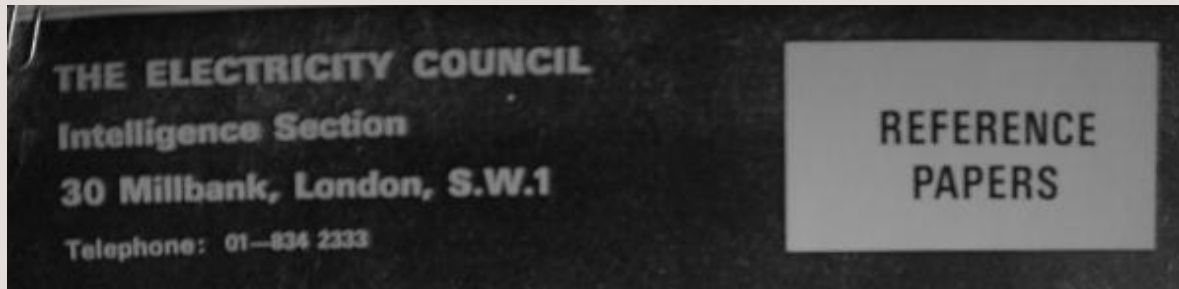


streamline computing

INNOVATION IN CLUSTER COMPUTING

first quote - 1926?



1926

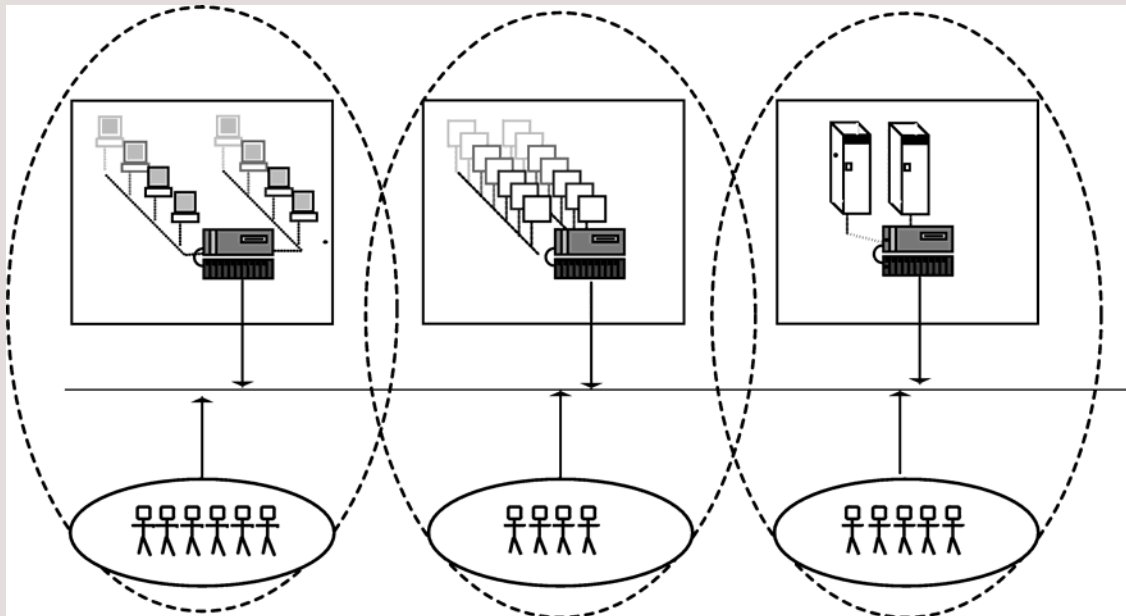
The Electricity (Supply) Act 1926, introducing the first effective national co-ordination. It provided for the creation of a public corporation, the Central Electricity Board, to concentrate the generation of electricity in a limited number of "Selected" stations, and to inter-connect these stations, linking up the existing regional system into a national "Grid", by the erection of a high tension main transmission system. The Act also required the Board to standardise the frequency of alternating current throughout the country, so that effective interconnection could be established; and to supply, either directly or indirectly local undertakings which required electricity for distribution and for this purpose to purchase the output of the Selected Stations and sell it to the local undertakings.



streamline computing

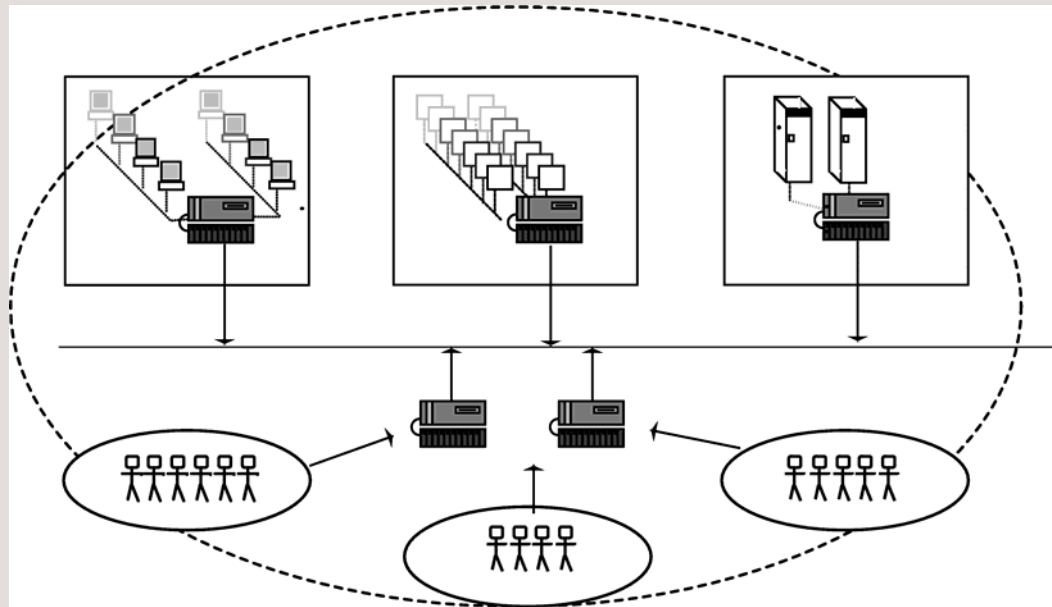
Compute Blocks

- Multiple resource blocks within a commercial/academic organisation



Developing resource sharing

Apply grid philosophy to compute resources to minimise costs and maximise utilisation



First Step: Management and Monitoring

- Based on open source technology
- Commercially supported with additional features



Cluster Management System

- Usual monitoring features (Ganglia)
- Job Scheduler Integration
- OS management:
 - Diskless failover
 - OS imaging/re-imaging
- Package Management
- Threshold monitor and trigger



Conclusion

- Concentrate on low-risk, high benefit aspects of Grid Technology
 - First step is addressing management and monitoring of multiple resource blocks
 - Cluster Management/Administration Tools takes proven Grid technology into commercial space

