Peer-to-Peer: Broad Pattern, Specific Applications

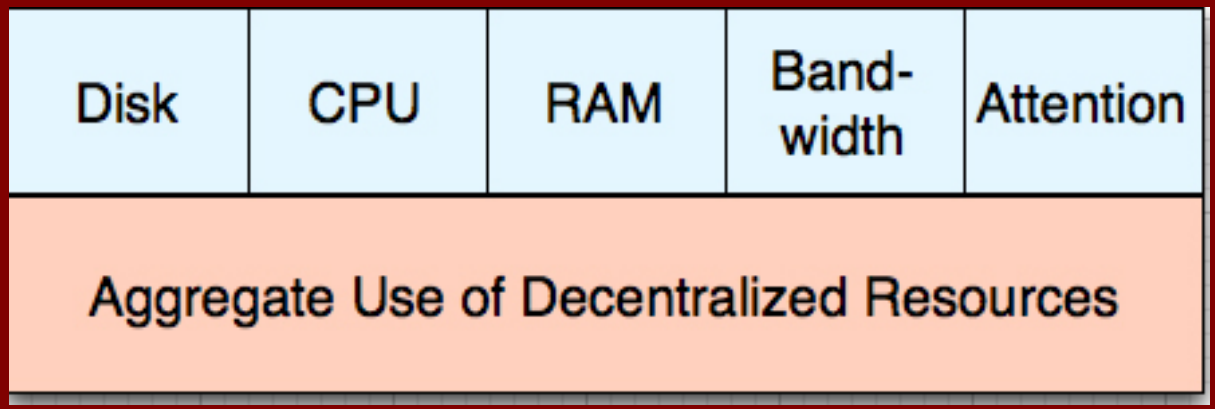
Clay Shirky
clay.shirky@nyu.edu
http://www.shirky.com

Aggregate Use of Distributed Resources

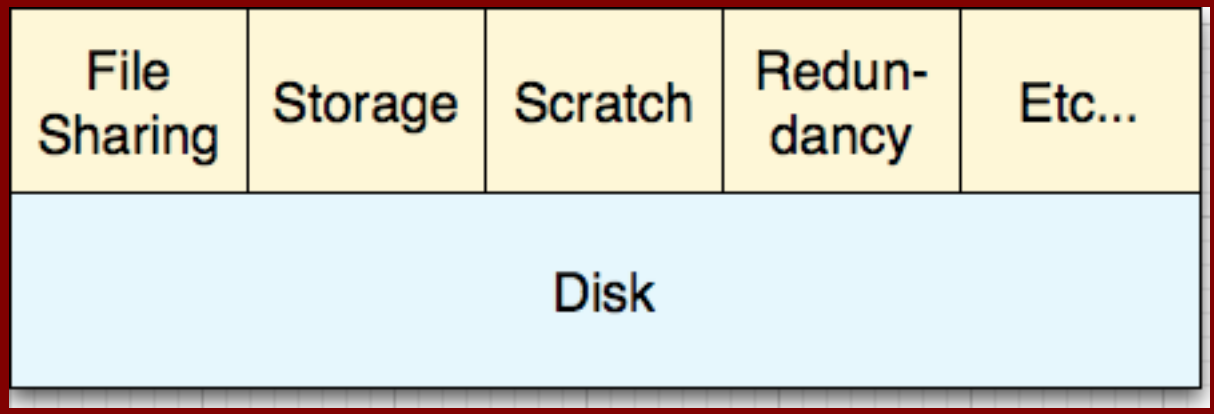
- Resources at the "edge" of the internet
  - PCs are the dark matter of the internet
- In aggregate, these resources are valuable
- They are impossible to aggregate using traditional models
- P2P applications create novel ways of aggregating these resources

Deep Pattern

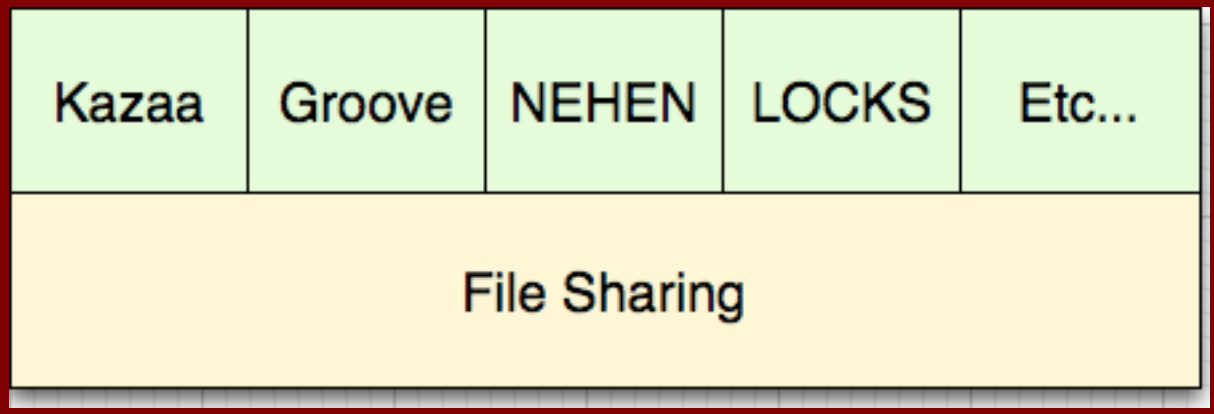
- General - Grid (SDSC, IBM, etc.)
- Disk - OceanStore
- CPU - SARS
- RAM - Genetic Algorithms
- Bandwidth - Bittorrent
- Attention - NASA Clickworkers



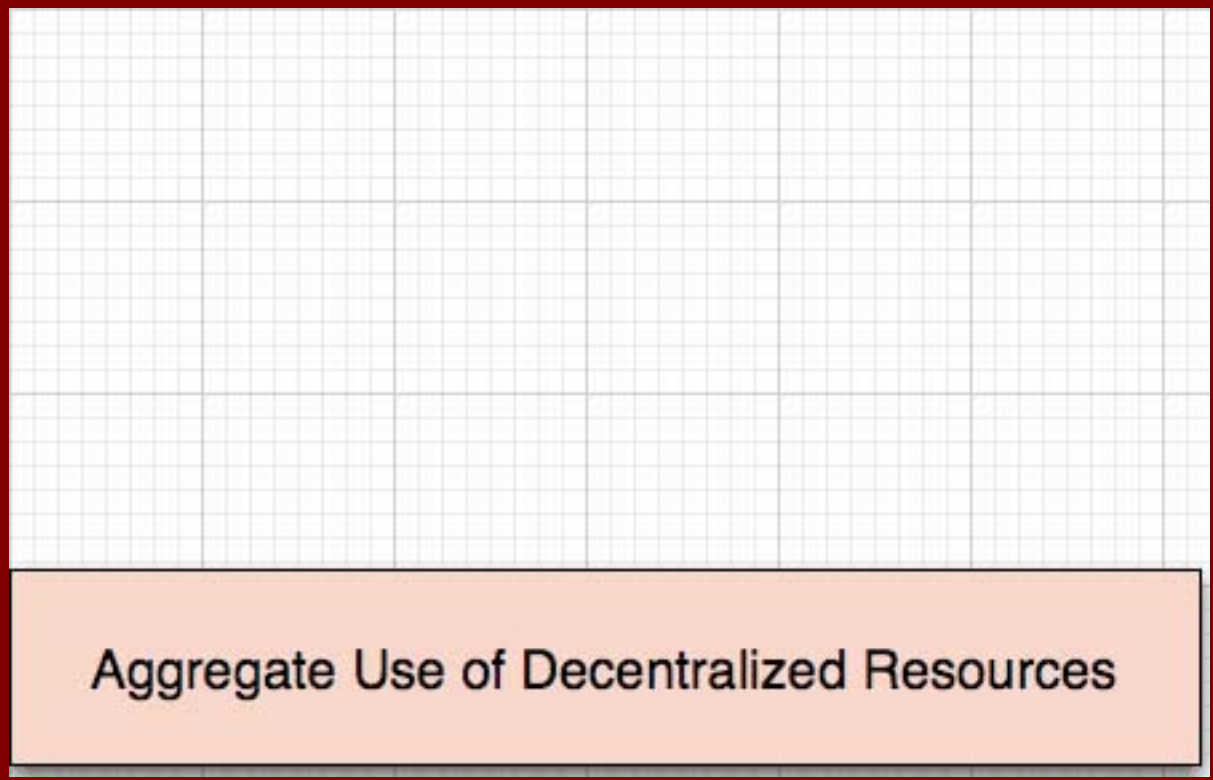
Middle Pattern



Shallow Pattern



What Do We Mean By P2P?



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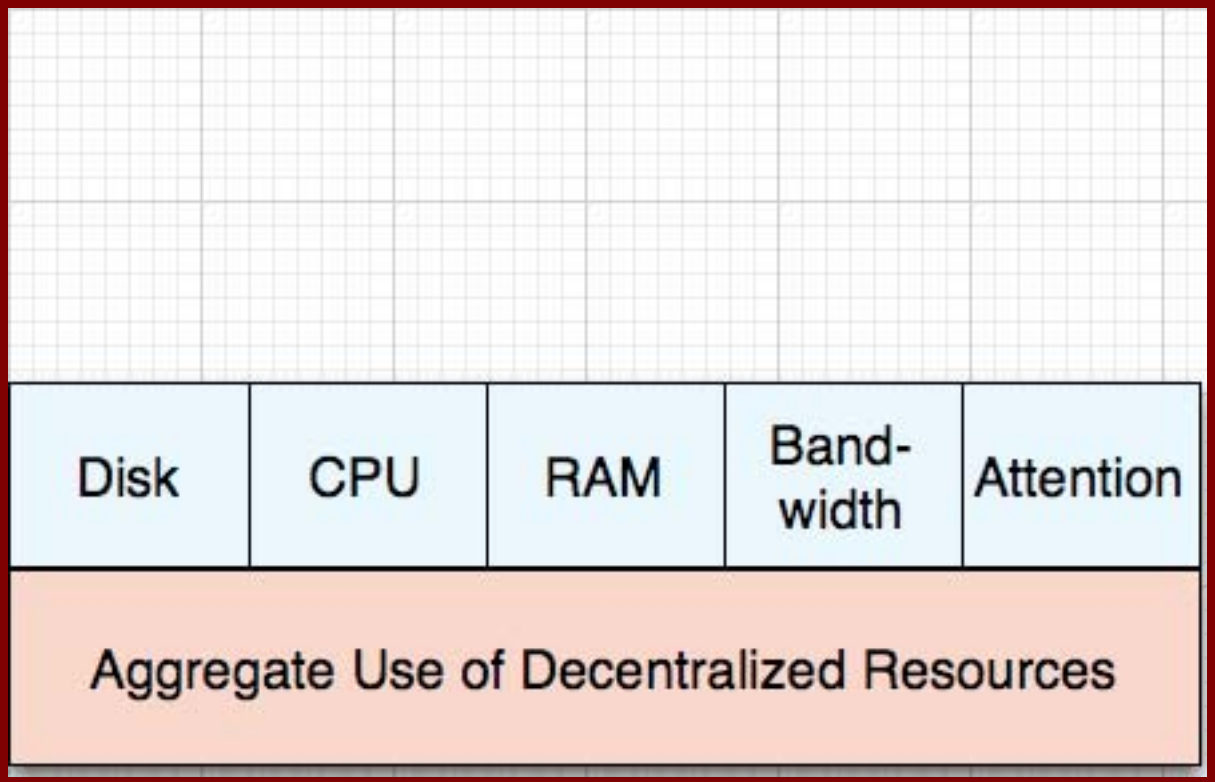

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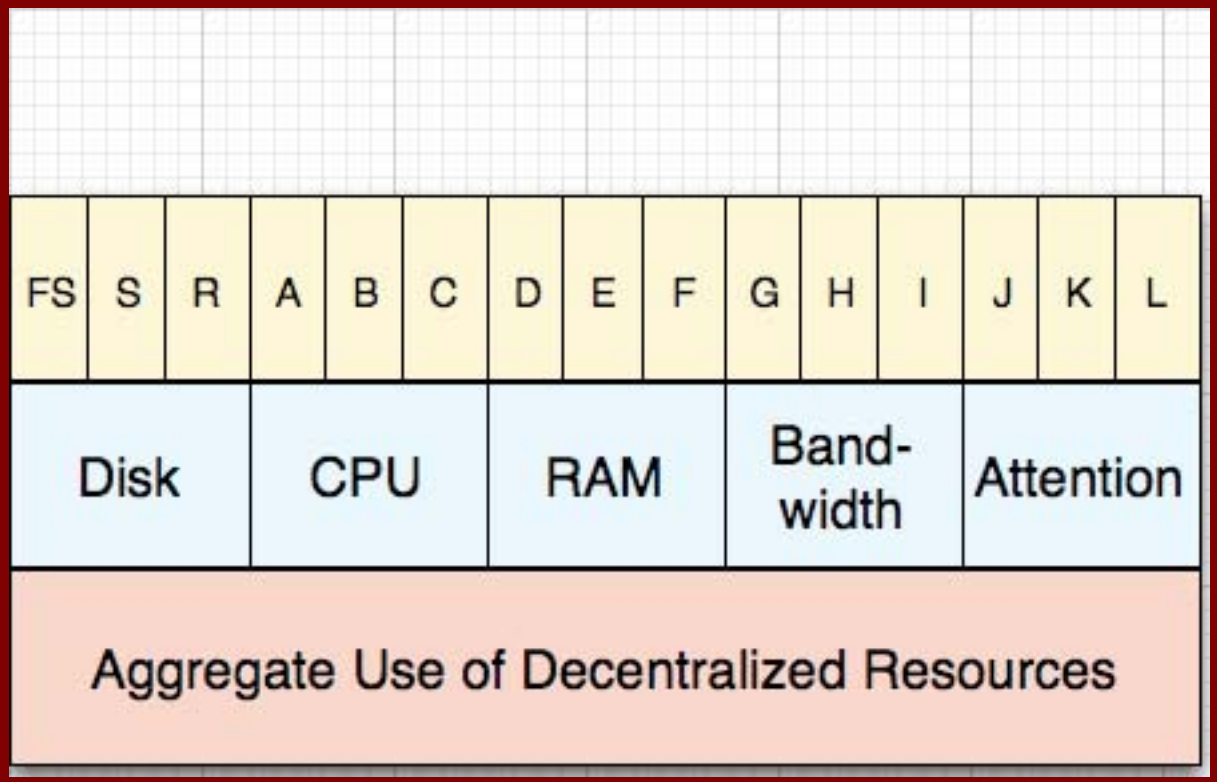
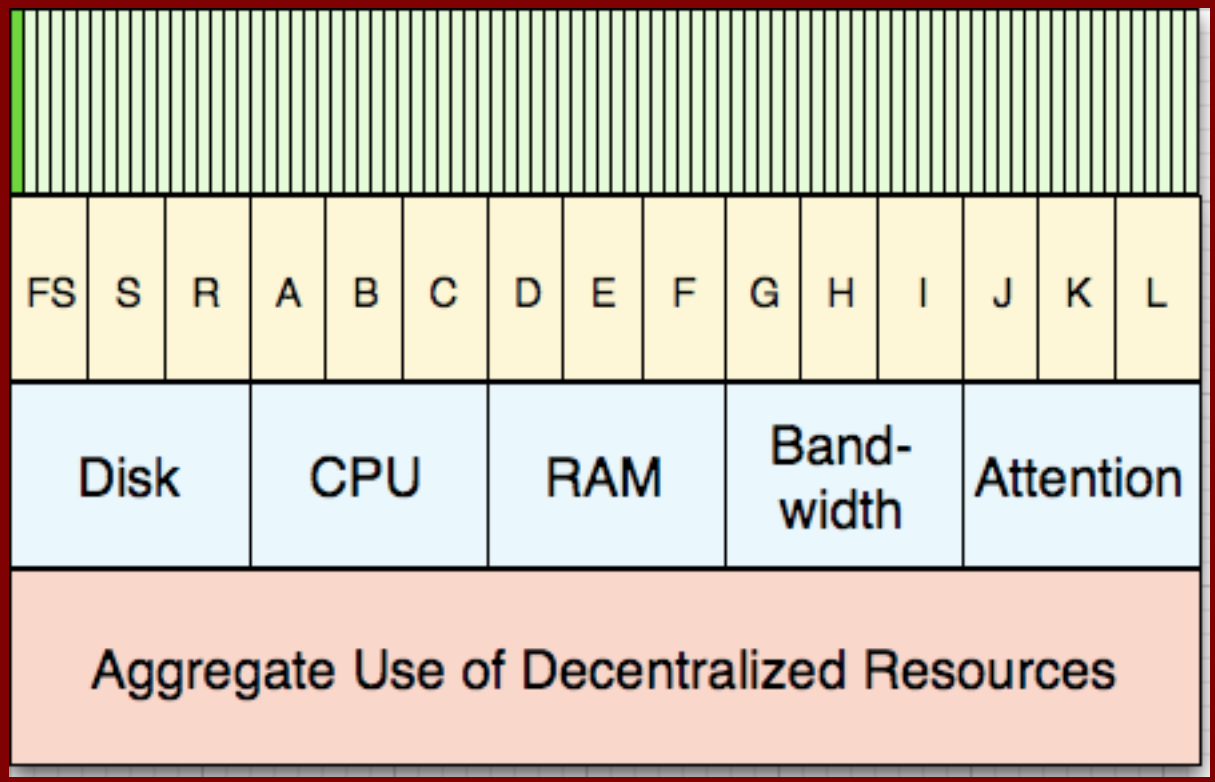
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