Enabling Grids for E-sciencE
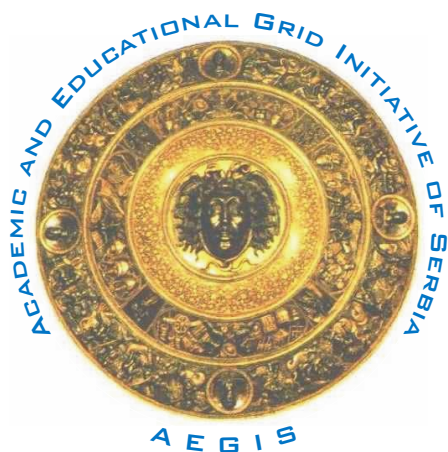
Cluster computing and Grid environment

Branimir Acković

acko@scl.rs

Scientific Computing Laboratory
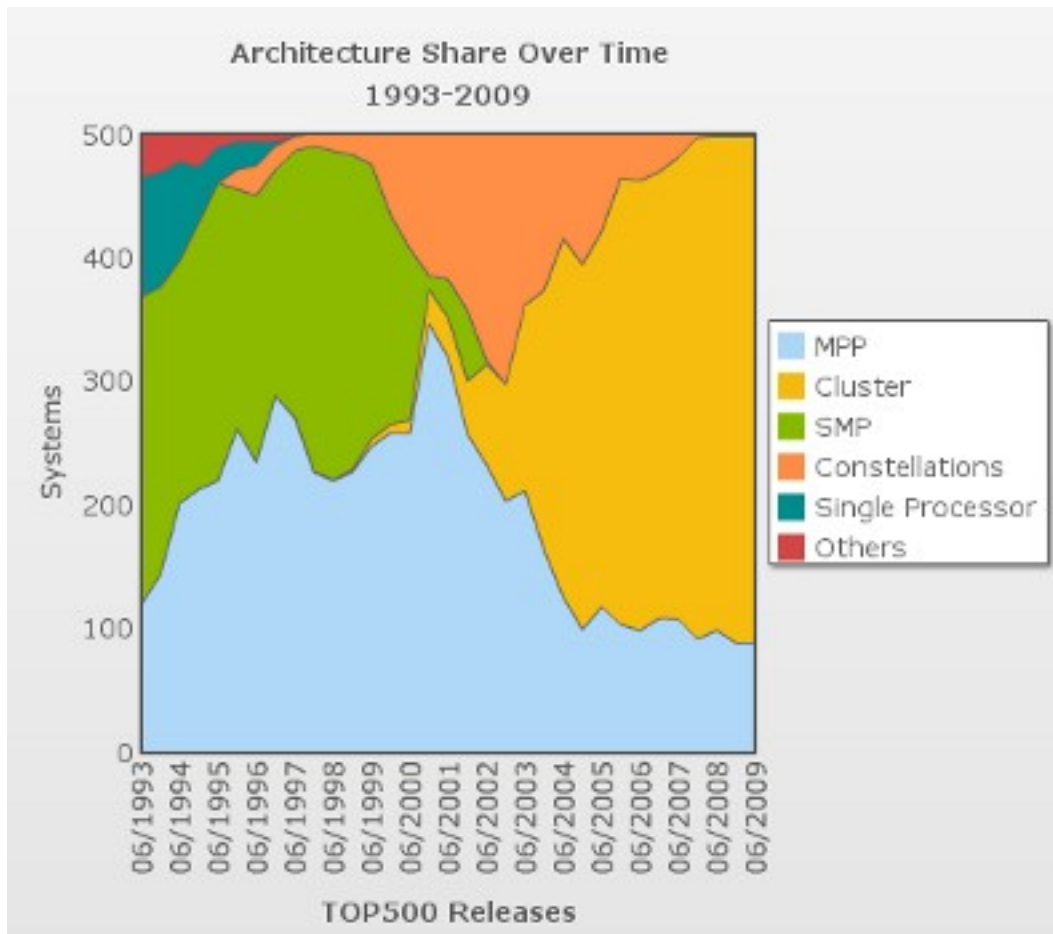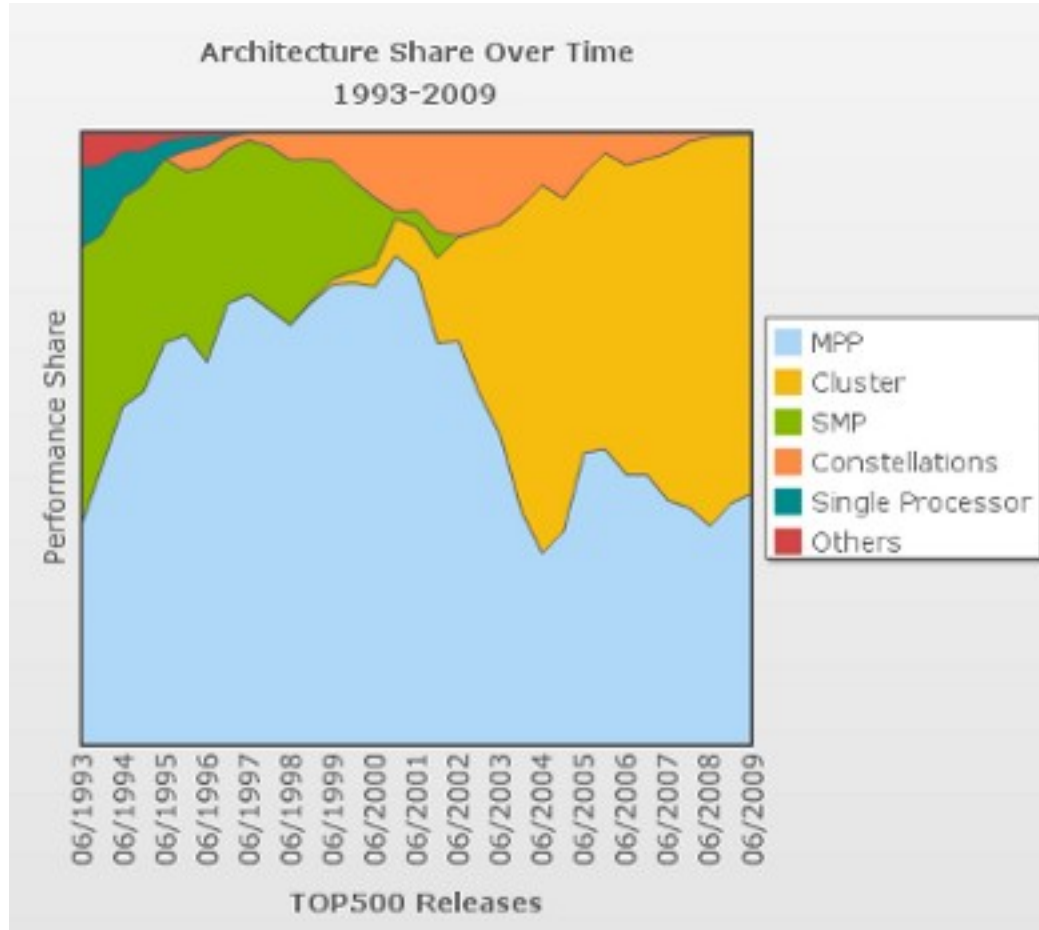
Institute of Physics Belgrade, Serbia

Oct. 06, 2009

www.eu-egee.org

- Trivial
  text editing, Internet services, trivial calculations, programming, process monitoring…

- Extensive
  numerical simulations, extensive calculations, data mining…

- Single processor

- Symmetric Multiprocessing – SMP

- Massive Parallel Processing – MPP

- Clusters

Architecture Share Over Time 1993-2009

Architecture Share Over Time 1993-2009

- '90 – computer grid as a metaphor to power grid

- SETI@HOME - most known grid

- EU – leader in grid computing trough EGEE

- Cloud computing