CASE STUDY

LIFE STYLE SPORTS DELIVER CONTINUITY OF SERVICE TO THEIR STORES
WITH DRAYTEK 4G SOLUTIONS

Dray Tek

smarthotspots
more than WiFi

LIFE STYLE SPORTS

INTELLIGENTWIRELESS
MANAGED**CONNECTIVITY**

About Lifestyle Sports

With 58 retail stores throughout Ireland and a strong e-commerce presence targeting Ireland, the UK and the rest of Europe, Life Style Sports have grown to become Ireland's biggest and best loved sports and fashion retailer.

Lifestyle Sports aim to provide customers with a unique shopping experience combining fashion with the latest active wear or sports-fashion wear.

As Ann Marie Keady from Lifestyle Sports explains:

> "Our company is all about providing an excellent customer experience and reliable EPOS systems is a critical component to providing that service experience…..
> We need to have an "always-on" branch office system to provide visibility and consistency throughout the supply chain. Due to the varied business demands, access to quick debit card processing, instant product pricing, stock availability and workforce management software is essential. "

The Brief

The network has grown in complexity over the past ten years with the organisation standardising on an ADSL router for VPN and internet connectivity. Whilst ideal in the early days of ADSL, as the organisation has grown the need to improve network resilience and up-time as well as take advantage of newer, faster internet technologies became more pressing. It was decided that the current router hardware infrastructure needed a refresh. Upgrading to 4G, ADSL2 or VDSL wasn't an option with current routers.

As Ann Marie Keady from Lifestyle Sports explains:

> "we realised that we needed full visibility of traffic and diagnostic information across our entire estate of routers and connections. With the previous setup we had multiple providers of each element of the branch network WAN and LAN. When technical or performance issues arose, it became more and more difficult to pin-point or eliminate a cause quickly. Time was lost liaising between various third parties to resolve the cause. We also urgently needed a contingency for broadband line failure which inevitably happens from time to time, often at the worst possible moment! We wanted to embrace high speed VDSL connectivity and provide managed private and customer Wi-Fi to meet the growing demands of the business"

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At the company's co-located datacentre in Dublin all 58 branch connections terminate with a managed firewall allowing converged access to the company's EPOS and business servers.

So the key technical and business requirements were:

- To replace the existing ADSL routers with ADSL2+/VDSL supported routers

- To provide secure redundant VPN connection to the datacentre for EPOS and office systems

- To implement a resilient solution for line failure utilising 3G/4G technologies for continuity of service, critical for in-store customer transactions

- To consolidate more services to one provider

- To implement a high speed, high-availability redundant firewall/VPN solution at the datacentre for termination of all the VPN connections

Lifestyle Sports contacted technology provider, smarthotspots, a managed services provider and DrayTek dealer. The brief was to provide a complete managed solution that addressed the needs of the business as outlined above.

The Solution

As Derek Buchanan, smarthotspots CTO explains:

"When Ann Marie first contacted us we had no hesitation in recommending the DrayTek solution. We have used and installed their products for almost 20 years. We find them highly reliable, feature-rich and our customers really trust them"

We knew that the DrayTek business class router offering would be ideal for the branches but the icing on the cake was the recent announcement of their new LTE product. It includes a SIM card slot built in and high-gain 3g/4g antennaes. Perfect for the 3G/4G back up required by the customer."

Dray Tek

The Solution continued

The branch solution proposed consisted of DrayTek's Vigor 2860L multi WAN router that handled all the high speed DSL broadband options required by the company. With the autosensing DSL port built into the router the same device can be installed in VDSL or ADSL sites and when higher speeds become available in the area, for example when ADSL migrates to VDSL, there is no need to change the router as it will handle both. There is a second WAN port available within the device that is also used in some key branches where there is an extra shared internet connection available. This added even more resilience and load-balancing. Vigor 2860 series routers support up to 200Mbs of total throughput; more than enough for perceived future demands.

For the 3G/4G line resilience requirement, smarthotpots installed a Three/O2 SIM card, although most providers are supported as standard. The router was then configured in load-balance/route-policy mode. Since the 4G account included 15Gb data plan as standard, it would be a shame not to use it to offload some internet traffic, even when the primary DSL is functioning normally. By using the Draytek's route policies, under normal circumstances, the traffic is load-balancing 80% on DSL and 20% on 4G. If there is any loss of service on the primary network connection, it is immediately identified and a 3G/4G session becomes the main provider automatically. The VPN is also automatically brought up over the 4G connection within 5 seconds of a DSL line failure. When the main connection is re-established the 3G/4G connection returns to its normal duty and the VPN is dropped and re-created, automatically, over the DSL connection within seconds.

As a business class router the Vigor 2860L handles all of the VPN connections, can be fine-tuned to handle local DSL conditions for optimum performance and has numerous firewall options to prioritise traffic according to importance e.g. credit transactions before email.
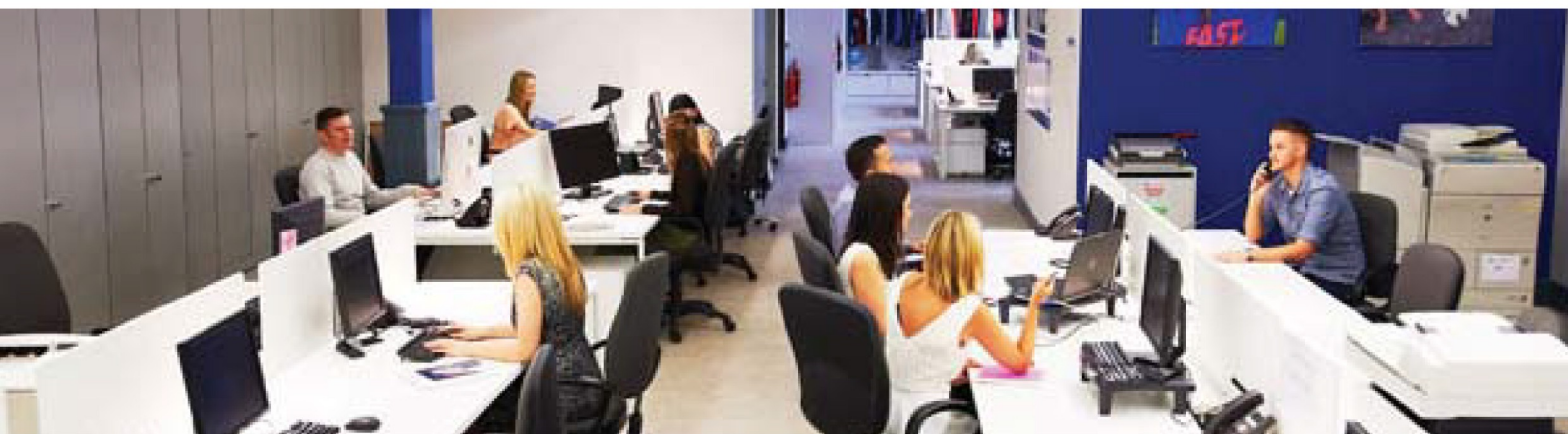
At the central datacentre site in Dublin a Draytek Vigor 3900 firewall/router was installed as the VPN concentrator for all the branches. With Gigabit throughput and up to 500 VPN capacity the device is ideal for the growing demands of the business. As a future option it is planned to install a second Vigor 3900 set up in "High Availability" mode that provides contingency for a catastrophic hardware failure. As the diagram above indicates a primary Vigor 3900 handles all connectivity under normal circumstances but in the event of a failure a second device automatically takes over providing continuity of service.

smarthotspots also provided the managed Wi-Fi network as well as router, switch and broadband monitoring service thus becoming the single point of contact for the complete managed solution.

DrayTek

The Difference

The network rolled out smoothly and very soon after the first sites were installed the full benefits of the 3G/4G line failover were realised. Just before Christmas, at the height of the shopping frenzy there were issues with a broadband line at one of the stores… but 4G kicked in straight away, service was maintained and no business was lost.

Head Office   58 Branches

VPN Concentration

High Availability

Vigor 3900

4G

SIM Card

VDSL / ADSL

Vigor 2860L

Internet

DrayTek