

# CASE STUDY

## THE INSTALLATION OF WIFI WITH ACCESS POINTS AND MANAGED WIRELESS CONTROL

at Clarice House Health Club, Day Spa & Restaurant



**DrayTek**

Router - Switches - Managed Wireless - VoIP

INTELLIGENT WIRELESS  
MANAGED CONNECTIVITY



## About Clarice House

Clarice House, Colchester is an exclusive Health Club, Day Spa and Restaurant.

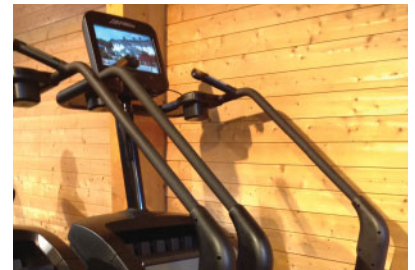
A magnificent Georgian House in a parkland setting offering luxurious day breaks with an award winning restaurant.

## The brief

As part of a recent refurbishment programme Clarice House decided to provide WiFi for guests throughout the building.

As Christine Pointer, Clarice House General Manager explains...

*“The new gym now has state of the art cardiovascular equipment each with an LCD screen for TV, Internet and tracking personal fitness regimes. We decided to install a wireless network to connect up all the machines and as part of the upgrade extend this to other parts of the building benefiting other departments and guests”.*



The key requirements were:

- To maximise the existing ADSL broadband potential and ensure that Fibre broadband could be accommodated when available
- Provide a closed WiFi network for the 40 fitness devices in the gym
- Allow guests (circa 200 per day) to access free WiFi from the Club Reception seating area using any WiFi enabled device
- Allow restaurant staff to take orders on WiFi enabled tablet computers in the restaurant, patio and Club Reception areas
- To allow guests and Front of House staff to move between areas without losing WiFi connection
- To ensure that all three WiFi networks (guest, gym and Clarice House administration) were completely separate

With such a mix of requirements Clarice House contacted their local trusted IT supplier Sicon, for advice and as Christine Pointer explains *“Sicon are our IT external contractors and provide fantastic support to our business. The team is friendly and knowledgeable and respond quickly to any reported issue.”*

Once appraised of the requirements Sicon recommended DrayTek's Vigor 2860 router for the broadband access and AP-900 access points for the WiFi network. The Vigor 2860 high speed router supports all of the common broadband connections (ADSL, VDSL, Ethernet WAN and 3G/4G modems) out of the box so was ideal to maximise the potential of an ADSL broadband connection today but will also connect to VDSL (required for FTTC fibre broadband) when available. Another great feature is that the router includes as standard a wireless management controller allowing up to 20 access points to be centrally managed.

Using a WiFi mapper, Sicon were able to install AP-900s in key locations to provide building wide coverage and the multiple SSID function was utilised to segment the gym, the guest and staff networks. It was important that users in the gym were unable to see the specific gym SSID used for the fitness equipment so this was configured as "hidden" and therefore not seen.

The mobility features within the DrayTek managed wireless solution allow individuals to log on via one specific access point, for example in the lobby, and then move to other parts of the building serviced by different access points without losing connection.

802.1q VLANs were configured for specific networks and inter-VLAN routing is not permitted to ensure networks are completely separate.

A DrayTek VigorSwitch P2261 Power over Ethernet (PoE) fully managed switch was installed to both power and connect the access points to the network. The AP-900s needed to be installed high up where no plugs were available making the PoE feature essential in both access point and switch.


For fine tuning Sicon utilised some of the extensive firewall features in the Vigor 2860 to block certain types of traffic (e.g. Peer-to-Peer) and until the fibre broadband becomes available the Quality of Service (QoS) facility has been utilised to ensure corporate traffic enjoys a greater priority on available bandwidth.

Now that the network is installed Christine Pointer goes on to summarise...

*"Our members and guests are loving the free wifi; mobile phone signal is very poor at our location so this has enabled them to keep in touch whilst visiting us, which they could rarely do before! The new gym equipment is a real hit with our members; it has such a range of media to keep them entertained whilst burning those calories! They love the ability to track their fitness routine, add exercises completed away from Clarice House and access the data via internet from wherever they are! The wifi tablet service in the restaurant has considerably improved our customer service and sped up the turnaround of orders. We are now able to provide a much more efficient table service because orders link directly to the bar and kitchen immediately, without the need for the Front of House Assistant to return to the till after every order."*



# Clarice House Colchester Managed WiFi



**Draytek 2860 N**  
 ADSL / VDSL  
 Private Subnet  
 192.168.1.1 - Main Network Default VLAN  
 10.0.0.0/24 - Guest Network VLAN ID 100  
 10.0.5.0/24 - GYM Network VLAN ID 200

WLAN Management Profiles – ClariceColchester

VigorSwitch P2261 PoE Switch (185W)  
 Default VLAN 192.168.1.1/24  
 Guest VLAN 192.168.1.1/24  
 Gym VLAN 10.0.5.0/24

Switch P 1 into Draytek LAN 1 – Hybrid Port for tagged and Untagged Packets



CORPORATE NETWORK

## WiFi

- SSID ClariceHouse
- SSID Guest
- SSID GYM

