The Environment Agency Simplify Complex Fee Calculations

The Environment Agency is undergoing a review of their license charging model to streamline and improve service to customers. They have chosen to use a Responsiv Cloud installation of the Responsiv Unity Rules Module to deliver the service, and to take advantage of our "as a service" offering to avoid operational complexity for their Complex Fee calculations.

The Rules module is built on IBM Business Rules (Rules, iLog, Operational Decision Manager ODM), and is used to achieve consistent calculation of complex fees.

> The EA mission is to "protect or enhance the environment, taken as a whole so as to promote the objective of achieving sustainable development."

The Environment Agency (EA) is a non-departmental public body, established in 1995 and sponsored by the United Kingdom government's Department for Environment, Food and Rural Affairs (DEFRA), with responsibilities relating to the protection and enhancement of the environment in England.

The Challenge – Complex Fee Calculations

The Environment Agency needs to complete complex fee calculations for water extraction and irrigation charges based upon logic defined in collaboration with customers.

Each complex fee calculation is based on many variables, including permit category, volumes used, and operational criteria, as well as pro-rata adjustments. Each charging model has a validity period to allow for calculations to change over time.

The Agency needed separate rules into Charging Regimes, with a management team for each. Rules can only be applied to data specifically relevant to a specific Charging Regime.

> Responsiv were engaged to work directly with EA business users to create a solution that can capture, automate, and govern consistent charging.

Industry

Non-Departmental Public Body

DEFRA

Solution Components

Responsiv Consulting

Responsiv Unity Rules Module

Responsiv Cloud

Key Benefits

Separated business logic and IT systems

Greater development agility

Single source of truth for fee calculations

Reduced support and maintenance effort

Cloud-based, decoupled systems

Expert mentoring

Solution

Responsiv Solutions worked closely with EA staff to provide mentoring on the use of Responsiv Unity Rules Module to create rules that define these complex fee calculations.

Using Responsiv Unity Rules Module (Responsiv Cloud Decision Platform), the team were able to separate business logic from the IT systems. This abstraction allowed the generation of logic in terms that business users could understand and update.

This separation, abstraction and consistency enabled effective collaboration where business analysts, policy managers and rule authors developed and maintained the decision logic, while architects, developers and administrators developed and maintain the IT services.

Technology

Responsiv Unity Rules Module is Digital Process Automation software that captures, automates and governs frequent, repeatable business decisions.

- Fee calculations fully managed directly by business
- Single source of truth for all fee calculations
- Greater agility within business units to make changes
- Reduced support and maintenance effort
- Cloud-based, decoupled systems

By separating rules from applications, it is possible to allow experts to define more refined sets of rules that can be changed independently of the applications that use them.

A single, consistent set of rules can be made available across the enterprise and in this case, provided as a secure set of APIs on the Internet for more widespread use.

Why Responsiv?

Responsiv provided a highly cost-effective rules solution as a service as well as technical development and support to the project.

The solution was provided with custom terms to achieve a price acceptable for the project, and to allow EA to grow their use incrementally as the need materialises. This is the pattern we use for all "Responsiv Cloud Solution as a Service" offerings.

The Environment Agency procured the solution and maintain its use through UK Government G-Cloud agreements. Find Responsiv on G-Cloud to begin a conversation about your rules automation, process automation, or connectivity needs.

Responsiv deliver cloud services from the Responsiv Cloud, which is located in UK based data-centres and the IBM cloud. We can also provide these services from Microsoft Azure if you prefer.