



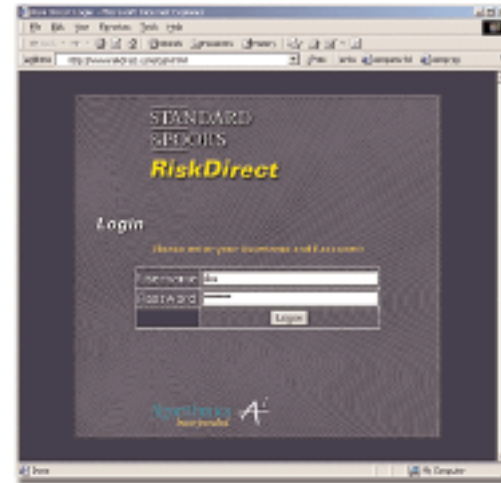
case studies



**STANDARD
& POOR'S**

**STANDARD & POORS
AND ALGORITHMICS**

**ONLINE PORTFOLIO
RISK MANAGEMENT TOOL**



CLIENT OBJECTIVE

Standard & Poors and Algorithmics wanted to offer a portfolio risk-management tool that was Internet based. Typically, risk management services are very costly to maintain due to the expertise needed sustain the data and risk assessment algorithms. The clients' objective was to offer the same service over the Internet so that customers could share the expense involved with risk management services.

CASE STUDY: STANDARD & POORS AND ALGORITHMICS

CHALLENGES

- A secure system had to be developed to handle highly sensitive data sent over the Internet.
- The client needed to offer the services of the highly complex RiskEngine interfaces online so they could sell this service to mid-tier clients. The highly complex interfaces of the Algorithmics RiskEngine made interfacing with the web nonsensical.
- Professional looking VaR, FAS133, Sensitivity, Credit and Summary reports needed to be generated, but easy-to-use reporting tools could not be used due to the complex data model.
- A large number of publicly traded and OTC financial security institutions and companies needed to be modeled and stored in the system.
- A robust interface was needed to manipulate the complex user tasks.

SOLUTION

Despite technical and algorithmic challenges, members of the current JIG team were able to develop an online interface for the highly complex RiskEngine service. used by mid-tier clients by using the knowledge and skill of JIG affiliates.

To ensure that data remained private and secure, 128-bit encryption was coupled with client-side certificates. The 128-bit cipher ensured that no one could eavesdrop on data being transmitted over the lines. Client-side certificates prevented unknown users from entering the system.

The complex interfaces were addressed by using the IDL specification in Iona Corba. Developers in remote offices could then specify how these systems would interact before development work began. This made integrating the complex systems an easier task.

The report formatting found in Crystal Reports created professional reports. This allowed for the necessary control of formatted information through a COM API. This allowed a simplified access to the complex data model.

The large data model was developed employing object-modeling tools and the professional expertise of skilled architects.

Java applets were used to support the required interface. This allowed a real-time and user-friendly interaction with the system.

Technologies Used

- Java Servlets
- Java Applets (Swing)
- KL Group Java Components
- DHTML
- Kiva • Oracle 8i
- Crystal Reports
- COM
- Iona CORBA
- SSL and client side certificates

OUTCOME

Jig Technologies was able to build and implement this system on time despite the technical complexities and large business logic requirements. Both Standard & Poors and Algorithmics were well pleased with the technical implementation and the robust and easy-to-use interface.