Falkirk Council Serves 160,000 Constituents Using WFA Model and the Zscaler Zero Trust Exchange Platform

The Falkirk Council is a unitary authority providing comprehensive local government services for its approximately 160,000 residents spread across a geographic area encompassing 112 square miles. Responsible for activities ranging from environmental management to transportation, the Falkirk Council owns and manages about a quarter of all area housing stock as well as administrating primary and secondary education for more than 30,000 students.

Accelerating a transformation to the cloud
Like many regional government agencies worldwide, Scotland’s Falkirk Council needed to fast-track its cloud and digitalization transformation when the COVID-19 pandemic hit. This included rapidly modernizing its existing cybersecurity solutions.

"By the time the pandemic struck we were already looking at a different way of working," explained Murat Dilek, Network, Infrastructure and Cybersecurity Team Leader at Falkirk Council. “However, our legacy remote working solution and security systems were insufficient for supplying productive and secure user experiences.”

Streamlining access for enhanced user experiences with Zscaler
A Scottish unitary authority serving a rural region, Falkirk Council is responsible for supporting a wide range of education, housing, health, public safety, and transportation services for its 160,000 residents. When pandemic closures sent employees, teachers, and students home to work and learn, Falkirk Council IT systems strained under the load.

CHALLENGE
Rapidly transition cybersecurity to a zero trust, cloud-centric approach in support of work-from-anywhere

SOLUTION
• Zscaler™ Zero Trust Exchange™ platform
• Zscaler Internet Access™ (ZIA™)
• Zscaler Private Access™ (ZPA™)

OUTCOMES
• Established VPN-free, zero trust WFA access to internal apps and the Internet, significantly boosting productivity while eliminating attack surfaces
• Slashed infrastructure and cybersecurity costs by half, compared to previous VDI-based environment
• Deployed secure, zero trust network access to iPads for 1,000 teachers in less than a week
• Provided users with stable, reliable, high-quality videoconferencing and other collaborative experiences
• Enabled delivering future innovations to support government administrators and school teachers in serving the public
“Compared with continuing to support our VDI infrastructure, our new Zscaler-enabled environment will be half the cost.”

– Murat Dilek
Network, Infrastructure and Cybersecurity Team Leader
Falkirk Council

“Demand for applications that were little-used previously, like videoconferencing, escalated dramatically once everyone had to work from home,” Dilek said. “Suddenly we were overwhelmed with reports of connection disruptions, which we determined was primarily caused by our traditional premises-based security approach.”

Although the Falkirk Council IT team considered significantly enhancing its existing systems as a stop-gap, Dilek sought a more effective way to use taxpayer funds. “The pandemic situation was constantly changing and we had no insights into the long-term impacts on life and work,” he said.

At the time, Falkirk Council had already conducted a proof-of-concept (POC) to investigate the Zscaler Zero Trust Exchange platform as part of a larger initiative for transitioning to a hybrid cloud and on-premises IT environment. As Zscaler proved to streamline and automate its infrastructure at scale, while supplying exceptional security and user experiences, the Council decided to roll out the solution across its footprint.

“Demand for applications that were little-used previously, like videoconferencing, escalated dramatically once everyone had to work from home,” Dilek said. “Suddenly we were overwhelmed with reports of connection disruptions, which we determined was primarily caused by our traditional premises-based security approach.”

Although the Falkirk Council IT team considered significantly enhancing its existing systems as a stop-gap, Dilek sought a more effective way to use taxpayer funds. “The pandemic situation was constantly changing and we had no insights into the long-term impacts on life and work,” he said.

At the time, Falkirk Council had already conducted a proof-of-concept (POC) to investigate the Zscaler Zero Trust Exchange platform as part of a larger initiative for transitioning to a hybrid cloud and on-premises IT environment. As Zscaler proved to streamline and automate its infrastructure at scale, while supplying exceptional security and user experiences, the Council decided to roll out the solution across its footprint.

“The POC served to demonstrate the software’s power,” Dilek said. “This included road-testing the Zscaler user experience, which significantly simplified access to all of the services our staff required.”

Zero trust environment enables work-from-anywhere

For its implementation, Falkirk Council deployed Zscaler Internet Access (ZIA) and Zscaler Private Access (ZPA) to create a holistic zero trust environment that provides work-from-anywhere (WFA) application access. Together, the two solutions form the foundation of the cloud-native Zscaler Zero Trust Exchange platform.

With ZIA, Falkirk Council can furnish access to SaaS applications and the Internet for on-site and remote workers. ZPA complements ZIA by providing VPN-free access to the Council’s internal applications running on public clouds, such as Microsoft Azure, or within its data center.

Both solutions accomplish their zero trust mission using lightweight applications. It starts with a common app called Client Connector, which is loaded on client devices to provide secure connectivity from users to applications. ZPA adds App Connector, which serves as a secure connection between Zscaler and private applications running in the data center or in a public cloud. It even discovers unknown private apps within the environment.

In addition, ZPA reduces risk by eliminating attack surfaces inherent in VPN-based environments. As ZPA takes a zero trust network access (ZTNA) approach, it ensures neither networks nor applications are ever exposed to the internet. This makes the Council’s entire networking infrastructure completely invisible to unauthorized users, while still giving authorized users least-privileged access based on policies Dilek’s team sets.
Rapidly protecting 1,000 users in less than a week

At Falkirk Council, the zero trust deployment focused on user engagement. Early adopters were identified in each department to champion the initiative and serve as representatives on the implementation committee, with ideas and suggestions from all employees encouraged. “As employees who were initially resistant learned how Zscaler eliminated friction to help them work effectively, we brought them onto the platform,” Dilek said.

During the Council’s implementation to its initial 1,000 government administrators, the pandemic’s adverse impact on remote schooling became more pressing. Having distributed Apple iPads and laptops to all teachers and students, Falkirk Council needed to give teachers access to internal resources on their iPads.

“In less than a week, we remotely implemented ZPA on iPads for 1,000 teachers,” Dilek said. “Zscaler is incredibly fast and easy to deploy.”

Once teacher devices were completed, the Zscaler rollout to government administrators resumed as the Council continued issuing mobile devices to replace its existing VDI environment.

New model comes at half the cost

Today, Falkirk Council and its employees are realizing significant rewards. Faster application access and higher network performance has considerably improved productivity, while consolidating multiple sign-ons to one has enhanced employee efficiency and satisfaction.

Collaboration is now facilitated through files held in shared drives, as the Council also deployed Microsoft 365 as part of the initiative. This implementation is further enhanced by the performance gains from Zscaler’s direct peering with Microsoft and its tight integration with the Azure cloud, where a variety of Falkirk Council’s business-critical applications reside.

“Now employees have the same working experience in and out of the office and IT can easily manage what applications staff members can access based on their credentials,” says Dilek. “Videoconferencing when working remotely has improved, with reliable sound and image quality. Our entire agency is also more resilient because our distant offices and remote workers no longer rely on a physical cable to our main data center – if a line is accidentally cut, workers can use a cellular network to access their applications.”

From a cost perspective, the ability to adopt laptops with docking stations, secured by Zscaler, for on-site and remote work has resulted in significant capital and operating savings over the VDI. “Compared with continuing our VDI deployment, using a mobile-first, zero trust model will be about half the cost, which is a considerable taxpayer savings,” Dilek said. “From an IT staff resources perspective, we’ll be able to refocus on business-critical initiatives rather than spending hours troubleshooting VDI.”
Expanding zero trust for the future of education and work

Moving forward, Falkirk Council intends to continue leveraging Zscaler to help it innovate in support of workers and constituents. "For example, we plan to move more applications to the cloud, such as our emergency response system, which supports elderly residents with the push of a button," said Dilek. "This will make the system more secure, resilient, and accessible to our response teams."

The Council will also evaluate other Zscaler options for expanding zero trust to address workstyles forever altered by the pandemic. "The workplace landscape has completely changed," Dilek said. "We’re not expecting staff to work full-time from offices anymore, even after this crisis has ended."

"With the help of Zscaler, we’ve adjusted our technology infrastructure rapidly to ensure users have the tools they need to work securely in a new-normal way," he added. "We can now provide the right devices, the right applications, and the right level of access to deliver seamless, efficient, high-performance user experiences. It’s that simple."

“With the help of Zscaler, we’re enabling our users to work in new ways.”

– Murat Dilek
Network, Infrastructure and Cybersecurity Team Leader
Falkirk Council

Leveraging the cloud to benefit all residents

With a responsibility to support all of its constituents from cradle to grave, Falkirk Council used the COVID-19 remote work imperative to accelerate its transformation to a hybrid cloud environment. By providing a secure, high-performance zero trust WFA experience for its users, Falkirk Council is ensuring it can fulfill its obligations to residents both young and old.

About Zscaler

Zscaler (NASDAQ: ZS) accelerates digital transformation so that customers can be more agile, efficient, resilient, and secure. The Zscaler Zero Trust Exchange protects thousands of customers from cyberattacks and data loss by securely connecting users, devices, and applications in any location. Distributed across more than 150 data centers globally, the SASE-based Zero Trust Exchange is the world’s largest inline cloud security platform. Learn more at zscaler.com or follow us on Twitter @zscaler.