UTILITY PLAYER

*UK Utility Company Severn Trent Water Saves £100k per Year
with Entrust Enterprise Authentication Framework*

Entrust®
Securing Digital Identities
& Information

The Drive Toward Employee Efficiency

In line with many forward-thinking organisations, Severn Trent Water places strategic importance on enabling employees to work as effectively and efficiently as possible through more flexible working practices.

The organisation sought to improve collaboration between staff, suppliers and contractors. In 2009 it began the first phase of their strategy to provide staff secure access to the network from any device, from wherever they are.

This idea also had to incorporate Severn Water contractors, who are responsible for the design and build of their assets — reservoirs and water causeways — as well as third-party suppliers responsible for processing customer communications.

"It's vitally important to us that we provide the technology and tools to enable our employees to work productively — from wherever they are," said Severn Trent Water CTO William Hewish. "The first phase of this process enabled our staff to access the network from a standard PC either in the home or at the workplace, securely and with speed and ease."

Displacement Decision

As part of this strategy, Severn Trent Water began a process of reviewing its existing authentication tools.

To this point, the organisation used RSA one-time-passcode (OTP) hardware tokens to allow users to gain access to the network. However, the renewal costs, combined with the rigidity of the hard token system (e.g., users had to remember to carry a hard token wherever they went), meant that the organisation required a new solution.

The hard-token system meant that lost or stolen tokens needed to be replaced, which could incur additional costs. For this reason, in November 2009, Severn Trent Water reviewed a number of leading strong authentication products that could meet the twin demands of saving costs whilst improving flexibility for users.

"Whilst we understand the importance of more flexible working practices, we have to balance this with the security of our devices; and to make sure that whichever security tools we use, they are not an obstacle for users," said Hewish. "Usability is the byword."

"Entrust gave us a solution that combined security and usability with the flexibility to add additional devices in the future. The cost-savings have been significant. And whilst we know access is as secure as possible, it's also easy to manage, maintain and update. In that way, it really is the complete solution."

- William Hewish
Chief Technology Officer
Severn Trent Water

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About Severn Trent

Severn Trent Water is a UK-based utility company, serving more than 8 million customers across the heart of the UK, stretching from the Bristol Channel to the Humber, and from mid-Wales to the East Midlands.

Three Critical Requirements

- Out-of-box migration from the existing RSA solution
- Integration with Juniper remote access solution
- Integration with Active Directory to simplify the administration process

Entrust's Platform Approach

"We found that the hard tokens simply didn't fit with our vision for more flexible security," said Hewish. "It's fine if you're in the office, but if you're offsite, or at an airport, you have to remember to bring your hard tokens with you everywhere you go. For users, this can be impractical and constraining."

The team conducted a full market analysis of the alternative solutions, and whittled the choices down to a shortlist that best suited their requirements. The selection process also involved 'sandboxing' and testing several solutions to prove their suitability.

Following this selection process, Severn Trent Water selected Entrust Inc. and the company's comprehensive security framework approach. This strategy is powered by the Entrust IdentityGuard software authentication platform, which, as one of the authentication methods supported, includes SMS 'soft' tokens.

This enables the transmission of a configurable number of OTPs to a user's mobile device for use during authentication, which can be automatically updated as needed. Entrust IdentityGuard also includes advanced authenticators like eGrids, smartcards, mobile smart credentials, digital/device certificates, among others.

Making the Change

It's clear that Severn Trent Water's objective was to deploy a comprehensive authentication solution that's cost-effective and easy to deploy, but versatile enough to solve today's security challenges and easily evolve with technology advancement.

"On balance, the Entrust solution was by far the most flexible and user-friendly solution that we considered, so it was rolled out to 3,000 users initially," said Hewish. "We have also recently added another 3,000 user licenses and tokens. This was a pretty seamless process and we could get people up and running with the new OTP instantly. In the past, it took an average of five days to create and distribute the hard tokens."

Hewish also noted that there was a further benefit from a maintenance perspective. All 4,800 employees have access to their own personal information via a secure portal and are responsible for updating their contact details — including their mobile number.

With the Entrust solution in place, Severn Trent Water employees are able to update their mobile phone details via a Web portal. The telephone number is stored in a database and employees then receive an OTP via SMS for authentication, avoiding the need for administrators to issue hard tokens.

Similarly, Severn Trent Water is now able to easily enroll the significant number of contractors that require authentication. If the organisation was still reliant on a token-based solution, IT would be required to manage ongoing requests instead of focusing on their core roles. With Entrust IdentityGuard, contractors can do it themselves.

Entrust fulfilled key requirements from a technical point of view: out-of-the-box integration, with automatic provisioning and integration with Juniper RAS Remote Access Server.

Better Security, Lower Costs

As well as enabling a more flexible approach to authentication, the Entrust IdentityGuard solution delivered significant cost-savings.

"I would estimate that moving to an SMS OTP approach substantially reduced our costs, somewhere in the region of £100k per year," said Hewish. "About 60 percent of the savings come from renewal costs and 40 percent from the reduction in the operational overhead for token management and distribution."

The Future

Severn Trent Water is currently in the second phase of its flexible working strategy and plans to further embrace the bring-your-own-device (BYOD) trend and secure remote access, enabling users to access the network on any devices, be it smartphones or tablets. Entrust's solution will play major part in this strategy.

"At the heart of the migration from RSA to Entrust was the need to make it easier for our workforce to work from any device securely," said Hewish. "Entrust gave us a solution that combined security and usability with the flexibility to add additional devices in the future. The cost-savings have been significant and whilst we know access is as secure as possible, it's also easy to manage, maintain and update. In that way, it really is the complete solution."

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