

01 THE CHALLENGE

Waterscan is a leading water management solution provider for the non-household retail market in the UK. The company's Waterline software enables clients to access water cost and consumption data in a visually compelling, user-friendly way.

Waterscan needed a software provider that could:

- Accelerate the development of their Waterline platform, allowing them to implement a step change in functionality.
- Move Waterline to a more flexible hosting environment.
- Improve the security of the product.
- Work collaboratively with them to develop new functionality.
- Improve quality with more robust build and test processes.
- Provide technical support.
- Scale the development team when needed.

02 THE SOLUTION

Through a competitive procurement process, Waterscan selected Critical Software as their preferred software partner. We approached the challenge by:

- Allocating teams to perform the development, support and testing of the platform.
- Instigating an agile development process, involving the customer in the development lifecycle, allowing incremental updates and improvements in functionality.
- Migrating Waterline into an AWS EC2 hosted environment, which allows scaling.
- Implementing continuous integration for the build, test and deployment of the product.
- Integrating IdentityServer into the product, to secure it.

03 THE RESULTS

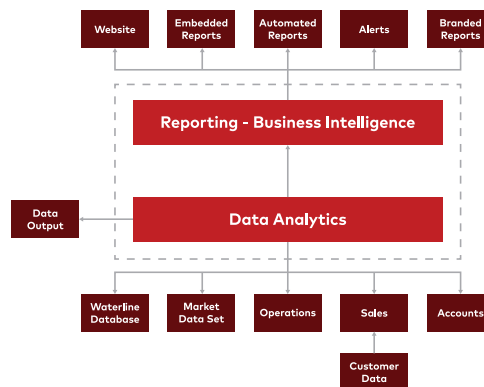
This software services contract was the beginning of a successful relationship for both Critical Software and Waterscan. The initial intention to stabilise, secure and scale the Waterline solution has been completed, creating zero adverse effects for the growing body of Waterscan clients. New functionality is now being developed at a good pace and the stability of both the product and the hosting environment have improved immeasurably.

As a result of this project, Waterscan and Critical Software have begun working on new market solutions together.

“Over the past two years, the Critical Software team has been an integral part of transforming our digital business and improving our service offering to our customers. The team is highly collaborative, dovetailing well with our internal product teams. They deliver high quality results using their technical expertise and knowledge of the water industry.”

- Neil Pendle, Managing Director, Waterscan Limited

04 ARCHITECTURE DIAGRAM



Within the Waterline product, data is collected from many sources (MDS, operations, sales, accounts etc.) and via the data analytics and BI engine, the custom-built backend software creates outputs for the various stakeholders via reports, alerts and a dedicated website.

05 KEY TECHNOLOGIES

- C# / .NET development
- MS-SQL databases
- Continuous integration using Jenkins, Groovy & MSBuild (hosted on Azure)
- Automated testing using Selenium/Katalon
- AWS EC2 cloud hosting environments
- Amazon Athena for querying MOSL's Market Data Set (MDS) from CMOS
- AWS S3, Lambda, Glacier & RDS
- Development managed using JIRA
- Documentation managed using Confluence
- IdentityServer for security
- Looker for business intelligence / data analytics

ABOUT CRITICAL SOFTWARE

Critical Software provides systems and software services for safety, mission and business-critical applications. We work closely with our clients, helping them to meet the most demanding standards for performance and reliability.

We were founded in 1998, with NASA our very first client. Today, we work across many international industries and have offices across the globe.

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