

Blaze Networks support Colchester Zoo as they migrate to the most up-to-date, secure, cloud-based technology.

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Image Mark Blakemore

CHALLENGE:

A new ticketing system for Colchester Zoo needed to be hosted in the cloud. At the same time, the Zoo's existing servers were due for renewal, driven by a need for more storage, greater security and resilience. The decision was therefore taken to perform an entire infrastructure refresh.



STAY CONNECTED
STAY SECURE
STAY EFFICIENT

SOLUTION:

- ▶ Fibre optic leased line for a direct connection into Blaze Cloud providing faster speeds and a more reliable internet connectivity with guaranteed service level agreements.
- ▶ Fortinet, Unified Threat Management firewall, providing next generation protection technology and SD-WAN capability including layer 7 application routing.
- ▶ New ticketing system, hosted on Blaze Cloud, interfacing directly with the systems located around the Zoo, including tills and turnstiles.
- ▶ Microsoft Server infrastructure migrated, upgraded and centrally hosted on the Blaze Cloud platform. Servers including Microsoft active directory, file and print services as well as Microsoft 365 sync server and terminal servers for line of business applications.
- ▶ Fortinet switching infrastructure integrated into the SD-WAN layer and dedicated VLAN segmentation implemented across the Zoo.
- ▶ Blaze Service desk offering was provided to allow 24/7 support from Blaze and also including proactive patch management and support of all systems within the Zoo.
- ▶ Implementation of advanced email threat protection for email services reducing the amount of spam and unwanted content the Zoo was receiving over email.

RESULTS:

- ▶ A stable and resilient infrastructure which has improved efficiency.
- ▶ Highly available internet connectivity for speed and reliability across the business.
- ▶ Automatic line failover for business continuity.
- ▶ Greater storage capacity for future growth and expansion.
- ▶ SD-WAN providing intent based networking, allowing the Zoo to implement new requirements like CCTV or credit cards on the fly rather than waiting weeks and months for configuration.
- ▶ The switch infrastructure provision immediately enabled the delivery of an outstanding project for a BT phone system. Providing the new Fortinet distributed switch infrastructure allowed BT to complete their project and link their telephony services over the newly implemented Blaze fibre optic leased line.
- ▶ A documented infrastructure that allows the Zoo to have greater visibility on their infrastructure investment.
- ▶ A supported network through a managed service provider offering 24/7 support.

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BACKGROUND

Colchester Zoo is home to 220 animal species set in 60 acres of parkland and lakes. Their mission is to provide a first-class experience for all visitors, as well as growing the visitors' understanding and respect for animals. Through visitors' funds, Colchester Zoo undertakes breeding programmes for endangered species and funds various in situ projects in the wild.

Due to the Coronavirus lockdown, Colchester Zoo had to remain closed from 23rd March 200, over the Easter holidays and May half term, traditionally some of their busiest times. The Zoo reopened on 18th June, albeit with safety measures and reduced capacity, and has been open since, as regulations allow (interupted by the November lockdown).

THE CURRENT SITUATION

Blaze were first introduced to Colchester Zoo by one of their partners when Blaze were asked to host the Zoo's new cloud-based ticketing system. The ticketing infrastructure had previously been on site but it was time to migrate to the cloud to provide a more reliable and more secure environment for this key line of business application.

Colchester Zoo's legacy servers were also due for renewal and storage was becoming an issue, since the Zoo had grown significantly in recent years. Ben Brassington, MD at Blaze, had an initial meeting with Colchester Zoo and put together a proposal to migrate their multiple servers into the cloud, meeting all of their security and storage requirements. Blaze Networks own and operate their own cloud network, 'Blaze Cloud', which meant they could address the Zoo's critical infrastructure hosting requirements, without involving any third-party suppliers.

A MULTI-FACETED SOLUTION

Fibre optic leased line for New Ticketing System integration:

Colchester Zoo required faster internet connectivity to be able to integrate software for the new ticketing and till systems. Blaze initially installed a fibre optic leased line that connects directly into the Blaze Cloud environment. Blaze used Fortinet equipment that presented SD-WAN network capabilities to the Zoo.

Unified Threat Management:

Blaze has deployed Unified Threat Management which prevents cyber threats from entering the Zoo's network. Colchester Zoo now has comprehensive threat protection, including anti-virus, intrusion prevention, application control, content filtering, sandbox services and vulnerability scanning.

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Server Migration:

Once the high availability internet connectivity was established, Blaze turned their attention to the legacy server equipment. Like lots of businesses, the Zoo was running legacy on-premises Microsoft servers. Blaze rebuilt the infrastructure on Blaze Cloud using the latest Microsoft server operating system. Active Directory services, DHCP and DNS services as well as terminal servers and Microsoft 365 Sync servers were migrated or implemented on Blaze Cloud in a high availability configuration. Once complete, the Zoo's line of business applications were then migrated onto this new solid and secure infrastructure.

Dedicated VLANs:

Fortinet switches were installed to support network segmentation and PCI compliancy. Blaze integrated a Fortinet switching infrastructure into the SD-WAN network and security layer, utilising Blaze's connectivity into the site, which automatically fails over to an existing wireless link.

VoIP phone system:

The Fortinet switching infrastructure has enabled voice segmentation on the VoIP phone system. The Zoo's BT phone system now run over the Blaze leased line and provides excellent voice quality by prioritisation provided by the Fortinet equipment, which uses quality of service (QOS) technology.

Enhanced remote access:

Blaze deployed Blaze secure access, Blaze (SA) for the handful of employees who work remotely, this remote working security focused technology became even more valuable to the Zoo since the Covid-19 pandemic.



SECURITY EVERY STEP OF THE WAY

Blaze implemented single sign on (SSO) into all line of business applications and network areas so all staff members activity can be tracked by their one Microsoft network identity reducing risk and complexity in managing staff accounts for the Zoo. In addition to this Blaze enabled Microsoft 365 two factor user authentication (2FA) for access, again enhancing security. The Zoo now enjoys 24/7 support from Blaze Networks' certified compliancy-driven support network.

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A HIGHLY SECURE NETWORK AND A HAPPY CUSTOMER

Colchester Zoo now benefits from a robust and highly resilient network infrastructure which will automatically failover, ensuring they never have to worry about losing internet connectivity.

The SD-WAN technology and Fortinet switches are fast, reliable and secure, which has enabled segmentation across the network for redundancy and uninterrupted service. It allows the Zoo to implement new requirements on the fly rather than waiting weeks and months for planning and configuration.

The new, cloud-based ticketing system has ensured faster ticketing and till processes, enhancing the customer experience. There are also a lot of remote locations around the Zoo, such as refreshment kiosks, so the improved network visibility has allowed Blaze to resolve any connectivity issues at the remote kiosks, which has greatly improved internet speed and efficiency around the site.

Melissa Dench, Business Development Manager at Colchester Zoo, said,

"We now have full redundancy and multiple failover protection on our core network infrastructure, thanks to Blaze. We are also benefiting from fast and efficient internet connectivity and greater storage capacity. The Zoo has been brought up to speed with modern technology and is secure and resilient.

Overall, I am very happy with the service from Blaze. The team are helpful and supportive, often going above and beyond to help us understand the technical complexities and explain all the benefits at every step."

Ben Brassington, Managing Director at Blaze Networks, added,

"Blaze proposed expanding the Blaze Cloud infrastructure to replace Colchester Zoo's entire network infrastructure, which was a complex, technical project. It was business as usual for Blaze, even during the Covid-19 lockdown, as we continued working with Colchester Zoo, who now have a much more robust, agile and scalable network for future growth."

Blaze are on a full maintenance and 24/7 support contract with Colchester Zoo, making sure that they are always available for any issues or queries. The Zoo only closes for one day per year so they have the assurance that Blaze is always on hand to keep their IT up and running.

FUTURE PLANS

Blaze Networks will continue to develop the SD-WAN technology further into the wireless infrastructure, keeping the Zoo up-to-date with the latest technology and making sure they remain as secure as they can be. Blaze will also provide consultancy, education and support that will allow the Zoo to navigate effectively through their digital evolution.



Image Benjamin Pollard

If you'd like to see how Blaze Networks could future proof your network needs, give us a call today.

0333 800 0101