



talk
STRAIGHT[™]
The Straight Talking Telecoms People

Co-Location Service Description



August 2016

Service Description

The purpose of this document is to provide Talk Straight customers and partners with a description of Talk Straight’s colocation services together with the different options that we can offer.



Shared Hosting

Space	Power	Max Power	Setup Cost (£) ex Vat	Monthly Cost (£) ex Vat
1U	0.15kW	0.15kW	£450	£50
2U	0.3kW	0.3kW	£450	£100
3U	0.45kW	0.45kW	£450	£150
4U	0.6kW	0.6kW	£450	£200
5U	0.75kW	0.75kW	£450	£250
6U	0.9kW	0.9kW	£450	£300
7U	1.05kW	1.05kW	£450	£350
8U	1.2kW	1.2kW	£450	£400
9U	1.35kW	1.35kW	£450	£450
Extra power (in 0.25kW increments)			nil	£55

A Dell 1U R330 server uses on average 0.147kW

All physical racking / unracking of equipment to be conducted by site data centre engineers

Continues

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Dedicated Hosting/Colocation

Space	Power	Max Power*	Setup Cost (£) ex Vat	Monthly Cost (£) ex Vat [#]
Quarter Cab (10U)	2A (0.5kW)	2A (0.5kW)	£1,000	£400
Half Cab (20U)	4A (1kW)	6.25A (1.5kW)	£1,000	£600
Full Cab (40U)	8A (2kW)	29.16A (7kW)	£1,500	£950
Full Cab (40U)	16A (4kW)	29.16A (7kW)	£1,500	£1,295
Extra power for a Full Cabinet per 1 kW			nil	£220

*Subject to contract

[#] Based on a 36 month contract

Bandwidth	Setup Cost (£) ex Vat	Monthly Cost (£) ex Vat
10Mbps Burstable Bandwidth	£250	£80
20Mbps Burstable Bandwidth	£250	£100
50Mbps Burstable Bandwidth	£250	£125
100Mbps Burstable Bandwidth	£250	£200
200Mbps Burstable Bandwidth	£250	£400
300Mbps Burstable Bandwidth	£250	£500
400Mbps Burstable Bandwidth	£250	£600
500Mbps Burstable Bandwidth	£250	£700
1Gbps Burstable Bandwidth	£250	£1,000
2Gbps Burstable Bandwidth	£500	£1,800
3Gbps Burstable Bandwidth	£500	£2,400
4Gbps Burstable Bandwidth	£500	£3,000
5Gbps Burstable Bandwidth	£500	£3,600
10Gbps Burstable Bandwidth	£500	£5,000

Continues

Dedicated Hosting/Colocation continued

Cross Connect Cables to Telecoms provider rooms	Setup Cost (£) ex Vat	Monthly Cost (£) ex Vat
Single fibre cross Connect - single mode or multi-mode (LC to LC connectors)	£550	£25
Resilient 2 x fibre cross Connect - single mode or multi-mode (LC to LC connectors)	£1,000	£50
Single Copper Cat 6 (RJ45 connectors)	£350	£20
Resilient 2 x Copper cat 6 (RJ45 connectors)	£650	£30

Other Cabinet options	Setup Cost (£) ex Vat
Combination Locks (per cab, front & back)	£180
Install of customer provided power strips	£150

IP Addresses	Setup Cost (£)
/30 (4) Subnet of IP addresses delivered to cabinet	£40
/29 (8) Subnet of IP addresses delivered to cabinet	£80
/28 (16) Subnet of IP addresses delivered to cabinet	£160
/27 (32) Subnet of IP addresses delivered to cabinet	£320
/26 (64) Subnet of IP addresses delivered to cabinet	£640
/25 (128) Subnet of IP addresses delivered to cabinet	£1,280
/24 (256) Subnet of IP addresses delivered to cabinet	£2,560

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Quarter Rack Features

Each quarter rack compartment is physically separate to any adjacent cabinet section with independent lockable doors (front and back).

Rack dimensions

- Standard 19" racks, 600mm wide, 1000mm deep (internal rail depth 750mm)
- Useable U space within the 19" compartment is 10u (9u's usable as 1 needed for power feed)
- Front and back mesh doors with swing locks (suited keys)

Power strip setup

- Dual Feed power to the ¼ compartment
- 2 x basic 4 way IEC C13 outlet vertical power strips
- Max power 0.5 kW (protected with 13 amp fuse)

Power usage validated but clamp meter reading (no historical stats available). Environmental stats monitored per cabinet.

Half Rack Features

Each half rack compartment is physically separate to the adjacent half cabinet and is fitted with independent lockable doors (front and back).

Rack dimensions

- Standard 19" racks, 600mm wide, 1000mm deep (internal rail depth 750mm)
- Useable U space within the 19" compartment is 20u.
- Front and back mesh doors with swing locks (suited keys)

Power strip setup

- Dual Feed power to the ½ compartment
- 2x Basic 8 way IEC C14 outlet vertical power strips
- Max power 1.5 kW

Power usage validated but clamp meter reading (no historical stats available). Environmental stats monitored per cabinet.

Continues

Full Size Rack Features

For improved cooling and cable management, full racks are 800mm wide by 1000mm deep and 45u high (other rack options available upon request). Power is provided via 2 dedicated (N+N) single phase 32 Amp overhead outlets. Power options are available from 2kW to 7kW per rack with power usage included in the cost of the rental.

Rack dimensions

- Standard 19" racks, 600mm wide, 1000mm deep (internal rail depth 750mm)
- Useable U space within the 19" cabinet is 42u.

Power strip setup

- Dual Feed 32 Amp feeds to the cabinet
- 2x Basic 8 way IEC C14 outlet vertical power strips
- Max power 7 kW

Other power feed and power density options available upon request.

Each full rack has local temperature and power monitoring to ensure SLA compliance and optimum performance. Any variation outside of our strict temperature and power tolerances are investigated by our engineers and any necessary actions are coordinated with you to resolve the issue as effectively as possible.

High Density Rack

For customers that require a rack density greater than 7kW our solution architects will plan and deploy UPS backed fan tiles, cold aisle containment and in-row cooling to ensure equipment remains cool even during transition and maintenance periods. Once the rack is deployed, live management does not stop there, we continue to monitor the rack's health to spot any possible issues and act before they occur.

Key features of standard/high density rack space include:

- Immediate availability
- Dedicated Implementation Manager
- Secure and resilient infrastructure
- Bespoke power options available
- Personal support services
- Managed cabling solutions
- 99.99% for power and cooling SLA

Continues



For more information please call

01133 222 333

or email info@talk-straight.com

Private Cage Solutions

For multiple rack footprints, a dedicated cage option provides a customer with additional security and the benefit of avoiding expensive property build out costs. All cages are secured from the raised floor to the ceiling slab and fitted with tamper proof bolts to ensure maximum structural integrity. The underfloor void is also secured with horizontal bars for total security.

Access is via electronic secured doors with swipe card readers as standard and options are available for 2 factor authentication using biometric readers.

Key Features

- Rack footprint to 4,000 ft²
- Private dedicated secure areas
- Flexible design and layout options
- Short fit out timescales
- Bespoke security and power configurations
- Tailored support services
- 99.99% power and cooling SLA

Bespoke Rack Solutions

For customers that require additional flexibility around solution design and billing, we will work together to understand the exact requirement and design a solution accordingly. Options include metered power usage, flexible contract terms, staging environments, migration services and managed bandwidth and connectivity services.

24/7 Remote Hands

Even with the most meticulous maintenance schedules in place faults can occur. In those cases, a rapid response by onsite engineers is essential to restoring your systems to full productivity quickly and effectively.

All engineers are qualified, efficient individuals who are available 24/7/365 as an extension of your own in house team to aid and improve your systems performance. All the engineering team members continuously attend training programs to improve and enhance their skills to better understand your needs.

As well as ad-hoc changes and troubleshooting, we offer a pre-scheduled service to enable you to complete work without having to attend site, for example; offline firmware updates, patching and equipment install, rebuild or relocation.

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24/7 Remote Hands Continued

Standard Tasks Include

- Power cycling a router, server, switch and soft-booting a server
- On-site technical assistance and troubleshooting
- Equipment installations and configurations
- Hardware removal, installation and configuration
- Testing media for continuity and faults
- Providing visual verifications to assist in remote troubleshooting
- Inventorying/labelling of equipment
- Moving equipment within your space and racks
- Moving or replacing patch or power cables
- Tape changes and off-site storage services



Premium Burstable Bandwidth

Although we are a carrier neutral site, Optimum Data Centres are able to offer premium bandwidth to customers. The service is delivered via two diverse telco links and via HA routers and distribution switches, to provide maximum redundancy and failover capability for customers.

Bandwidth options start at 10Mbps and are charged using 95th percentile which allows customers to burst up to 1000Mbps on demand (10 Gbps options available) without incurring excessive usage charges.

Key Bandwidth Features

- Tier 1 network links
- Managed IP ranges
- Burstable links with HA failover
- 99.99% SLA
- Local link monitoring & bandwidth usage

Location

The data centre is ideally located with excellent access into central London (20 minutes by train to Paddington from Hayes & Harlington station) and within 5 miles of the M25 & M4. Heathrow airport is a 10 minute drive or 8 minute journey by train on the Heathrow Connect line.

Optimum Data Centre
Springfield Industrial Estate
Beaconsfield Road
Hayes
Middlesex
UB4 0SL

NB: All access is by prior appointment only, as per the site access policy.

Site Technical Data

Summary

- Tier III technical infrastructure
- Standard data hall size - 8,250 ft² (766m²)
- Total technical power per hall - 880 kW
- Total site power – 9 MVA

Utility Power

- 3 x 11 kV redundant power feeds from grid
- 5 x HV transformers onsite

Generators

- Vendor diverse generator sets, N+N 6.6MW total capacity
- A side 3 x 2,200 kVA Cummings diesel generators
- B side 3 x 2,200 kVA Broadcrown diesel generators
- All generator sets rated for continuous running
- Skid mounted, above-ground tank with diesel for 48 hours running (each gen)
- Supplier contracts in place for additional fuel within 24 hours

Space

- Each hall comprises 8,250 ft² (766 m²) of raised floor Data centre space
- 30,000 ft² (2,787 m²) office space 650mm (25.5”) raised floor over on slab-on-grade (concrete) floor
- Floor loading 10 kN/m² UDL, 4.5 kN/m² point load
- Leak detection monitoring inside data hall perimeter
- Walls
 - No water running above the data halls
- Roof Space - 30,000 ft² (2,787 m²) - available distance to roof is 100m, ability to place point to point microwave link systems and other antennae systems on the roof space - subject to terms

UPS

- Dedicated 8 Pillar UPS Modules @ N+N
- Current capacity 880 kW
- UPS runtime 10mins on A or B feeds

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Site Technical Data continued

Switchgear

- Vendor diverse Schneider & AF LV switchgear
- N+1 Input (from utility)
- 2N Output (4 x 2,000 amp breakers) to raised floor
- N+1 gen, N+N UPS
- Closed Transition ATS
- UPS full load static by-pass switch

Maintenance

- Generators are load tested once a year
- Generators are serviced biannually, tested monthly
- UPSs are serviced bi-annually
- Batteries are tested bi-annually
- All major systems are under service contracts

Data Hall PDUs

- 10 x Schneider PDUs (12 rows in total)
- A+B feed to racks (32 amp, 240V single phase)
- 3 phase circuits available upon request
- Branch circuit monitoring per cabinet installed as standard



Rack Layout

400 rack layout per hall
All racks positioned in hot and cold aisle design
Cold aisle containment & fan assisted tiles for high density rows
Racks - 42u high, 800mm wide, 1000mm deep – key locks standard
Combination locks or swipe card access to racks available
Dedicated cages available
N+N diverse network connections to the rack
N+N secure Meet Me Rooms - 80m from data hall

Environmental

N+2 Cooling – DX cooling, total cooling 1,058 kW
16 x DX downflow air conditioning units
DFUs with dual feed A+B power
24°C ambient air temperature (+/- 2 degrees, equivalent to 77°F)

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Network

Option for Optimum Data Centres provided network and IP, with fully redundant N+N network infrastructure (CAMPUS design, customer provided distribution switches).

Managed firewall or router options available.

On-Net Providers

BT
Talk Straight
Colt
Level 3
Virgin Media
Next Connex
SSE
EU Networks
Virtual 1
Vtesse
Zayo



Diverse fibre backhaul to Telehouse, Telecity Hex, Lonap, Google, Equinix LD4, Cross Harbour Exchange and Global Switch allowing access to all UK carriers and a wide range of international carriers as well as links to the Chi-X trading platform in Slough and LINX peering network in Telehouse and Equinix LD4.

Fibre Access

- All exterior fibre routes are underground and encased in a concrete duct bank
- N+N fibre routes
- Strict cable management and permit to work policies
- Site owned ducts out to main connection

Fire Systems

- Early-warning VESDA fire detection system (positioned on the air intake of all DFUs and underfloor)
- Smoke and high temperature ion detectors (above and below floor space)
- Data hall localised sprinkler system
- Gas suppression in plant rooms

Monitoring

- Site is monitored 24x7 by on-site staff
- Real time CCTV with replay and copy functions

Control Systems

- Trend Building Management Systems (BMS) monitoring for all M&E plant (generators, UPS, condensers, DFUs, AHUs, PDUs, switch gear)

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Physical Security

- List X compliant site
- Mandatory visitor registration and visitor escorts, as well as mandatory employee photo badge access policy
- Single authentication required for access to the building
- Two factor authentication to data halls
- Swipe Card Readers on all main entrance and routes
- 24x7x365 video surveillance (each row, plus entrance, exits and all corridors)
- Steel lined twin-wall bomb blast external walls
- Digital recording (RAID disks) 30+ day retention
- Generator sized to run entire site at full load for 48 hours minimum
- Systems monitored by on-site staff 24 x 7

General Information

- Breakout area with free Wi-Fi, TV and tea & coffee facilities
- 100% renewable energy consumption
- On-site remote hands service
- Managed cabling policy
- Numerous amenities within one mile
- Onsite secure parking available
- Dual vehicle access lock



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