

Cluster computing and Grid environment

Branimir Acković

acko@scl.rs

Scientific Computing Laboratory

Institute of Physics Belgrade, Serbia





SEE-GRID-SCI

SEE-GRID eInfrastructure for regional eScience











Oct. 20, 2009

www.eu-egee.org



Computer usage in Science

 Trivial text editing, Internet services, trivial calculations, programming, process monitoring...

 Extensive numerical simulations, extensive calculations, data mining...



INFSO-RI-031688 EGEE Grid training for Petnica students of Physics, Petnica Science Center, Serbia

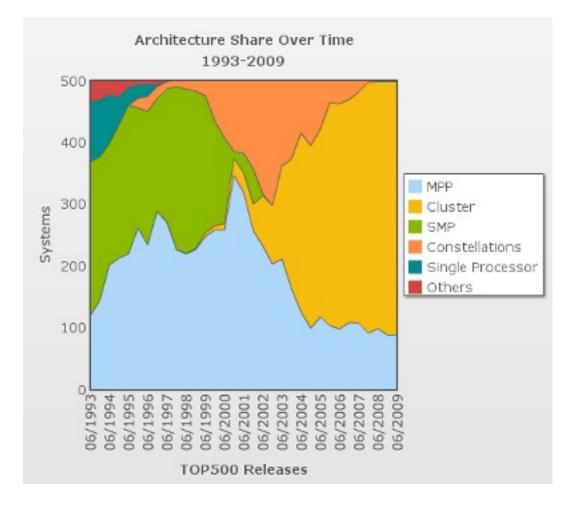


- Single processor
- Symmetric Multiprocessing SMP
- Massive Parallel Processing MPP
- Clusters



Cluster systems on TOP500

Enabling Grids for E-sciencE





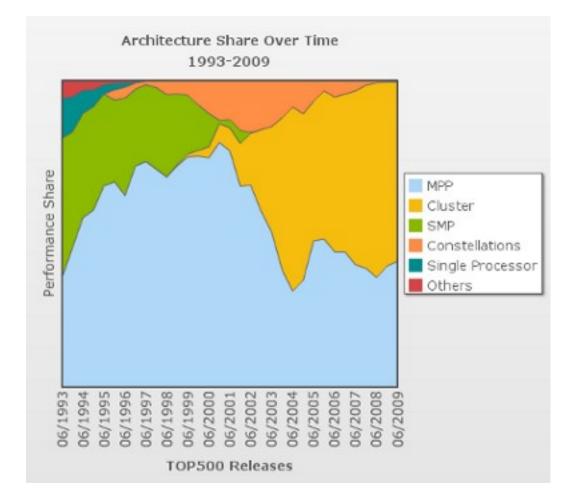
eeee

INFSO-RI-031688 EGEE Grid training for Petnica students of Physics, Petnica Science Center, Serbia



Clusters performance on TOP500

Enabling Grids for E-sciencE





INFSO-RI-031688 EGEE Grid training for Petnica students of Physics, Petnica Science Center, Serbia





- '90 computer grid as a metaphor to power grid
- SETI@HOME most known grid
- EU leader in grid computing trough EGEE
- Cloud computing

