



Special Study Global Data Centres Presentation IEEE

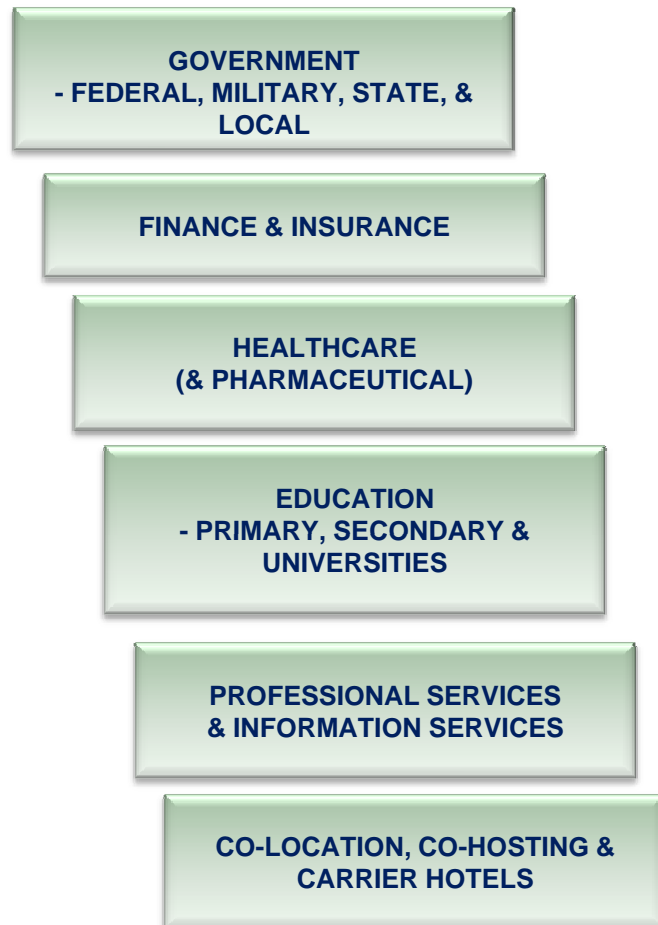


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BSRIA
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Data Centre Study Scope



The Six Countries Covered

- *U.S.A*
- *U.K.*
- *Germany*
- *France*
- *India*
- *China*

Data Centre Study Methodology



End-user survey:

- 335 interviews conducted online with sole or joint decision-makers for the data centre cabling. (Sole decision makers = 53%)
- 89% Enterprise data centres (DCs) and 11% said they are co-location, co-hosting or carrier hotels
- 53% had 5 – 50 stand-alone and rack-mountable servers and 39% 51 – 500 servers
- 57% with 5 – 50 blade servers and 31% 51 - 500

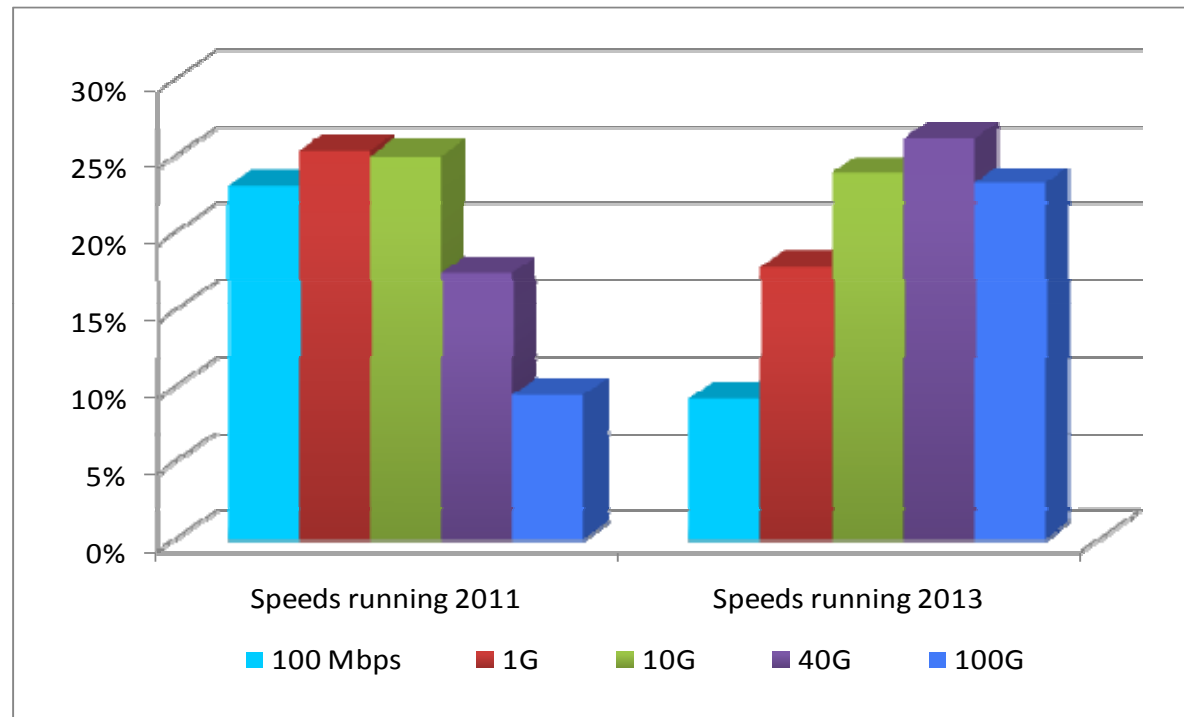
Country specific information

Desk research and interviews with suppliers and the channel

- Number of Data centres (sq. meters, large projects, co-los)
- Trends

Data Centre Study

Speeds – Percent Links 1



When looking at the average percent of links running the different speeds, the differences between the speeds being run by the end of 2011 and the end of 2013 is noticeable.

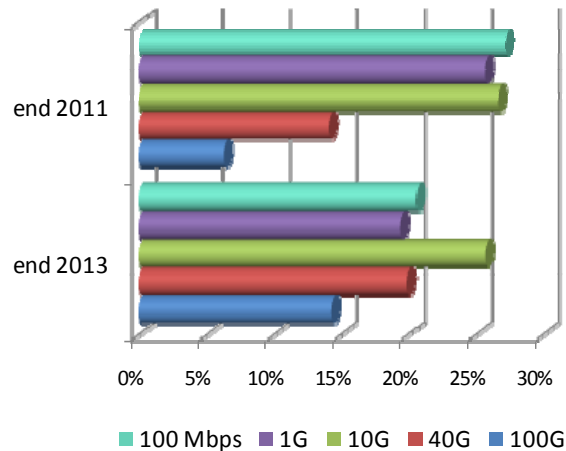
The differences are also pronounced when looking at individual countries and individual sectors.

Data Centre Study

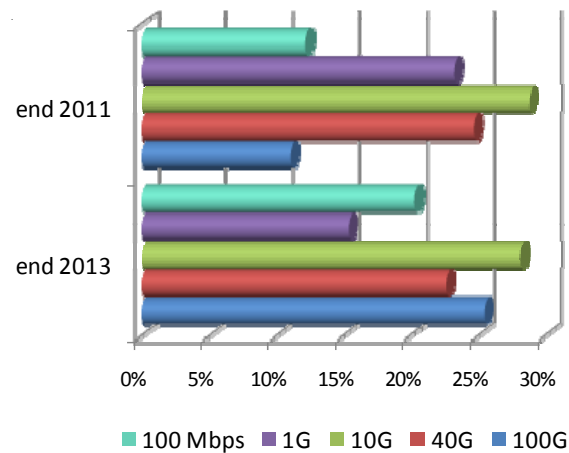
Speeds – 2011 and 2012 by Sector 1



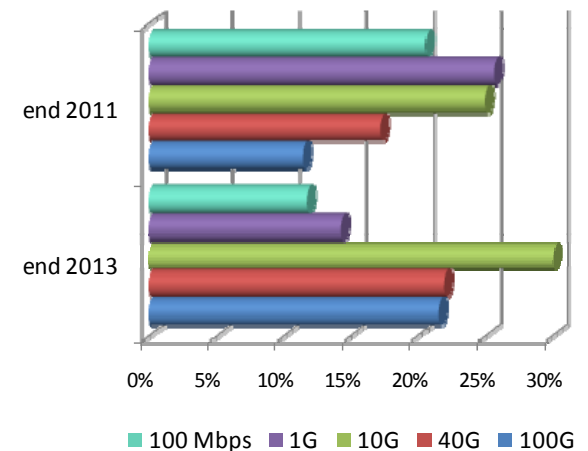
Finance & Insurance



Government



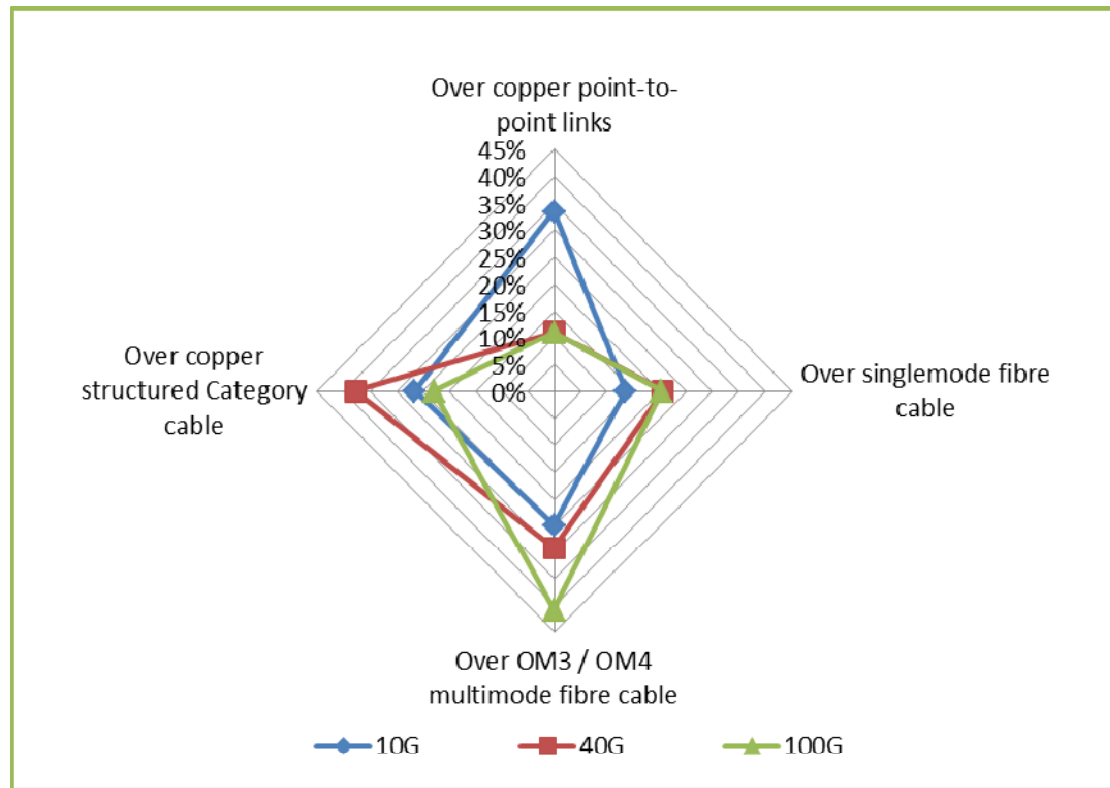
Health



Data Centre Study

10G, 40G & 100G

Over Which Media



Mean	10G	40G	100G
Over copper point-to-point links	33%	11%	11%
Over copper structured Category cable	26%	38%	23%
Over OM3 / OM4 multimode fibre cable	25%	29%	41%
Over singlemode fibre cable	13%	21%	20%

UK Data Centres Structured Cabling Projects 2010/11

Finance	Prof. Services	Health	Government	Education	Co-location DC
RBS (2009-2012)	Large IT supplier (2009 - 2011)		Large project (2010)		Cap Gemini, Swindon (2011)
Nomura (2009-2010)	Fujitsu (2010)				Bunker, Newbury (2011)
Nationwide (2010)	Dell (2011)				Computacenter
Deutsche Bank (2010)	Cisco (2011)				
Barclays (2010)					
Mann Group (2010-2011)					
Bank of Canada (2011)					
Goldman Sachs (2011-2012)					
HSBC					
PWC (2011)					
Amex (2011)					
BGC (2011)					

The UK projects listed are typically the very large projects, which accounts for 50-60% of the total cabling installed in data centres by value.

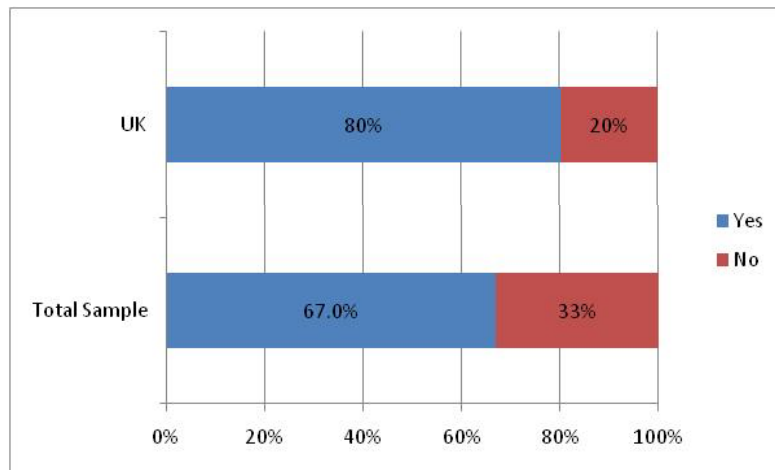
The total value of cabling in data centres includes all installations with more than 50 servers.

UK Data Centre Trends

Point-to-point Links



Use of point to point links



Q14. Are you already using point-to-point links with CX4/twin-ax/Infiniband/SFP+ cabling ?

Types of Point to Point installed

	Total Sample	UK
CX4	19%	21%
Other twin-ax	10%	13%
Infiniband	18%	21%
SFP+ (copper)	19%	16%
SFP+ (fiber multimode)	24%	21%
SFP+ (fiber singlemode)	10%	8%

Q16. What type are these point-to-point links currently installed?

80% in the UK sample compared to 67% of the total sample of end-users surveyed stated that they use point to point links. A wide range are using CX4, Infiniband and SFP+ MM and STP+ copper.

The main reasons for the use of Point – Point links are:

- Higher density port count
- The ability to reduce cabling
- The ability to use fibre only
- No requirement for changes
- Cisco's recommendations
- The lower price than 10G Base-T