



Case Study: Dimension Data - Global Services Operating Architecture (GSOA)

About the Company

Dimension Data (DD) is a global IT services and solution provider that helps customers plan, build, and support their IT infrastructures. The company is listed on the London Stock Exchange [DDT LSE] and operates in 30 countries on five continents. DD applies its more than 23 years of experience in technology infrastructures, networking, security, operating environments, storage, and contact center technologies and its unique blend of skills in integration, consulting and managed services.

Global Services are DD's suite of standards-based services that can assess, implement, monitor, maintain, and optimize client's IT and business environment, from the network to applications. Global Services Operating Architecture (**GSOA**) is a framework that governs the process used by DiData to design, deliver, and support its customers. The features and processes of GSOA determine the method used by DiData to do various services related tasks in various layers of customer's IT environment - from the network to the applications.

Siebel forms the CRM backbone of GSOA by performing critical roles including contract management, event tracking, and recording. These activities were carried out over and above, the normal production, support, and maintenance requirements. Following are the various Siebel related enhancements and activities executed by Nihilent.

Project Description

- Upgrade to Siebel 6.3

DiData wanted to consolidate the regional Siebel instance to achieve a single customer view. This meant that the thick client approach of Siebel 6.3 needed to be replaced by a web-based interface. The purpose of this was to allow DiData users to access the application using the browser without direct access to the database. This led to Nihilent building an upgrade strategy and upgrading the Siebel application from 6.3 to Siebel 7.5.3.5. As a first step all the 5 regional Siebel instances were upgraded.

- Single instance of Siebel

This was followed by the consolidation exercise by moving the Siebel instance to the centralized hosted clustered facility. In addition to overcoming the normal challenge of data mergers, ensuring linkages of data were maintained, and ensuring data in the backend and Siebel is coordinated; the consolidation project had the challenge of migrating the database from Oracle to SQL Server.

- Data Migration

DiData was bringing in additional countries from their existing systems onto GSOA. This required migration of data from existing systems onto Siebel.

- Contract Process Optimization (CPO)

GSOA uses Siebel to manage contracts on devices. There was a requirement for the contract information to be available in Siebel to be able to determine whether a device is in service. The same information needed to be available in the billing system (SAP) for generating the invoices. This meant duplication of data.

The duplication of data was avoided by implementing the CPO project. This project required building a billing module in Siebel. The project generated a billing list by device under contract. Based on the billing data and additional criteria like service type, device manufacturer etc defined by business



these billing details are consolidated. This summarized data is sent to SAP as a line item against the contract. SAP is then used for billing. This required building of interfaces between SAP and Siebel for smooth sharing of data.

- Siebel Test Automation

Nihilent's testing team successfully automated regression testing for Dimension data's GSOA Siebel system using Siebel 7.8 and Mercury QTP.

Nihilent developed a framework that could be used in different environments. This framework uses various library files (developed by Nihilent) to create an interface, which accepts test data from XLS files, and reports the results into XLS or word files, behaving as a completely automated Test Management Tool.

Automation framework also involved checking flow of data from user interface to databases. By implementing this framework, user could directly test flow of data in back end and can test data for consistency.

Nihilent can also integrated Mercury Interactive Test Director with Quick Test Professional to completely automate the Test Management process.

- ITIL compliance

Recently, DiData has embarked on an initiative to make their services and solutions ITIL compliant.

The projects included:

- Business process modelling and redesign
- Siebel upgrade to Siebel 7.8.x, and SQL upgrade to MS SQL 2005
- Raising an ACR on Siebel to include specific ITIL functionality, providing consulting to Siebel on ITIL functionality, reviewing their design, and carrying out a code-review at Siebel's development center in Bangalore
- Developing custom functionality on top of Siebel to provide DD-specific ITIL functionality for new solutions - Managed NI and Managed IPT.

Business Challenges

- To consolidate the regional Siebel instance to achieve a single customer view
- To migrate database from Oracle to SQL Server
- Requirement for the contracts information to be available in Siebel, building a SAP-Siebel integration
- Business process standardisation
- Siebel training for DD regional staff
- Lack of ITIL compliance in Siebel Helpdesk module for external customers
- Long cycles on manual UAT by DD, leading to delayed solution rollout and tendency for scope creep during testing



Nihilent's Role

Over the last 3 years Nihilent has been responsible for supporting, maintaining and developing enhancements and architectural changes envisaged by DiData. Nihilent also has architectural ownership of GSOA.

Platform and Technologies

- Platform and OS: Microsoft Windows 2003 Advanced Server
- Products: Siebel 6.3, Siebel 7.5.x, Siebel 7.8.x with Actuate Reports
- Test Automation: Mercury Quick Test Professional
- Database: MS SQL Server 2005

Business Benefits Delivered

- Capabilities available in the old version were made available in the new one
- End user functionality was included to prevent in loss of productivity
- Automated ways provided by the application suite was used to combine customizations with new functionality
- The customizations created on the old release were migrated to the new release
- Nihilent's testing team successfully automated regression testing for Dimension data's GSOA Siebel system using Siebel 7.8 and Mercury QTP. By achieving over 80% test case automation, Nihilent brought down UAT duration from months to weeks, and regression testing time from weeks to days