# Cambridge Corn Exchange WIFI and Internet Services

The Corn Exchange has recently installed state of the art internet and WIFI services throughout the venue equipped to handle up to 1000 simultaneous users.

The venue currently offers a free shared wireless internet service available to all visitors to the venue, with a bandwidth coverage in all spaces of up to 2Mbps per user. Events that require faster internet connectivity can now upgrade with tailored packages offering managed or sole use access to the wireless system and providing **guaranteed** speeds of up to 90Mbps.

### What we can offer

There are three internet support services available at the Corn Exchange:

- Visitor WiFi Service
- Managed Internet Service for your Event
- Sole Use Internet Facility for your Event

### Visitor WiFi Service

The venue offers a seamless free Guest WiFi internet access for all users. Normal bandwidth is capped at 2Mbps per user. The WiFi is a shared by all users, so actual speed depends on the level of usage. This service can be disabled if required for events requiring sole use of the bandwidth.

### Managed Internet Service for your Event

Cambridge Corn Exchange can take the hassle out of providing fast reliable internet connectivity for your visitors and exhibitors. We can provide and manage separate dedicated connectivity and secure dedicated WiFi to individual stands, and areas, or for applications and platforms as required. The Corn Exchange can work with you or liaise with your suppliers and customers on your behalf to understand the exact requirements and make sure it is implemented and fully supported to your full satisfaction.

### Sole Use Internet Facility for your Event

The Corn Exchange can offer direct access to our full internet infrastructure to enable you to provide your own networking and customer internet end-service. We can provide unlimited access to the full available capacity of our in-house leased-line. Please note that our WiFi system cannot be offered under a Sole Use service (other than by using the Visitor WiFi service, with bandwidths capped at 2Mbps per user). If you require use of our WiFi system this will need to be provided as part of our Managed Service.

# Pricing Structure

Our pricing is determined by:

a) How much bandwidth your event requires (determined by the number of delegates and the demand they'll require from their mobile devices) and
b) whether your event requires our **Managed** or **Sole Use** Service.

The following prices include your individually tailored set up and guaranteed bandwidth throughout your event. All costs are + VAT:

|  | Guaranteed Bandwidth | Sole Use Price | Managed Service |
|---|---|---|---|
| **Digital 10** | 10 Mbps | £300 | If you require our managed service an additional £350 per day is incurred (extra costs apply for out-of-hours cover) |
| **Digital 20** | 20 Mbps | £550 | |
| **Digital 30** | 30Mbps | £900 | |
| **Digital 40** | 40Mbps | £1250 | |
| **Digital 50** | 50Mbps | £1600 | |
| **Digital 60** | 60Mbps | £1950 | |
| **Digital 70** | 70Mbps | £2300 | |
| **Digital 80** | 80Mbps | £2650 | |
| **Premier 90** | 90Mbps | £3000 | |

## Other Options & Services

We also offer:

- Installation and testing of additional data cabling between the network point and equipment anywhere within the event areas: £60 + vat per 50m incl. of materials
- Additional event on-site IT technical support to your Sole Use Service : £350 + vat (extra costs apply for out-of-hours cover)
- Hire and set-up of 8-port network switch to enable multiple internet connection points: £99 + vat

## Coming soon:

- Content and Media support to enable access to web content, promotions, sound and video content.
- Analytics Support and Statistics to understand visitor usage, behaviour and event performance.

**Further information:**

If you wish to discuss your internet and WiFi requirements further please contact Megan Charnock in the Conference & Events Team.

megan.charnock@cambridgelivetrust.co.uk

Megan will be able to put you in touch with the venue's network specialist who can provide further, detailed information on our IT services and assist with proposals and plans for setting up the internet services for your event.

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# Specification of Internet Services

## Managed Internet Service

- Single or multiple network/exhibitor setup with separate dedicated networks
- Single or multiple dedicated WiFi networks
- Dedicated true hi-performance/hi-capacity WiFi (1000 simultaneous users)
- Dedicated data cabling access
- Guaranteed priority bandwidth speeds per network upto 90Mbps
- Tiered WiFi Access (free and/or password controlled access with own SSID)
- Routed connection, PAT (NAT) & Port Forwarding available
- Separate private IP address ranges (dedicated VLANs & DHCP servers)
- Implementation cabling/support

## Sole Use Internet Service

- Up to 90Mbps non-contended leased line connection
- Public IPs available
- Bridged connection for direct public internet connection

## Specification of Internet Facilities

### WiFi

Using state-of-the-art WiFi technology, the system is specifically designed to support a large number of simultaneous users with a reliable and sustainable high level of performance under load. The system greatly avoids co-channel interference ('user self-interference'), which is a major issue with other high capacity WiFi deployments, particularly when the system is heavily used.

The system uses advanced single-channel architecture (SCA) WiFi, rather than the camore traditional micro-cell (Multi Cell Architecture), which is ideal for meeting stringent high WiFi performance requirements.

Band steering and load-balancing ensures effective and even traffic distribution between Access Points (APs) and between frequency bands. Issues with co-channel interference are eliminated by scheduling client access, mitigating against contention and against the ensuing performance degradation. Zero handoff technology means users roam seamlessly among access points, no matter the spacing, ensuring connection quality and reliable throughput with higher client/AP ratios. Fixed data sockets are also installed in the stage area, the Kings Room meeting room, and backstage area. These can provide access to any of the networks.

WiFi Specification:
- Guest Portal (can be disabled)
- Optional Cache and Web Content Filter
- System management, monitoring and remote support
- Internet Router Max Performance:
  - ✓ 4880Mbps (512 byte packets, routing with 25 IP filter rules)
- System User Capacity:
  - ✓ 1000 simultaneous users
  - ✓ 4094 IP address pool (/20) (can be disabled)
- Fully 802.11 IEEE standards compliant WiFi, dual-radio, dual-band, 802.11a/b/g/n WLAN access points:
  - ✓ 802.11b: Direct-sequence spread-spectrum (DSSS)
  - ✓ 802.11a/g/n: Orthogonal frequency division multiplexing (OFDM)
  - ✓ 802.11n: 3x3:3 MIMO with three spatial streams in main hall
  - ✓ 802.11n: 2x2:2 MIMO with two spatial streams in meeting rooms & backstage areas
  - ✓ operates over the 2.4GHz and 5 GHz bands
- Security Standards:
  - ✓ WPA2-AES, 802.11i
  - ✓ MAC filtering

### Leased Line
100Mbps Fibre Redcentric MAN Leased Line Circuit (up to 90Mbps available for event). The line is dual routed back to Redcentric Point of Presence (POP).