Using Everlab Cluster at UCL

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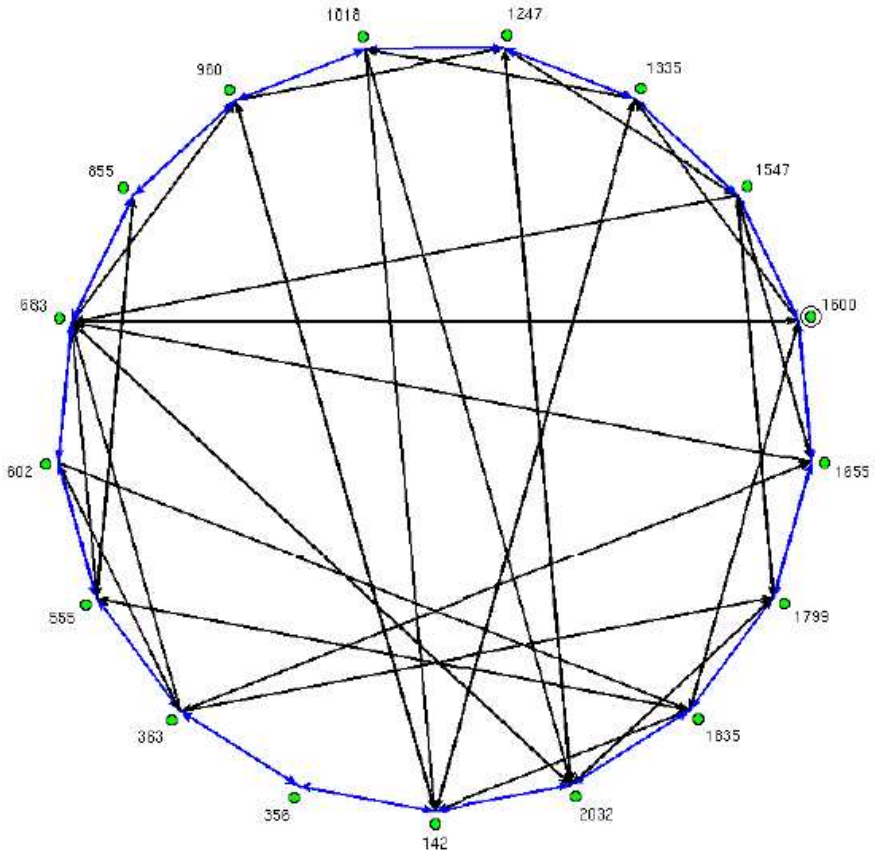
Experiments using the cluster

- Structured peer-to-peer networks
- Reliable broadcasting with structured overlay network
- Framework for developing robust, decentralised and scalable applications
- Computing Disjoint Paths using Constraint Programming.
  - German telecommunication network composed by 200 nodes
  - Using Dominators and Reachability.

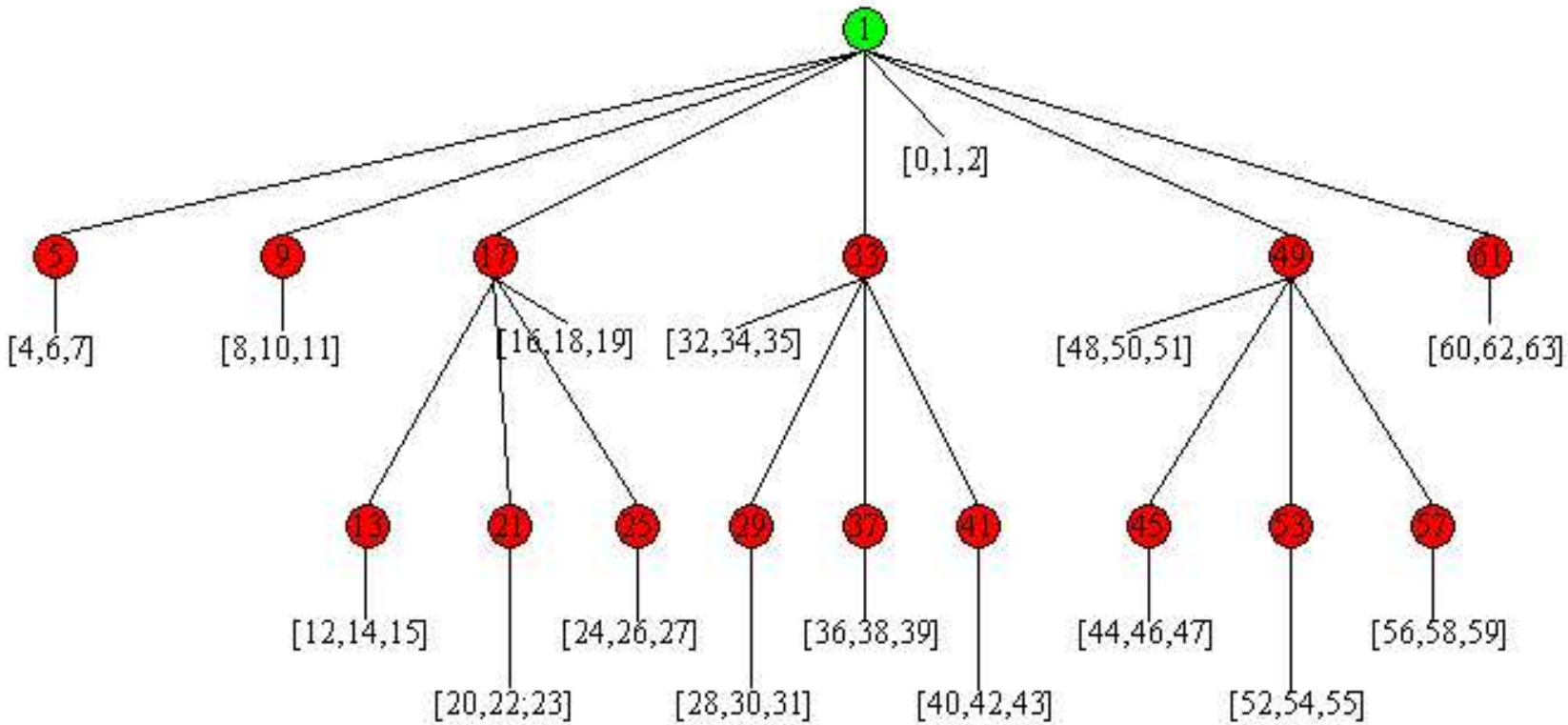
P2PS - Structured p2p network

- Self optimised overlay network organised by successor, predecessor and finger-table
- Efficient routing based on Tango algorithm



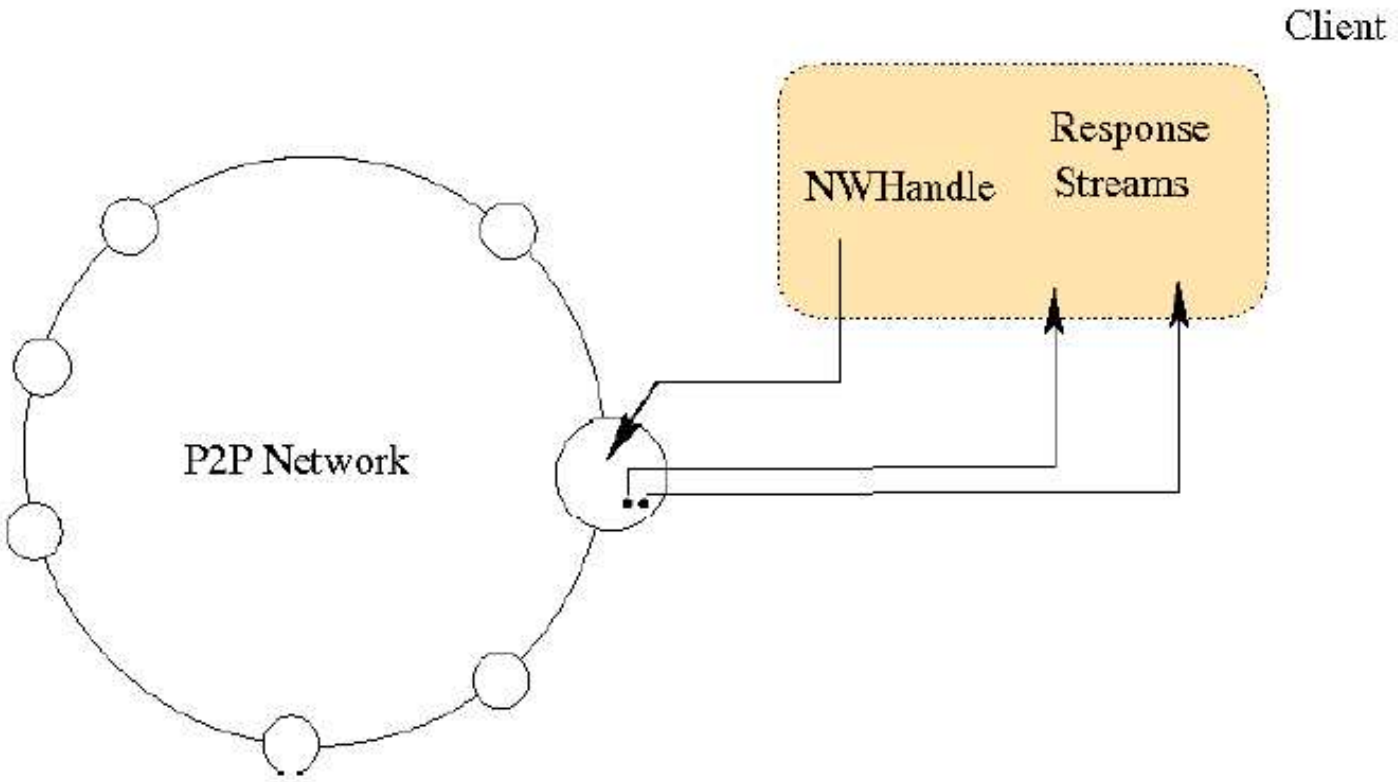
Reliable broadcast

- Spanning tree with collective acknowledgement
- Sorted messages propagated according to responsibilities

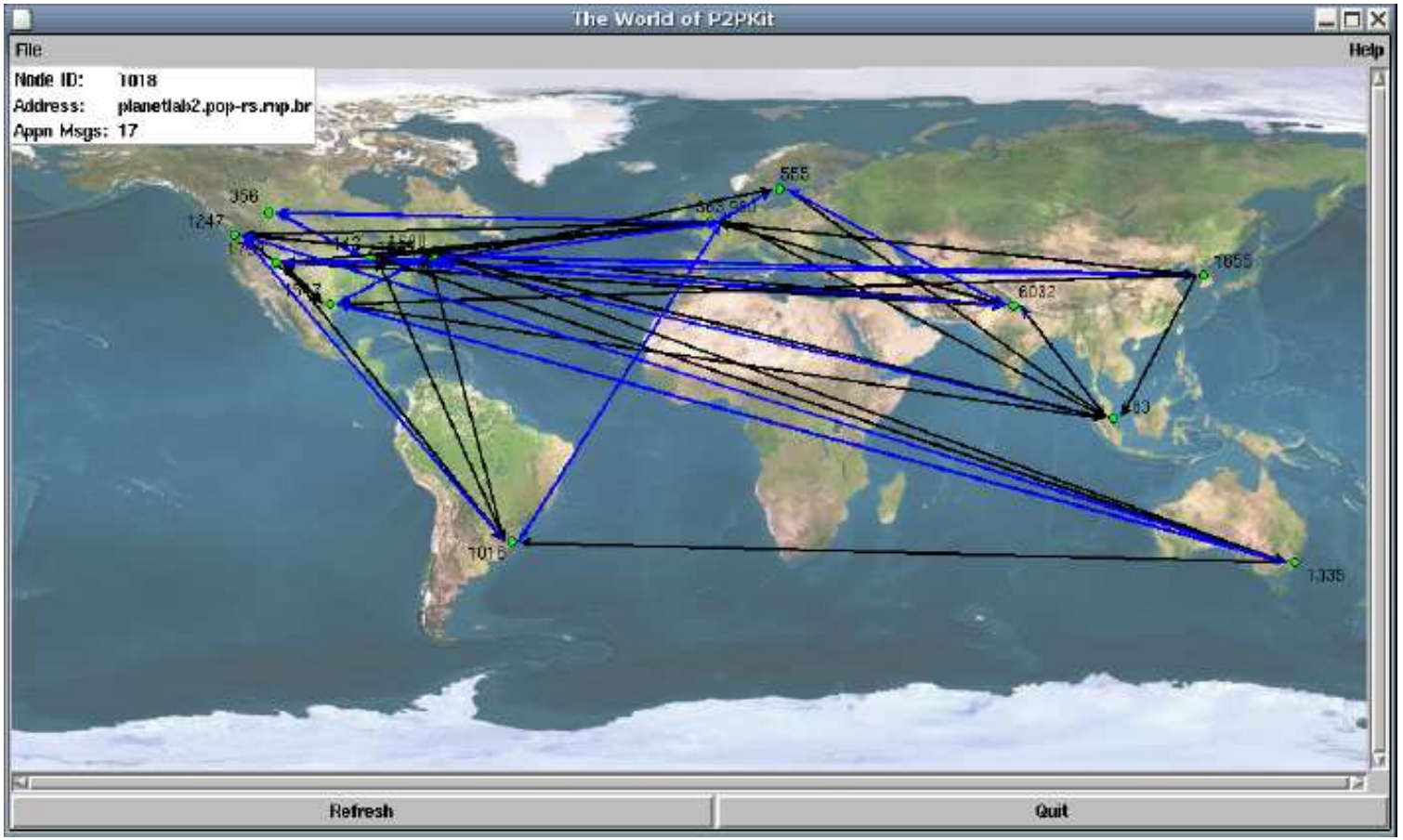


P2PKit - Framework for P2P Applications

- Clients connect to existing peer in the network
- Service oriented architecture
- Dynamic installation/upgrading of services



P2PS/P2PKit in Planetlab



Failures log

- Replacement of motherboard of a blade
- Replacement of HD of a blade
- Currently blade 10 does not work, probably memory