

Comrie Croft

Superfast Broadband in Rural Scotland

How a remote rural croft became a prime location for indoor and outdoor events

The Client

Comrie Croft is Scotland's award-winning green destination, including a farmstead hostel, group accommodation, camping, nordic katas, walking trails, wildlife viewing, grass sledging and some of the best compact mountain-biking in the country.

Comrie Croft has received a TripAdvisor Certificate of Excellence in 2016, is the 2016/17 winner of the Scottish Thistle Awards, member of the Scottish Independent Hostels, a Green Tourism Gold Badge holder and a Scottish Tourist Board 4-star hostel.

What We Do

Scottish Broadband Telecom lives by its name: we provide *Scottish* businesses with *Broadband* Internet and *Telecom* Services.

We have been successfully helping the general public and businesses of any type to communicate clearly and effectively since 2007.

Introduction

Comrie Croft is a stunning venue, in a enviable location, with magnificent views and incredible biodiversity.

A secluded haven in splendid isolation from the frenetic life of the cities, allowing guests to relax the mind and regenerate the body.

The more adventurous can take long walks in the area, while the sporty can rip through purpose-built bike trails.



Problems

Regretfully, this cocoon is in one of the many pockets of isolation from broadband, one of the most important utilities for any successful business, especially one in the hospitality sector where guests expect availability of some form of public WiFi service.

Broadband coverage for the area is, to date, limited to the basic ADSL services that were available in the '90s.

	Highest available download speed	Highest available upload speed	Availability
Standard	4 Mbps	0.6 Mbps	✓
Superfast	—	—	✗
Ultrafast	—	—	✗

The length of the telephone line is also adversely affecting performances and reliability of the service, with download speeds in the region of just 4Mbps, and upload speeds so slow that sending emails with

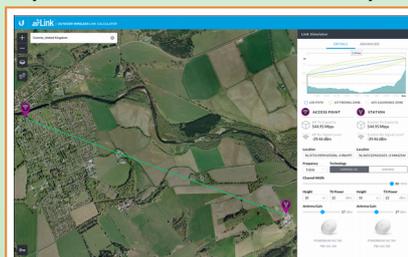
even the smallest of attachments can take minutes, and editing of their website is a long, difficult and frustrating experience.

Recurring total loss of connectivity, leading to routine equipment restart every hour, is severely affecting the business and frustrating guests.

The location is also peculiarly secluded, with no line of sight to any conurbation where some form of superfast broadband may be available.

Solution

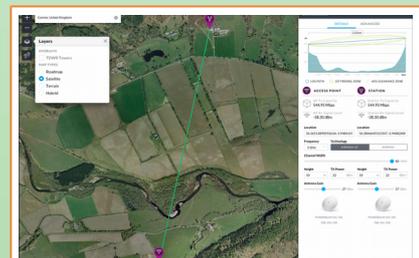
Scottish Broadband Telecom is specialised in bespoke engineering of telecommunication solutions. Prompted by the Broadband Delivery UK "Connection Voucher" Scheme, Comrie Croft approached us to ask if we were able to deliver a permanent solution to their frustrating long-term connectivity problems with a system compliant with the



Leg 1 - Combruih to Farmhouse

restrictive criteria of the scheme.

Our knowledge of Ubiquiti wireless devices brought the solution: a dual-leg point-to-point bridge that connects Comrie Croft to Combruih, a three storey building in Comrie part of their site hospitality offer, bouncing via a relay point at a nearby farm.



Leg 2 - Farmhouse to The Croft

Action

Scottish Broadband Telecom supplies connectivity to Combruth through an FTTC connection that, with the fibre cabinet only yards away, guarantees a fast, stable connection and consistent performances: real life speeds of over 70Mbps download and 16Mbps upload.



This broadband is delivered exclusively to a mini-dish, operating on the 5.8GHz range, pointed towards a similar mini-dish at the relay location.

Here, some of the available service is offered to the relay point site owners as a token gesture to compensate for the small energy usage and the space taken by the equipment.



From here, a smaller size mini-dish operating on a different frequency of the same 5.8GHz range feeds the superfast broadband to a receiving dish at the Croft.



These Ubiquiti devices are small, subtle and not intrusive. See for yourself: can you spot where the mini-dish is? We will give you a clue: look right in the middle of the picture on the left.

These mini-dishes are diminutive in size but big in performance: we field tested them to sustained symmetric speed of 250Mbps with non measurable latency (<1ms) thanks to their proprietary TDM technology.

Results

Comrie Croft is now connected to Internet through a stable, reliable superfast broadband and can operate at full capacity with no interruptions.

The reliability and performance of their connectivity allowed for further development, including:

- ✓ Trebling the number of PCs used for office work;
- ✓ Extended and expanded the public and private WiFi network to cover more outdoor areas and inside buildings;
- ✓ Installation of indoor and outdoor CCTV coverage and recording;
- ✓ Deployment of Voice over IP telephony throughout the site.

The newfound network speed and reliability has also enabled Comrie Croft to replicate their critical data from a local repository to a safe cloud-based server and plan a new web-based booking system.

Guests can access superfast wireless broadband throughout the site, stream High Definition video, play online games, access their preferred social media sites and communicate via video call with family and friends.

Weddings and other ceremonies can now be streamed online directly from the Croft, allowing distant relatives to participate in the atmosphere of the event.

What the client says

Andrew Donaldson, commenting on their recent Thistle Award said: "An important part of the winning formula is the great businesses we work with - like SBT!"

Statistics

	Previously	Current
Download Speed	567 Kbps (0.5 Mbps)	73 Mbps
Upload Speed	104 Kbps (0.1 Mbps)	16 Mbps
Avg. Latency	120 ms	15 ms
Jitter	> 300 ms	< 5 ms

The average monthly traffic is 670 GB, of which 150 GB are through Netflix and 25 GB from Facebook.

Remarkable, for a remote rural location with limited access to last century's basic broadband service from any other telecommunications provider.

The Ubiquiti devices have performed flawlessly through the most demanding weather, keeping a perfectly working connection through snow blizzards, freezing rain, sub-zero temperatures, thick fog and hail storms, with an uptime of 99.92%.

TL;DR

In a broadband blackspot? Had enough of waiting for the fibre roll-out? Scared by prices you have been quoted?

Talk to us. We work miracles.

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