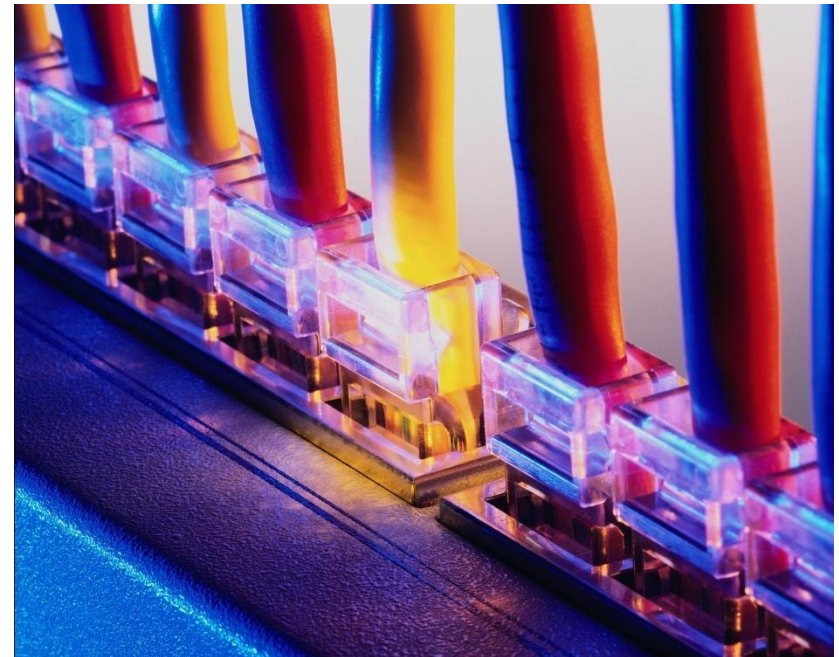
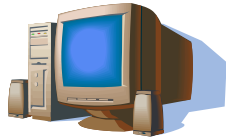
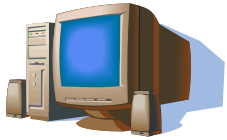


# The Network as the Foundation

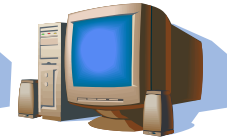
## Building an optimal ICT platform

Clive Longbottom,  
Service Director  
Quocirca Ltd





Clients



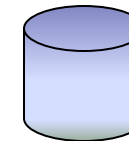
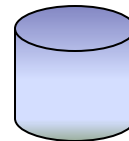
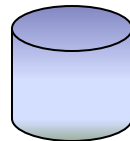
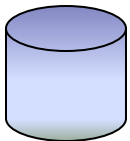
Applications

Application Server

Operating System



Network



Databases

- Surely it's just plumbing?
  - The network is essentially hidden from the business
- We've already spent loads on it – what more could be done?
  - 10Mb to 100Mb to GB to 10GB won't necessarily solve the problem
- It's just cables, isn't it?
  - Perceptions of the network tend to be basic
- We're not doing anything too special on it, are we?
  - Lack of understanding





- Data growth
  - Internal and external data volumes growing massively
  - Value chain issues must be dealt with
- Convergence
  - Not just all forms of data, not just voice, but video as well
    - More video traffic than data already on the internet
    - 90% of all traffic will be video by 2012 (Cisco)
- Latency
  - Speed of light is a (major) limitation
  - But latency may not be the problem
    - “Saw tothing” due to unmanaged bandwidth
    - Jitter due to poor network utilisation

- Ensure you know what is on your network!
  - If you don't know, you can't do anything
  - What mix of pure data, voice, video do you have?
  - What's important to the business?
  - Understand whether it needs to be real time, near real time, or can cope with being relatively asynchronous
- Filter out the rubbish
  - iTunes, FaceBook, YouTube, iPlayer may not be the most important things for your business
- Allocate bandwidth via virtual networks
- Use QoS/PoS, with MPLS as a backbone
- Use wide area network acceleration technologies

- The network is far too important to be left to chance
- The network is the foundation for everything else
  - You wouldn't build a house without good foundations
- Tools have to be in place to know what is on the network
- Monitoring and measuring give the capability to control
- Don't forget the external aspects – the value chain is all important