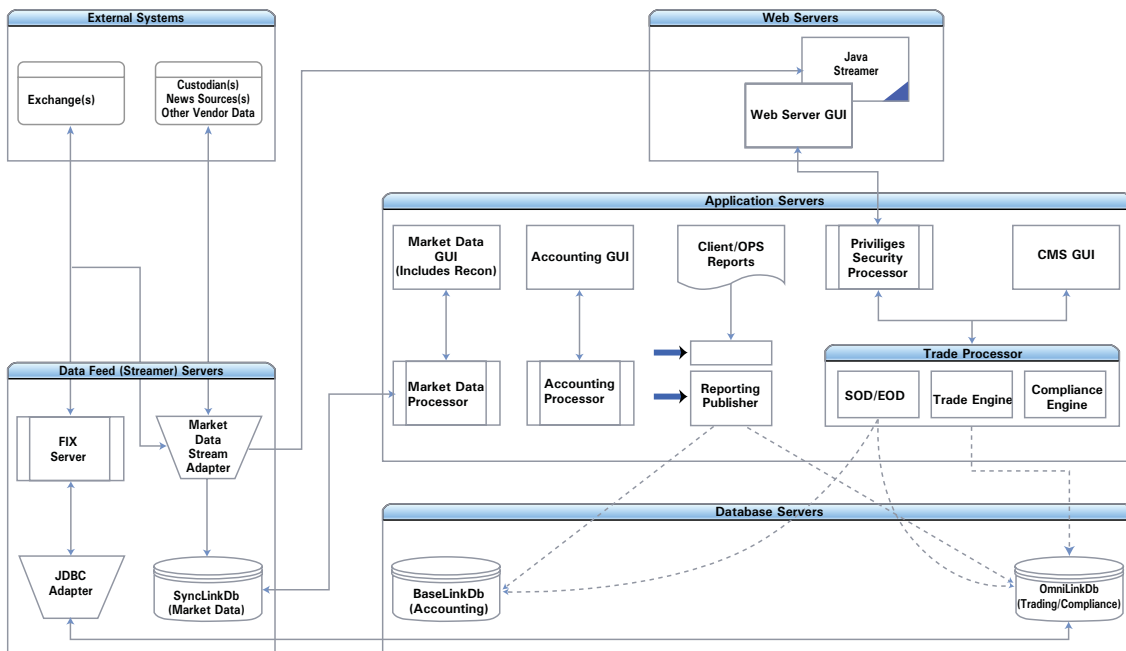
Xoriant adopted a multi-pronged unconventional approach towards this project.

1. Instead of implementing the functionality directly, Xoriant architects designed a modular system by building framework class libraries. Even though it took more time up front, this approach brought in much higher expandability and standardization. Some of these common class libraries were so generic in nature that they can be used across any .NET project, not just in this project.
2. To achieve mutually orthogonal demands of ubiquity and network performance, and security and connectivity, Xoriant architects conceived a mix of both client server- and web-based architecture. The seamless interoperability between MS-Windows client-server and .NET internet environments made this mixed architecture functional.
3. The project started out on a RAD development model and gradually transformed into a process-driven assignment for smoother and better delivery. Xoriant was able to leverage the client's existing development approach in the beginning, and then brought in the components of formal process slowly within client's comfort zone, causing minimum impact to product schedules and high impact to quality and maintainability of the final product.
4. Xoriant invited the domain experts from the client side to spend about 2 weeks in its India ODC centre, instead of sending one of its consultants to the client site. The advantages gained by this were:
  - The specific domain level ramp up was much faster
  - Leakage of information was minimized as the team interacted directly with the experts
  - The team and the client rapport was well established
  - The team realized the importance of this initiative and the different sub-components
  - Boundary level conditions for testing were easier to visualize
5. Resource planning was done in such a manner that the team size would increase in a phased manner. This brought down the total cost of the project.

6. Quality Control and Quality Assurance were handled by experienced members from Xoriant’s centre of excellence for Quality, thereby reducing the testing cycle

## Architecture/Data flow diagram

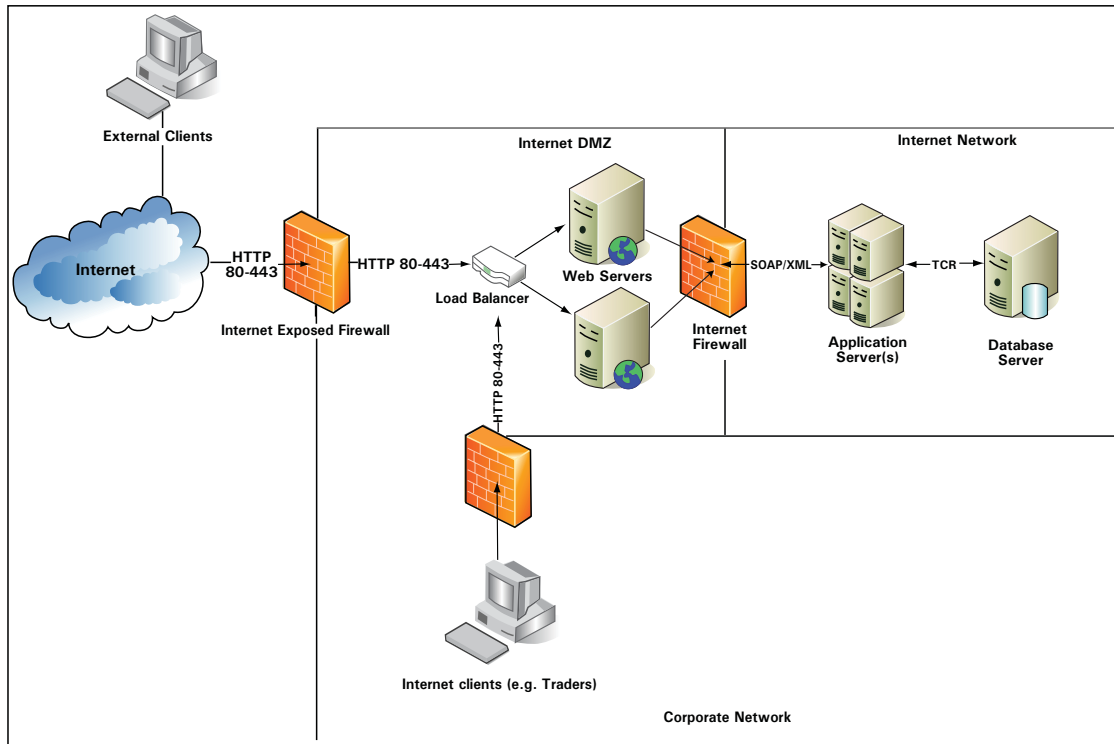
### ulBrokerage-High Level Dataflow Design



### Some of the highlights of the architecture were:

- Caching of large amounts of data was used. This helped in improving the performance to a great extent
- Web services and Remoting technology were used to achieve distributed architecture and scalability
- Data multiplexing techniques were used to overcome the limitation that the exchange server data and application data had to reside in one machine.
- Complete user-level report customization and web display of the data were achieved by writing the reporting environment in XML.

## Deployment Diagram



### Implementation approach

Xoriant embarked on a plan that involved the deployment of the software remotely from its development center in Mumbai, India. Using VPN connectivity, Xoriant had the software deployed on the servers at the stock brokerage house in Dubai. Consultants were then deputed to the site for resolving minor problems and ensure the smooth flow of operations. The team in India was on call to assist the implementation consultants

This resulted in major cost savings to the client in terms of logistics.



## Client testimonial

“First of all, let me say this was an amazing effort. Thank you all very much for all the hard work and dedication. I am certain of our success because of the great effort that you have put into this effort. I could not have asked for a more dedicated team to build this product.”

---

**Xoriant contact:** For more information on this project, you could contact [sales@xoriant.com](mailto:sales@xoriant.com)

### About Xoriant:

Xoriant Corporation is a leading IT services company offering a continuum of tactical software and IT services to both creators and users of information technology. Our highly flexible and customized support models focus on two primary vertical markets: Banking Financial Services and Insurance (BFSI) and High Technology. Xoriant has the qualities of an ideal software/IT partner - flexibility, versatility, agility and value.

We offer flexibility in:

- Mode - staffing, projects, outsourcing
- Geography - onsite, offsite, offshore, and
- Pricing - time & materials, fixed price, service level agreements based.

Xoriant’s software talent comprises developers of cutting-edge products on one side and business-facing solutions implementers on the other side. This gives us the versatility to tackle complex environments as well as to achieve healthy crossbreeding between technology and user experience. Our global delivery model helps us offer both agility and value. We strive to help the creators and users of software achieve more with less: people, time, and resources.