



CALVI

CASE STUDY

Two years with no database- related bugs



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The Customer

Calvi is Europe's leading provider of Telecom Invoice Management software, transforming the billing experience. Its customers include Siemens, Vodafone and Schiphol airport.

The Challenge

The teams found it hard to keep up with the sheer volume of changes that came through. With no version control in place, accidents happened which impacted customers.

The Solution

The Development Teams added Redgate's SQL Toolbelt Essentials to Calvi's versioning process with great success. Saving hours of work and cutting out bugs.

“Redgate tools save us hours and hours of work each week”

Michael Stoop, CTO

The Customer

Calvi is Europe’s leading provider of Telecom Invoice Management software, transforming the billing experience. Its customers include Siemens, Vodafone and Schiphol airport.

As one of the world’s leading experts on telecoms billing data they provide fully industry-tailored solutions combined with world-class expertise. Their data platform break down barriers and silos without the need to replace legacy billing software – enabling customers to quickly and easily consolidate their billing data into one place.

75% of their customers use the software as a service (SaaS) version of Calvi’s software.



75%

USE THEIR SAAS VERSION

100,000,000

ROWS ADDED TO DATABASE TABLES EACH YEAR

“SQL Compare has made a huge difference in helping us version our database – it’s the single most helpful tool we have”

Michael Stoop, CTO

The Challenge

Calvi stores invoices, contracts, bills, and other data for their customers in a SQL Server database which contains 300 tables and more than 1,500 other objects. The larger tables can grow by hundreds of millions of rows each year, and this scale comes with a special set of challenges.

As Michael Stoop, CTO at Calvi explains:

“We have two teams of developers – one in the Netherlands and one in India – that work on our database. They’re also responsible for three web applications and several interfaces and processing engines. We develop using agile techniques (specifically scrum) and work with a combination of ASP.NET, C#, and SQL Server.”

Their role is to oversee and accept database changes, including performance tuning and impact analysis. They also maintain the database versioning system and model database version. A lot of changes to their applications require changes to the database too. They often have to modify user-defined functions, stored procedures that are shared between applications, or even database tables directly. The team had found it hard to keep up with the sheer volume of changes that came through.



For customers who run locally-hosted versions of our software, they had an additional challenge of ensuring that they're running the latest version of the application and database in sync. Michael outlines that:

"To tackle both problems, we needed a precise database versioning system. With the help of Redgate tools, we've created one."

“Thanks to Redgate products, in the last two years we haven’t had any bugs related to database objects at all, which is a great result!”

Michael Stoop, CTO

The Solution

Michael and the Development Teams added Redgate’s SQL Toolbelt Essentials to Calvi’s versioning process with great success.

They started by linking their Team Foundation Server, to a version control system, using SQL Source Control across both teams, and it has given them a huge improvement in efficiency. Michael goes on to explain that:

“SQL Compare has made a huge difference in helping us version our database – it’s the single most helpful tool we have. We use it to create scripts that sync changes between development and the snapshot production database. No change is missed and the development and production databases are always in sync. Developers can now use each other’s changes at the start of every new sprint.”



They have also implemented their own take on continuous integration for databases- assigning a version number to each table, update that number after each sprint, and send everything over to the QA team for testing. To help out the QA team further, they create large volumes of realistic test data ahead of time, using SQL Data Generator, which is useful in their performance tuning work, too. The next step in this will be for the development teams to start using SQL Source Control to script out their database changes for each sprint release.

Michael summarizes their success with SQL Toolbelt Essentials as:

“Overall, Redgate tools save us hours and hours of work each week. They’ve cut out bugs and versioning accidents almost completely. In the last two years we haven’t had any bugs related to database objects at all, which is a great result!”

SQL Toolbelt Essentials is a set of ten industry-standard SQL Server tools that work together to standardize every aspect of database development. It enables teams, like Calvi, to save time, increase code quality, and gain greater confidence in more frequent releases.

Try SQL Toolbelt Essentials for free at www.red-gate.com/products/sql-toolbelt-essentials