R SYSTEMS
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Development of an Integrated Dry Bulk Shipping Management System

OVERVIEW & BUSINESS NEEDS

The Client is based in Australia specializing in providing proven software for maritime companies. The company offers scalable services — from development to designing — to help end-users manage functional areas of the Dry Bulk Shipping Industry.

The Client's core requirement was to develop an integrated system for maritime companies. The following specific objectives were also identified:

- Overcoming redundant industry processes
- Create a centralized update mechanism
- Fulfill requirements of predefined reports and other MIS Reports
- Addressing discrepancies in data entries
- Integration & enhancement of existing workflow processes

CHALLENGES

- Multi-time zone management and automated report delivery
- Designing and implementing the 5-tier Security Matrix for secured transactions
- Formulating arrival schedules to paramount accuracy
- Automated approval/rejection within workflow for various entities

SOLUTION

- Developed an integrated system for Dry Bulk Shipping Management
- Created the functionality for scheduling the company's ships and tracking their real-time locations all over the globe
- Developed a flexible, reliable, scalable, and modular design, consisting of a suite of interconnected modules & services [SaaS on demand]
- Provided end-to-end functionality to enable 24x7 reliable communications between discrete operations in the global shipping industry

- The integrated system consisted of modules that were highly effective and integrated with supply and distributed chain management system for dry bulk sea borne transportation
- Implemented a comprehensive architectural design for an offline and real-time environment
- The diversified portfolio of shipping services developed consisted of features like 5 Tier Security, Data Sharing capability, Cargoes, Charter Parties – COA, Fixture Notes, Nominations, Pre-Arrival Schedules, Production Data, Port Details, Estimators, Audit, and Market Information, etc.

TECHNOLOGIES USED

- Microsoft .NET Framework 1.1
- SQL Server 2000 Server
- Microsoft IIS 5.0 Web Server
- XML based
- SOA Architecture