



## Schema Manager™ Reduces Lead Time at EDS Inland Revenue Account

EDS is implementing Quest Software's Schema Manager™ to reduce the time and effort required in making schema changes to Oracle databases in their Inland Revenue Account. Their DBAs now claim a success rate for schema changes of almost 100 percent, whereas with the manual systems previously used, up to 10 percent of changes could result in errors.

Change tasks that previously involved three to four weeks work are now being completed in just a few days. The time saved by automating schema management has meant more time for system testing, and therefore better quality systems are delivered.

### The Challenge

The EDS Inland Revenue Account employs around 45 DBAs in various locations across the UK. Much of their work at present involves re-engineering older systems, and at any one time the team has around 60 projects ongoing. A typical project will include logical design, schema modelling, development, and implementation into the live systems environment.

The re-implementation of large hierarchical systems onto relational database management systems (RDBMS)—predominantly Oracle, but also including SQL Server—was proving a labour-intensive burden on the DBA staff. Any one change requested to a schema could mean a huge manual effort in making the changes and documenting each step of the process. Each change had to be assessed in terms of the work required and its potential impact on other parts of the system. The EDS Inland Revenue Account estimated that up to 100 man days effort was required for every schema change requested.

The EDS Inland Revenue Account realised that automating the routine tasks involved in schema management would free up DBAs to spend their time more effectively on systems testing and implementation. Implementing the right schema change management product would lead to a reduction in lead-times, increased time for testing, and ultimately greater confidence in the quality of the systems being delivered.

### The Quest Solution

Quest's Schema Manager is designed to allow organisations to create, track and deploy schema changes throughout the application lifecycle. A single complex change, such as renaming a column, can take hours to implement manually. Schema Manager automates all the key tasks involved, including documentation, schema comparison and versioning, auditing (pre-and post-change), and roll-back generation.

The Oracle DBAs at the EDS Inland Revenue Account assessed several leading products based on their suitability for their working environment, including Quest's Schema Manager. The EDS team knew that future developments were likely to involve SQL Server as well as Oracle databases, so initially a competitive product, with its open database interfaces, seemed an attractive solution. On discovering that Quest was itself planning to introduce SQL Server support for many of its offerings, this issue became less important.

"The fact is, we really only needed support for Oracle and, eventually, SQL Server," explained David Pember. "So a higher priority than open database support was the functionality and performance of the products. At the end of the day Schema Manager delivers between 75 percent and 90 percent of the functionality we originally identified as desirable—significantly more than the competition."

The EDS Inland Revenue Account needed a tool that addressed the entire schema management process: applying, removing and renaming objects, as well as generating changed Data Definition Language (DDL), the code required to perform the change itself.

### Overview

*"Schema Manager frees up our DBAs from routine time-consuming tasks such as pre-audit and post-audit documentation of changes, which we used to do manually. This means we're able to deploy them more usefully doing the jobs that DBAs are really there for, i.e., the planning and implementation of database systems. We're getting a better return on investment from our staff, as well as our systems."*

- David Pember,  
EDS Inland Revenue Account

### Headquarters

Plano, Texas

### Services

Provides management consulting, business process management, electronic business solutions and information solutions to help clients improve their performance and solve the complexities of the rapidly changing digital economy.

### Critical Needs

A solution to reduce the time and effort required in making schema changes to Oracle databases in their Inland Revenue Account

### Solution

Schema Manager

### Results

- Improved the success rate for schema changes to almost 100 percent, reducing change-related errors from 10 percent to nearly zero
- Reduced time to complete change tasks from four weeks to less than two days
- Automated many manual processes, enabling more efficient use of DBA resources
- Saved time by automating schema management, allowing more time for system testing, and therefore ensuring better quality systems are delivered

“Overall we found Quest’s Schema Manager to be the most rounded offering in terms of functionality,” continued Pember. “We liked the way it creates a baseline schema, and clearly identifies changes in different versions. Schema Manager kept a copy of the DDL being generated by Sterling’s COOL:Gen, which can be useful during system testing. It makes it easy to see ‘the big picture’ if you like, because a ‘version 2’ of a schema will actually be the whole of ‘version 1’, plus all the changes, not just the changes alone.”

Schema Manager made the DDL code accessible at the touch of a button. More importantly for the developers and DBAs alike, Schema Manager’s performance far outclassed the competition. “We were able to generate DDL much faster with Quest’s product,” continued Pember.

## The Bottom Line

“Schema Manager frees up our DBAs from routine time-consuming tasks such as pre-audit and post-audit documentation of changes, which we used to do manually,” concluded Pember. “This means we’re able to deploy them more usefully doing the jobs that DBAs are really there for, i.e., the planning and implementation of database systems. We’re getting a better return on investment from our staff, as well as our systems.”

Quest’s Schema Manager automates more than just documentation tasks. It manages industry-standard quality checks throughout the schema change process. The EDS Inland Revenue Account has seen the number of schema errors reduced from around 10 percent to almost zero.

Equally importantly, Pember estimates that since the introduction of Schema Manager, change-related tasks estimated to take three to four weeks are now being completed in under two days: “Some competitive products may have seemed cheaper, but they would ultimately have been a false economy—because of the additional effort required, we wouldn’t have seen the time savings we have with Schema Manager.”

The EDS Inland Revenue Account is currently implementing new working practices to facilitate the introduction of Schema Manager across all of its UK offices.

## About EDS Inland Revenue Account

Since 1994, EDS has been the IT strategic partner of the Inland Revenue, managing its IT services from development and delivery through output production and distribution. Inland Revenue applications cover the entire remit of UK taxation, both personal and corporate: Pay-as-you-earn (PAYE), self-assessment, maintenance and compliance, investigation and enforcement, and property valuations.

As a leader in the global information technology services industry for more than 37 years, EDS provides solutions for complex business issues. The company delivers management consulting, business process management, electronic business solutions and information solutions to help clients improve their performance and solve the complexities of the rapidly changing digital economy. EDS has more than 9,000 business and government clients in about 50 countries and in the UK, EDS employs over 13,000 people at more than 140 locations. Other UK clients include Vauxhall, BP, the BBC, the Department of Social Security, Employment Service and Rolls Royce.

## About Quest Software, Inc.

Quest Software, Inc. delivers innovative products that help organizations get more performance and productivity from their applications, databases and Windows infrastructure. Through a deep expertise in IT operations and a continued focus on what works best, Quest helps more than 18,000 customers worldwide meet higher expectations for enterprise IT. Quest Software can be found in offices around the globe and at [www.quest.com](http://www.quest.com)