



Network Services  
**IP Multihome**



# Why IP Multihome?



## Secure, resilient connectivity

TelecityGroup's IP Multihome (IPMH) network allows you to host your content with multiple carriers, providing superior performance and resilience. TelecityGroup gives you access to fully-redundant Internet connectivity without the expense and complexity of dealing with multiple carriers. You receive a single bill for your transit and peering connectivity, and have a single point of contact for support.

TelecityGroup uses connectivity provided by six Tier 1 providers and five European Internet Exchanges; LINX, LoNAP, SFINX, DEC-IX and AMS-IX. to provide full resiliency at all levels, and provides a 100% availability SLA guarantee and enhanced service levels. We manage the distribution of your traffic depending on the most efficient routing to the destination network. In the event of a failure of a carrier's network, your traffic is automatically distributed across the remaining connected networks.

### Is it for me?

TelecityGroup's data centres are specially designed technical facilities which operate with a number of sophisticated features to offer high levels of physical and environmental resilience.

From colocation to fully managed hosting environments, TelecityGroup offers a suite of data centre services that offer organisations a cost-effective alternative to in-house solutions:

### What equipment do I require?

In the simplest configuration, all you require is a single layer 2 switch, or two switches to provide a high availability configuration. To peer with TelecityGroup, you will need a router capable of running Border Gateway Protocol (BGP).

IPMH allows you to connect in one of the following ways:

- Plug and play: we provide the IP addresses and manage the routing and redundancy
- As above but where a client has their own PI (Provider Independent) address range we will advertise these instead of or in addition to providing IP addressing
- You peer with TelecityGroup using BGP4.

### Related products

If you are looking for a managed firewall solution, TelecityGroup can offer a redundant connection to our shared Fortigate 3000 platform providing firewall rule management, anti virus scanning and intrusion detection. We also provide and manage dedicated CheckPoint and PIX firewalls with 24x7 support from our dedicated security team.

The IPMH platform does not filter DDoS attacks, so if you are a target of large-scale attacks, we recommend the TelecityGroup managed DDoS solution. This is a multi-gigabit network which has a proven record of defending against 10Gbps attacks.

### Why TelecityGroup?

TelecityGroup brings it all together. We have:

- Excellent Tier 1 connectivity available within our network-independent data centres
- Access to the major internet exchanges – which we host
- 24x7 on-site support from our own teams
- All supporting systems such as power and cabling infrastructure are managed in-house.

This enables TelecityGroup to provide high performance, flexible, cost-effective, assured connectivity, with very fast turn-around times designed to suit IP-reliant businesses, such as yours.

# Key benefits



## Scalability

Bandwidth requirements can change and it is vital that your Internet service can be scaled up or down to meet your business' demands. TelecitGroup can scale the service from as little as 1 Mbps up to multi-gigabit speed, without any downtime or need to change IP addresses. This makes it ideal for all sizes of business: from start-up through to established companies.

## Burst rates

Not all bandwidth changes are planned, so TelecitGroup does not tie you to the bandwidth you buy and allows you to burst on demand. All burst traffic is on a pay-per-use basis and is priced according to the 95th-percentile industry standard.

## Redundancy

Along with access to multiple Tier 1 carriers, TelecitGroup can also provide you further redundancy. We ensure there is no single point of failure by including redundancy in access networks.

## Multiple carriers

IP Multihoming means that you can benefit from the improved performance and resilience provided by direct links to multiple carriers. TelecitGroup offers a more personal service and works with a range of different Tier 1 carriers to ensure that you have the best service wherever your business is based.

## Internet Exchanges

Because TelecitGroup peers with Europe's large Internet Exchange points, who host within our facilities, when connecting to the TelecitGroup network you get low hop count and latency, access to LINX, LoNAP, SFINX, DEC-IX and AMS-IX, delivering maximum bandwidth to your end users, with minimum latency.

TelecitGroup's service includes managing the complicated peering arrangements with other exchange members, ensuring that you deliver the best user experience to your customers.

Our transit and peering relationships ensure minimum latency for your end users, particularly important for SAS, gaming and VOIP applications, or for any high volume website.

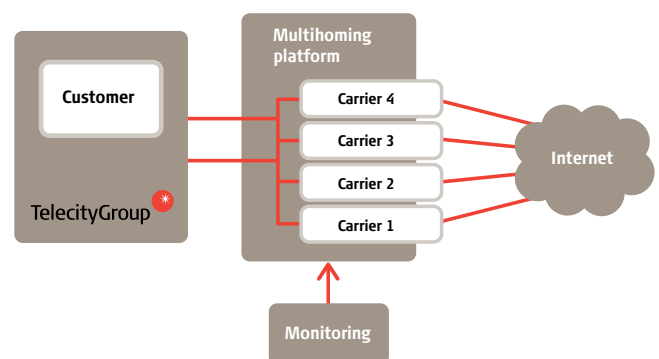
## Support

The highest quality support is essential for core business services and we offer 24x7 support as standard with a highly personalised service.

## Core network

TelecitGroup's core network is built to the very highest specification so that we can scale it to handle all of your bandwidth and burst requirements. We have also designed the network in a way that if one customer is the victim of a DDoS attack it will not affect any others.

TelecitGroup has developed its IP Multihoming solution to meet the market demand for high performance, resilient Internet connectivity.



IP multihoming allows businesses to host their content on multiple Tier 1 carriers simultaneously

Get in touch online:  
Email: [info@telecit.com](mailto:info@telecit.com)



# Technical details



## TelecityGroup network

- High performance and redundant IP network
- Network core consists of two geographically separated Cisco 7609 routers with dual SUP720-3BXL supervisory engines and distributed forwarding throughout
- Provides 40Gbps and 48mpps per 48 port 10/100/1000 Ethernet card

## Upstream connectivity

- Over 10Gbps provided by six different Tier 1 providers
- A further 6Gbps of connectivity provided by five European Internet exchanges
- Best routing metrics used, never lowest monetary cost
- Network Analysis Modules provide high visibility of traffic passing through the core allowing TelecityGroup to actively monitor and take action against malicious traffic.

## Network partners

To provide optimum performance, we continually review the carriers we use. At the moment TelecityGroup's partners are:

- Tier 1 providers: Deutsche Telekom, Interoute, Level3, PCCW-BTN, Telia and Tiscali
- Internet exchanges: LINX, LoNAP, SFINX, DEC-IX and AMS-IX.

## Access connectivity

- Dual cat5e or fibre hand-offs
- 10/100/1000 mbps line speeds with generous bursting above CDR
- HSRP gateway redundancy
- BGP4 with default route, full routing table or both.

## Administration & Support

- 24x7 1st line support in the UK/IRE
- 24x7 escalatiRemedy ticketing system
- 24x7x4 hardware support
- RIPE IP address space management
- Reverse DNS management.



## fernhart new media

“TelecityGroup enabled us to rapidly set up a secure link to the Internet, providing a more resilient connection and a higher quality end user experience for SKY's customers. The services we provide need to be available 24 hours a day, 365 days a year. By hosting our infrastructure at TelecityGroup, and using their IP multihome service, we can guarantee SKY service uptime above and beyond their strict SLA requirements.”

**Phil Broadbery**  
Managing Director - Fernhart New Media