

Watercare secures vital services for 1.7M residents using the Zscaler Zero Trust Exchange platform with ZDX



Watercare
An Auckland Council Organisation

Watercare Services

www.watercare.co.nz

Location: Auckland, New Zealand

Industry: Government Administration

Customer Size: Approximately 1,100 employees serving 1.7 million residents

Using a sky-to-sea approach, public utility Watercare Services converts approximately 400 million litres (106 million gallons) of collected fresh water into drinking water for 1.7 million residents of the greater Auckland, New Zealand, region every day. A similar quantity of wastewater is treated and returned safely to coastal waterways. Watercare also operates a substantial construction division to complete and maintain its various facilities.

Failed legacy system, poor experiences plague users

Having weathered the first wave of COVID-19 lockdowns using a combination of security solutions, including a secure cloud gateway and virtual private networks (VPNs), Watercare Services faced an even broader set of challenges when the second lockdown occurred.

“Right before the second lockdown, one of our legacy solutions for securing remote workers failed completely,” explained Adam Gower, Head of Digital Operations at Watercare. “Further, we learned during the initial round of remote work that our traditional troubleshooting tools were insufficient for diagnosing many types of application performance issues on home networks, resulting in poor user experiences and reduced productivity.”

Standardizing on Zscaler and ZDX addresses multiple needs

Like any city, Auckland relies on safe drinking water for commercial and daily life, making the protection of water systems a top priority. In addition to providing a vital service to the area’s residents, Watercare’s internal goals include giving every employee an hour back in their week, every week, through the effective use of technology.

CHALLENGE

Replace insufficient existing network security with a comprehensive zero trust solution that optimises WFA and remote access for IIoT and IoT devices

SOLUTION

- Zscaler™ Zero Trust Exchange™ platform
- Zscaler Digital Experience™ (ZDX™)
- Zscaler Internet Access™ (ZIA™)
- Zscaler Private Access™ (ZPA™)

OUTCOMES

- Deployed WFA access to private applications for 800 users in less than half a day
- Reduced application issue resolution from weeks to minutes with AI-powered analytics and real-time insights
- Optimised Microsoft Teams and M365 for improved experiences and reduced IT overhead
- Obtained the ability to provide IIoT, IoT, and other connected devices with direct internet access across 1,300 sites
- Gained a strategic partnership for securing planned multi-billion-dollar physical infrastructure investments

With the pandemic setting back its security, productivity, and user experience mandates, Gower's team decided it needed better solutions. Although one option was building out its existing secure cloud gateway, users were already dissatisfied by the product. "Instead of operating in the background, it was obtrusive and users hated it," Gower said.

Committed to adopting a zero trust security approach, Watercare realised it needed a comprehensive platform that also delivered exceptional user experiences. Familiar with Zscaler from a limited implementation during the first lockdown, Watercare decided to standardize on the **Zscaler Zero Trust Exchange platform**, including the granular user experience monitoring and analytics solution, **Zscaler Digital Experience (ZDX)**.

"Zscaler offered the most complete platform and easy expandability to include more capabilities, such as experience optimisation," Gower said. "What's more, our early evaluations proved that Zscaler really is easy to deploy and seamless for users. Not only was that refreshing, in our experience it's notable when a solution actually fulfills the claims a vendor makes."

VPN-free ZPA sets zero trust journey in motion

Stepping back to New Zealand's first pandemic lockdown, Watercare accomplished a significant remote work expansion by supplementing its existing VPN and secure cloud gateway systems with a trial of VPN-free **Zscaler Private Access (ZPA)** among several dozen users.

Just prior to the second lockdown, Watercare's primary VPN product collapsed. With the expected fix requiring several days, Watercare pivoted to Zscaler and immediately expanded its ZPA deployment by 800 people. "It took us less than half a day," Gower said. "With any other technology it would've been a week-long ordeal."

As a fundamental component of the Zero Trust Exchange, ZPA secures access to Watercare applications running in its data center and in its multicloud environment. Like all of the Zscaler platform's solutions, ZPA connects users and devices to applications, rather than to the network, preventing lateral infections while making users and applications invisible to external threats. In addition, the platform inspects traffic, including encrypted traffic, for the effective prevention of threats and data loss.

ZPA accomplishes these functions using two Zscaler services: Client Connector, a lightweight agent deployed on end-user devices, and App Connector, a lightweight virtual machine (VM) that brokers the secure connection between a customer's private applications (in the cloud or data center) and the end user's device.

For Watercare, the adoption paid off quickly. "In addition to being totally seamless for our users, unlike VPNs, Zscaler's tight integration with our public cloud providers is a plus for keeping application performance high, while saving on costs and reducing complexity, as no appliances are required," Gower said.

"Users love the Zscaler Zero Trust Exchange platform because they don't even know it's there. And there's no administrative overhead. It just works."

– Adam Gower
Head of Digital
Operations
Watercare

Adding ZIA speeds internet connections and boosts security

Not long after adopting ZPA, Watercare's employees expressed increasing frustration with the agency's existing secure web gateway, particularly for accessing local websites. "As that product's regional instance was hosted in Australia, it blocked our users from accessing sites located in our country," Gower explained. "It appeared that users were attempting to access from overseas, which is against policy."

By adopting **Zscaler Internet Access (ZIA)**, the problem vanished. With ZIA using the same Client Connector agent as ZPA, the transition was fast and enabled Watercare to connect through the Zscaler hub in New Zealand, one of 150 global data centers.

"With Client Connector already installed across our device landscape, it was a natural fit," Gower said. "We simply contacted our Zscaler team and it went live as soon as we negotiated a licensing agreement."

Zscaler Digital Experience solves user challenges

With ZPA and ZIA implemented, Watercare turned its attention to improving user experiences. "During the first lockdown, it was extremely difficult to resolve application performance issues," Gower said. "We didn't have the tools to locate the source of many problems. It was frustrating and discouraging for users when an issue would go on for weeks without resolution."

Similar to adopting ZIA, Watercare expanded its use of the Zero Trust Exchange platform to include ZDX by simply contacting its Zscaler account team. "Adding ZDX ensured our help desk could immediately pinpoint problems," Gower said. "This was particularly important for troubleshooting complaints with Microsoft Teams, which we adopted during the pandemic and now rely upon heavily."

Using ZDX, it takes Watercare only seconds to track down Teams issues, which frequently are related to a user's internet service provider (ISP), said Gower. "Even when our techs couldn't directly solve the problem, users were relieved to learn the steps they needed to take," he said. "Eliminating emotional roller coasters that could last a week, or more, drives up user satisfaction and productivity while freeing up IT resources as well."

Another ZDX benefit is its application scoring feature. "We're using ZDX scores to move from a reactive break/fix model to a proactive approach," Gower said. "By consulting each application's score hourly, we can see which ones need attention before user performance is affected."

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Keeping IoT-enabled water systems connected and secure

Looking ahead, Watercare plans to leverage the Zero Trust Exchange platform in multiple ways. "For example, as we build new bespoke applications for improving our collection, delivery, treatment, and discharge systems, we'll be using ZDX scores during application testing and deployment," said Gower.

In addition, Watercare is keen to supply secure, direct internet connections to industrial IoT (IIoT) and IoT-enabled equipment throughout the 1,300 sites in its water systems network. Similarly, it will provide secure, direct internet connections to branch offices when workers return.

"Zscaler will be critical for securing device access for everything from pumps to entire treatment facilities," he said. "ZDX will be vital for ensuring all of our far-flung assets are performing optimally."

The deployment also eliminates routing traffic from Microsoft M365, Teams, and other SaaS applications to and from its Watercare's data center, enabling direct connectivity over the internet instead. "This further improves performance, productivity, and experiences," Gower said.

Strong partnership builds a positive relationship

Throughout Watercare's coming initiatives, which include billions in infrastructure investments, Gower is excited about building on his agency's positive relationship with Zscaler. "From the beginning, Zscaler demonstrated an interest in being a strong partner during our zero trust journey," he said.

"Most importantly, users love the Zscaler Zero Trust Exchange platform because they don't even know it's there, which is as it should be," he added. "And there's no administrative overhead. It just works."

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Protecting the future with zero trust

A dedication to supplying reliable, safe, and sustainable drinking water makes Watercare a continuous innovator with IIoT and IoT-enabled initiatives, such as installing a one-megawatt floating solar array on a treated wastewater pond to power 200 homes annually. Today, Watercare is moving into a new multi-billion-dollar water and wastewater investment phase. It will rely on the agency's zero trust platform for secure application access and AI-driven experience analytics to ensure users and devices can connect effectively in service of Watercare's environmental, social, and governance (ESG) goals and the wellbeing of the greater Auckland region.

