



## Business Class Internet

Seriously Dedicated™  
Best of Breed, Innovative Solutions.

**Secura Hosting Ltd**  
**AS29452**  
Network & Infrastructure  
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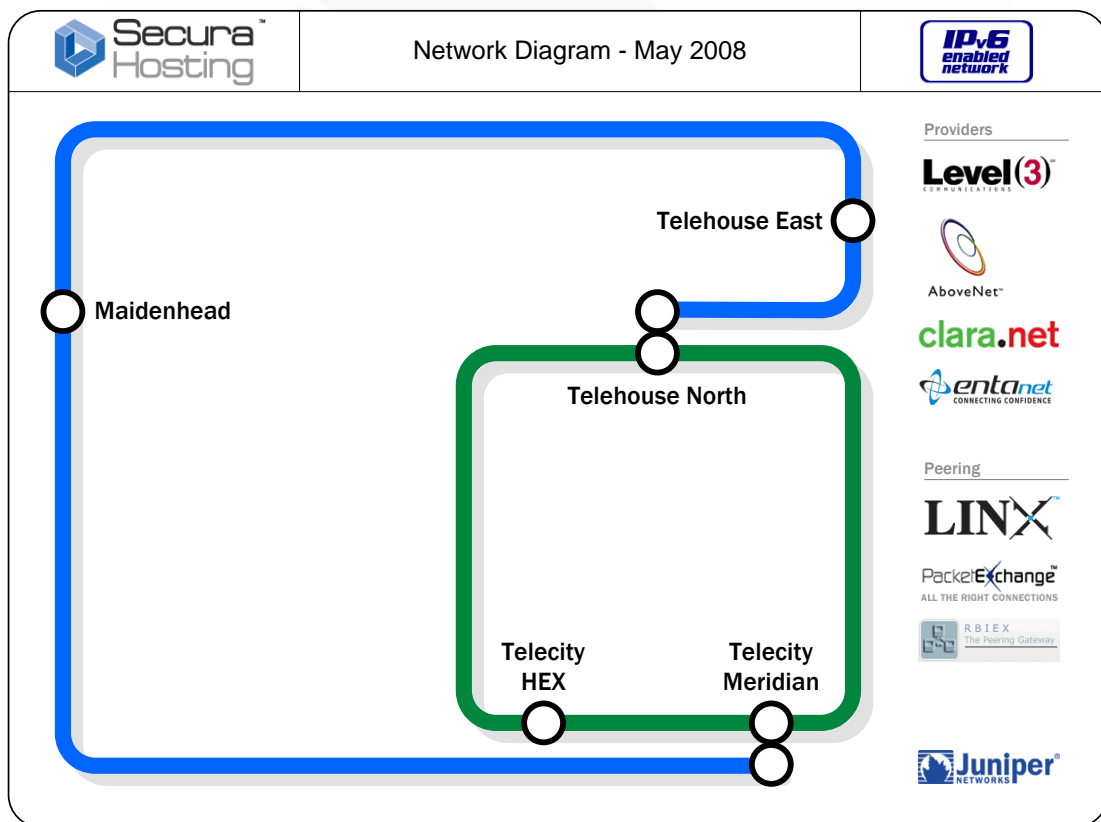


## Network Overview

### Introduction

Secura Hosting Ltd own and operate a carrier class 10 gigabit BGP4 network which is has been built from the ground up using state of the art switches, routers and connections.

Our network spans multiple data centres for redundancy and resiliency. We operate our own private secure caged suites within the TelecityRedbus Meridian Gate and Bluesquare datacentre facilities and we have multiple resilient connect to a number of Tier-1 and Tier-2 providers such as Level(3), Abovenet, ClaraNet and others.



### Peering Points

We currently peer at the London Internet Exchange (LINX), XChangepoint (Packetexchange) & RBIEX and plan to peer on a number of other exchanges in the near future. This means we have direct Ethernet connectivity to hundreds of UK ISPs and global networks including Microsoft, JANET/UKERNA, The BBC, Virgin Media, NewNet and lots of others.

## Peering Points (cont.)

We will be joining other peering points during the course of the coming year. Some providers prefer to use transit connections only, but unlike these purely transit only networks, we prefer to connect to as many networks as possible in order to take packets as near to their destination as possible.

If we don't currently peer with your ISP, please let us know. Additionally, please let your ISP know that you would like them to peer with us too.

## Network Security

We filter all traffic coming in and out of our network for the security of our clients and to ensure maximum network resilience. We also have anti-spoofing measures in place.

## Internal Network

Our Network is built upon our 10 Gigabit Ethernet backbone using multiple redundant switches and Juniper routers with leased dark fibre. Internally the network is routed using OSPF/OSPF3 and our switches are meshed using Multiple Spanning Tree Protocol (MSTP) which means that there are always two or more paths to all parts of our network. We utilise MPLS (Multi-Protocol Label Switching) throughout our network to deliver quality and reliability.



## Built for the Future

The network was built from the ground up with IPv6 in mind and is fully IPv6 enabled. We peer using IPv6 over LINX, Xchangeoint and RBIEX. All of our clients are able to take advantage of full IPv6 connectivity as we route a massive /48 of IPv6 address to all servers.



Our BGP4 IPv6 Enabled network has been built from the ground up by our in-house Internetworking experts.

## Built for the Future

We are a member of RIPE and a Local Internet Registry (LIR) which means that we are an organization that has the right to provide IP addresses to other carriers, ISPs and organisations.



## Datacentres

We operate a number of private data suites in a number of London datacentres including Telecity Meridian Gate, Telecity Harbour Exchange, Telehouse North and our newest addition Bluesquare which is outside of the M25. We lease dark fibre between the different data centre locations.

We also manage assets in a wide variety of other locations too, including other London datacentres, Hong Kong, Australia.

### Data Centres

The main Secura Hosting Data Centre facilities are conveniently located in the Docklands close to the heart of the City of London. We have chosen major London datacentres based on a number of key criteria such as number and quality of onsite bandwidth suppliers, physical security, proximity to dark fibre carriers and the number and quality of peering points onsite.

We operate from a number of secure private cages in one of our primary datacentre location, Interhouse Meridian Gate, but we also have points of presence in other UK data centres should you require redundant or offsite solutions.

### TelecityRedbus Meridian Gate Data Centre

#### Data Floor

- Total data floor measures approximately 18,400ft<sup>2</sup> (1,709m<sup>2</sup>) - over 4 floors
- Shared or dedicated partitioned areas
- 500kg/m<sup>2</sup> uniform floor slab loading
- 300 mm raised floors
- 2.70m from floor to ceiling

#### Power and Air Conditioning

- 2x1800 kva Generator back-up
- UPS system - redundant parallel formation @ N+1
- Close control down-flow air conditioning units to guarantee stable temperature and humidity @ N+1
- DX air conditioning systems @ N+1
- 2.5 MVA of UPS conditioned power @ N+1
- Diverse Power Supplies with diesel generator backup

#### Security

- Very Early Smoke Detection Apparatus (VESDA) installed
- Smoke detection system
- FM200 fire suppression system
- CCTV system covering all entrances/exits and main areas
- 24-hour video recording
- Full perimeter alarm
- PAC security card access system
- Visual verification of all persons entering the data floor

## Datacentres

### TelecityRedbus Harbour Exchange Data Centre

#### Data Floor

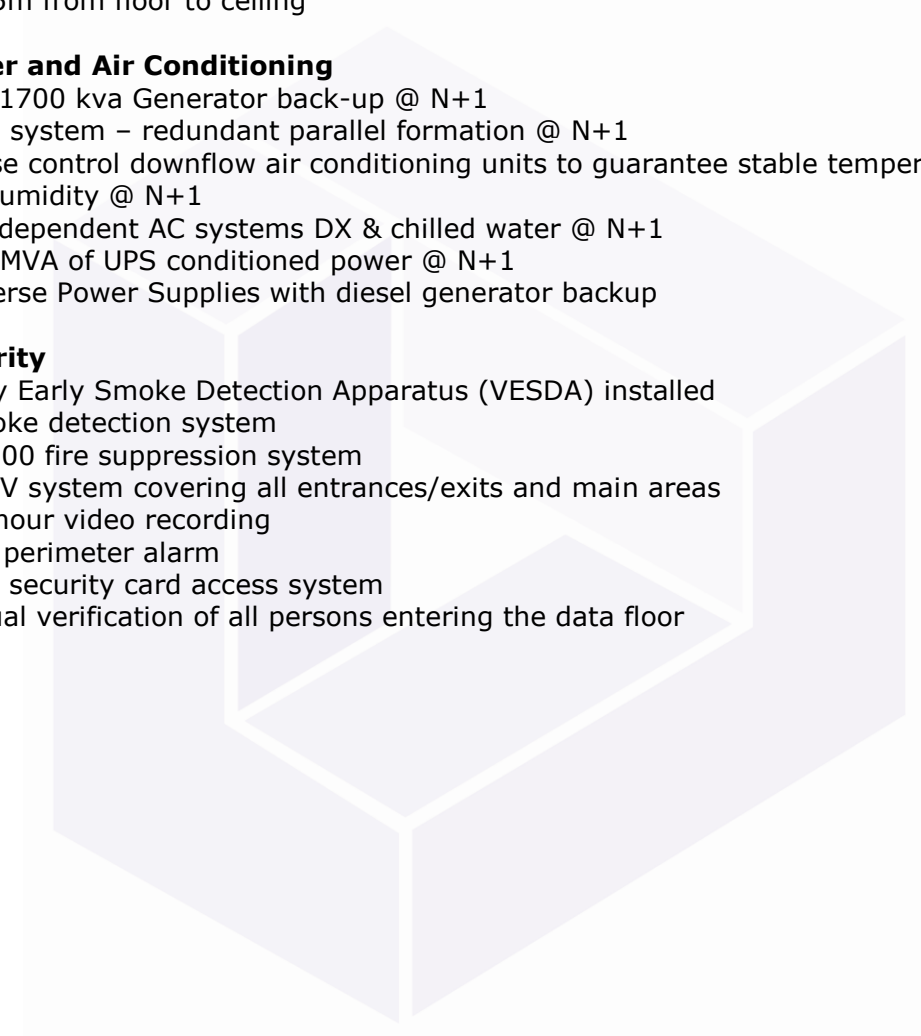
- Total data floor measures approximately 29,200ft<sup>2</sup> (2,713m<sup>2</sup>) – over 3 floors
- Shared or dedicated partitioned areas
- 500kg/m<sup>2</sup> uniform floor slab loading
- 300 mm raised floors
- 3.25m from floor to ceiling

#### Power and Air Conditioning

- 2 x 1700 kva Generator back-up @ N+1
- UPS system – redundant parallel formation @ N+1
- Close control downflow air conditioning units to guarantee stable temperature and humidity @ N+1
- 2 independent AC systems DX & chilled water @ N+1
- 2.5 MVA of UPS conditioned power @ N+1
- Diverse Power Supplies with diesel generator backup

#### Security

- Very Early Smoke Detection Apparatus (VESDA) installed
- Smoke detection system
- FM200 fire suppression system
- CCTV system covering all entrances/exits and main areas
- 24-hour video recording
- Full perimeter alarm
- PAC security card access system
- Visual verification of all persons entering the data floor



## Our Infrastructure

### Bandwidth Utilisation

The Secura Hosting network always runs well within its capacity. We are constantly adding new providers and negotiating peering agreements with some of the largest global networks to increase capacity. This allows us to comfortably accommodate some of the largest traffic spikes and ensure that downtime is virtually eliminated.

### Network

#### Connectivity

Secura Hosting utilise connections to multiple major Tier-1 bandwidth providers for transit connectivity. We are directly connected with multiple gigabit Ethernet connections to carriers providing a total bandwidth capacity in excess of 6Gbps. Secura Hosting NEVER throttle bandwidth connections.

#### BGP4 Routing

Secura Hosting runs the Border Gateway Protocol (BGP4) for best case routing. Coupled with our high powered switches and routers, Secura Hosting ensure that your data is being sent over the best route available. If one route is not available, data is automatically transferred using the next best available route.

### Network Providers



The London Internet Exchange (LINX) is one of the world's largest Internet Exchange Points (IXPs). This position has been achieved by building and maintaining a global reputation for quality, performance and technical excellence.



Level 3 is among the top three largest Internet carriers in the world. Spanning over 23,000 route miles, the Level 3 network delivers services to customers in major markets across the United States and Europe.



AboveNet™

AboveNet Fibre IP Transit is specifically designed to deliver maximum performance and unparalleled reliability without the constraints of legacy offerings. Business demands for instantaneous access to applications, content, streaming media and disaster recovery assets require networks to be lightning fast and available 24x7.



Claranet is one of the most successful ISP's in Europe. Since 1996, they have developed an award-winning service based on a solid, scalable technical foundation. Claranet's network links directly to all the major European peering points and the global Internet backbone providing the best speed and performance.



XchangePoint/PacketExchange is a leading provider of wide-area Internet Exchange services connecting the a number of neutral co-location facilities within Europe's cities. We peer at XPE using both IPv4 and IPv6.



Entanet International Ltd is a leading communications provider of business class voice and data connectivity services. Entanet has invested heavily in an extensive and robust MPLS-based network which boasts 99% geographic coverage throughout the UK and which extends into Europe.



RBIEX is a neutral Internet Exchange based in Redbus I, II and III in London. We are connected to the exchange over 100Base-T and we peer using IPv4 and IPv6



Hurricane Electric is a leading Internet Backbone and Colocation Provider with an extensive high capacity network in the United States. Hurricane Electric have the most extensively connected IPv6 network in the world from which we take a full IPv6 transit feed. This provides us with exceptional access to the IPv6 internet.