RBC Place London – Network Infrastructure Fact Sheet

RBC Place London has a fibre internet connection provided by local London company Start.ca

Internet access to the facility is a 100 Megabit per second bi-directional fibre optic service, shared amongst all wired and wireless network applications. The network infrastructure utilizes a variety of traffic prioritization methods to ensure adequate allocation of Internet bandwidth to the wired and wireless network segments. Paid wired and wireless network access receive a higher amount of bandwidth and prioritization than the complimentary wireless access available in public foyers.

RPC Place London has been optimized throughout the facility based on the 5 GHz wireless band. This ensures that visitors receive the highest possible experience with our wireless solution, while supporting devices up to 10 years of age.

Wired Internet:
Speed: The wired network infrastructure utilizes the latest wired switching solutions, with each port capable of up to 1 Gigabit per second transmission speeds. DHCP address assignment is also available on the wired network infrastructure.

Connection Type: Cat5e cable with RJ45 connectors on the main level

Wired network capacity is limited by the number of available network ports within the building infrastructure. Specific capacities may vary depending on the event size and wiring closet location.

Wireless Internet:
Protocols Supported: 802.11a, 802.11n, 802.11ac, 802.11ax (WiFi 6)
Network Name: RBCPL-client name
Authentication Type: Web Login
Communication between devices: Turned off

Wireless coverage is available throughout the facility, including:
- Salons
- Studios
- Ballrooms
- Public foyers
- Loading Dock

Wireless Capacity:
The wireless infrastructure has been designed to accommodate high-density wireless applications. There are 34 wireless access points throughout the facility. Specific capacities based on wireless access point density and network infrastructure design are as follows:
- Salons: Up to 1,000 simultaneous connections
- Studios: Up to 500 simultaneous connections
- Ballrooms: Up to 1,500 simultaneous connections

- Public foyer areas, 1st floor: Up to 1,000 simultaneous connections
- Public foyer areas, 2nd floor: Up to 1,250 simultaneous connections
- Facility total: Up to 4,000 simultaneous connections

Guests need to have dynamic host configuration protocol to access the wireless system.

Wireless Speed:
The wireless infrastructure utilizes next-generation wireless access points. Each wireless access point is capable of up to 2.98 Gigabits per second transmission speeds, utilizing the 802.11ax wireless protocol. The wireless infrastructure is backwards-compatible with all previous 5 GHz wireless standards, including 802.11a, 802.11n, and 802.11ac.

Internet Security:
Network security for our guests is of the utmost concern to RBC Place London. Depending on the needs of our wireless guests, wireless traffic is fully encrypted utilizing the WPA2 security protocol, providing our guests with security akin to a modern banking website.

All authentication attempts are fully logged and categorized within our network monitoring solution.

Wired network traffic is enabled on a per-request basis, and only specified network outlets are permitted access to the wired network infrastructure. The wired network traffic for our guests is completely isolated from the wireless and other network traffic in the facility.

Bringing your own Network Equipment:
Due to the design, complexity, and security of the network infrastructure, no outside network equipment is permitted within the facility.

Wired and Wireless Differences:
Though the wired and wireless network architectures have been implemented with the latest standards, there are a number of considerations when choosing a wired or wireless network.
- Wired access provides dedicated, guaranteed access to network resources
- Wired access has a limited physical range, based on physical cabling
- Wireless access is a shared resource amongst all wireless users
- Wireless access provides access to network resources throughout the facility

Wireless Reporting:
Below is a sample of a usage graph which outlines the user count during the week, available within our infrastructure monitoring solution. Customized splash pages are available.
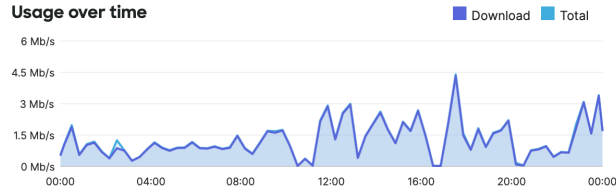
Usage stats

TOTAL DATA TRANSFERRED	TOTAL DATA DOWNLOADED	TOTAL DATA UPLOADED
13.38 GB	12.99 GB	398.3 MB

Usage over time

Download Total

6 Mb/s
4.5 Mb/s
3 Mb/s
1.5 Mb/s
0 Mb/s

00:00   04:00   08:00   12:00   16:00   20:00   00:00

Client stats

TOTAL UNIQUE CLIENTS	AVERAGE USAGE PER CLIENT
9	1.49 GB

Splash page

NUMBER OF CLIENTS TO REQUEST PAGE ⓘ	NUMBER OF CLIENTS GRANTED ACCESS ⓘ
0	0

Top clients by usage

Description	Usage	% Usage