

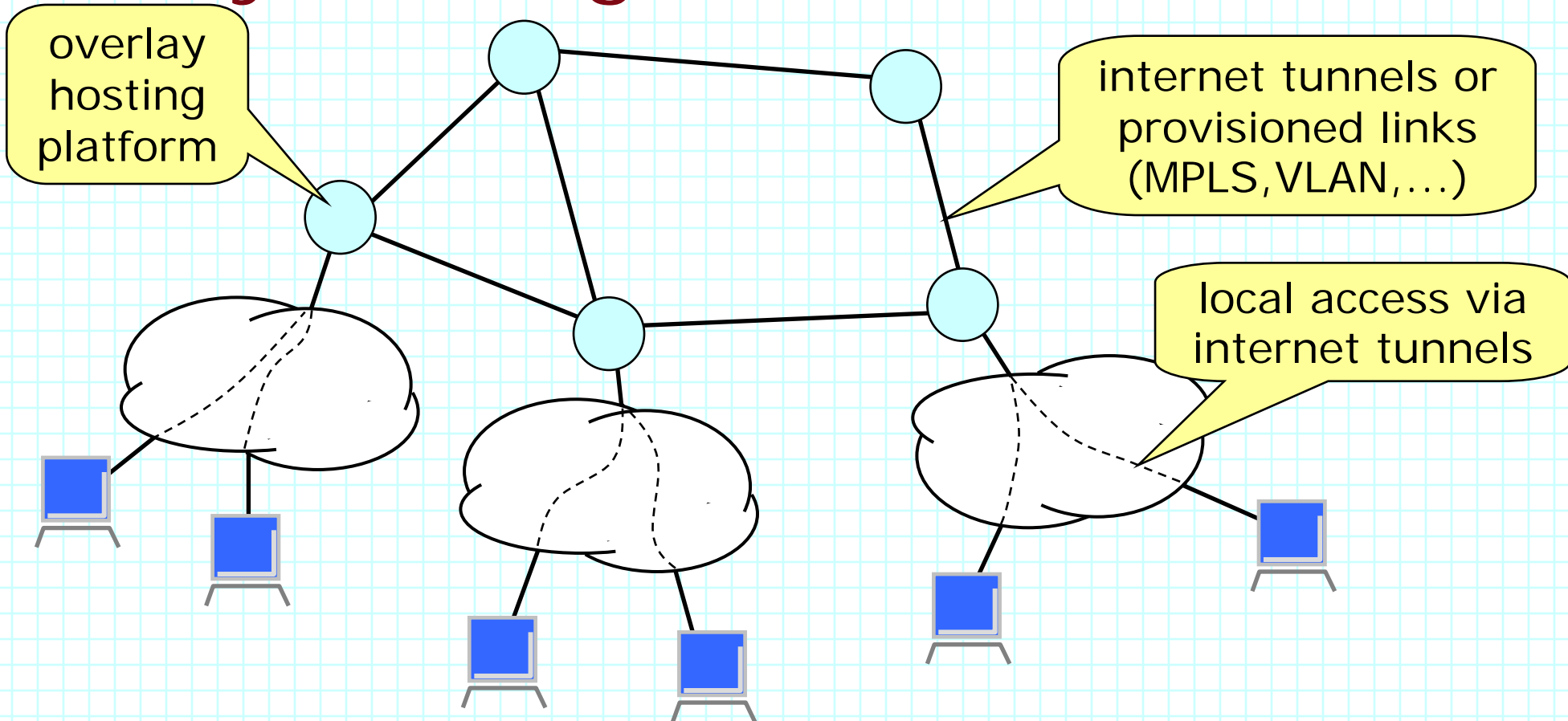
A Platform for High Performance Overlay Hosting Services

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Overlay Hosting Services

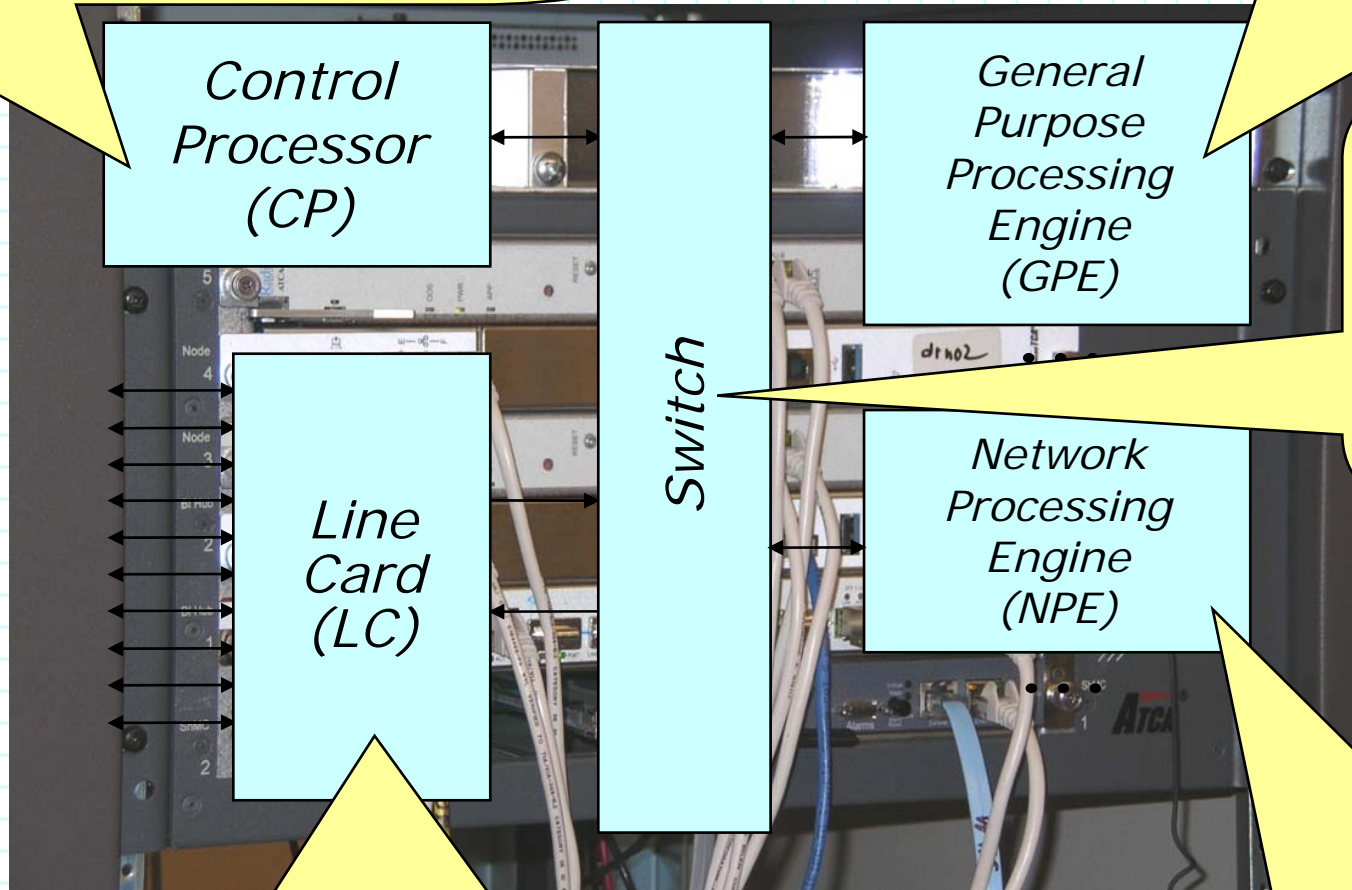


- Shared infrastructure hosting overlay-based services
- Objectives for overlay hosting platform
 - » internet-scale traffic volumes and consistently low latency
 - » deployment target: first Planetlab, then commercial and GENI

Platform Components

conventional server which coordinates system components and synchronizes with PlanetLab

conventional server blades supporting standard PlanetLab environment

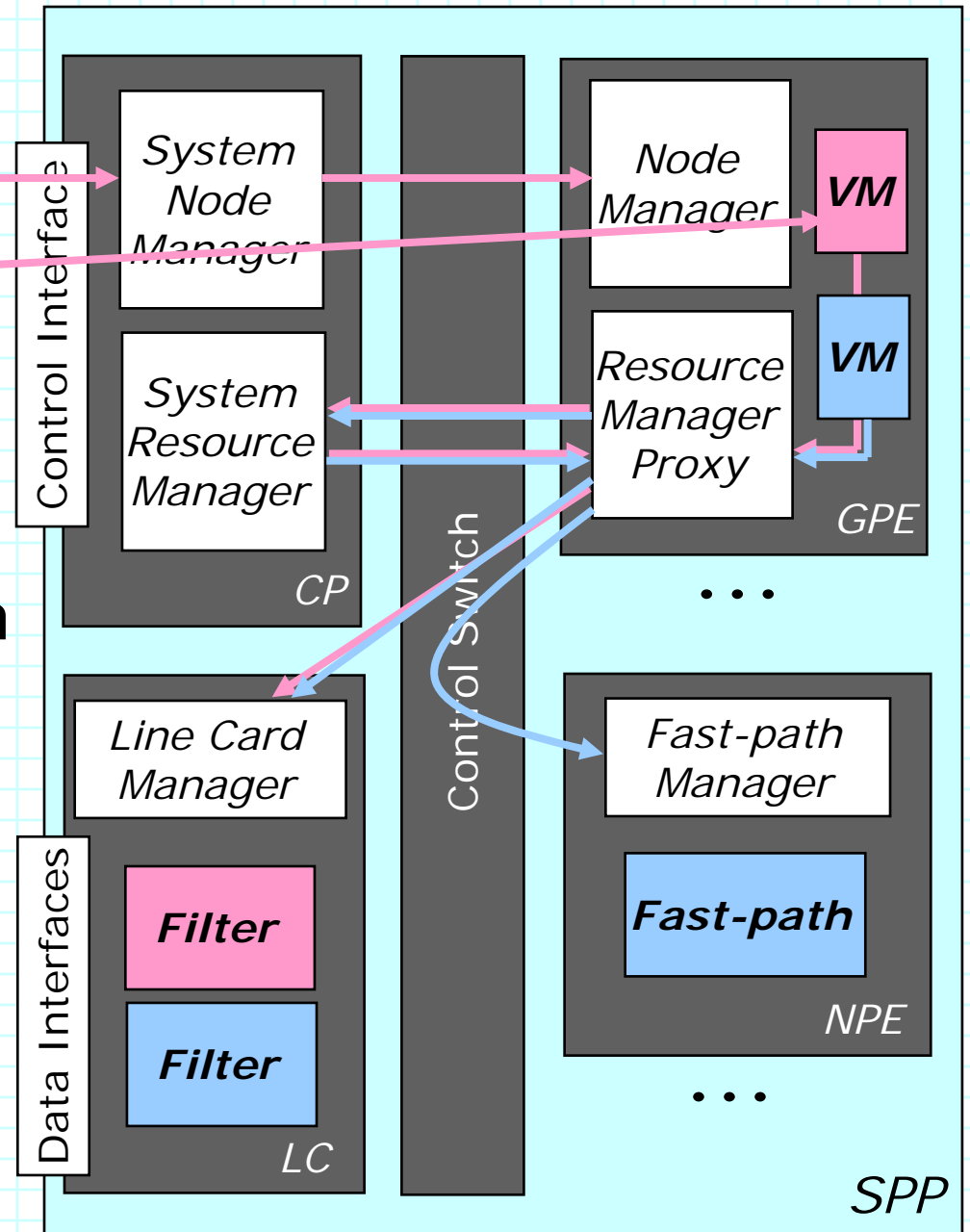
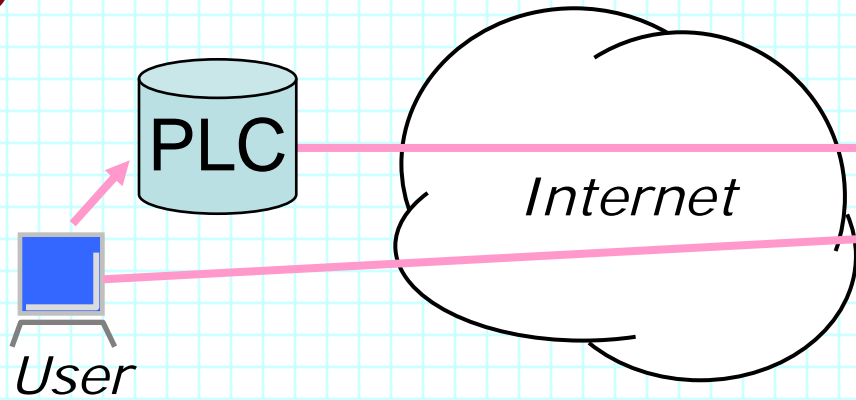


blade containing 10GE data switch and 1GE control switch

dual Intel IXP 2850 blade which forwards packets to correct PEs

dual Intel IXP 2850 blades supporting application fast-paths

System Control

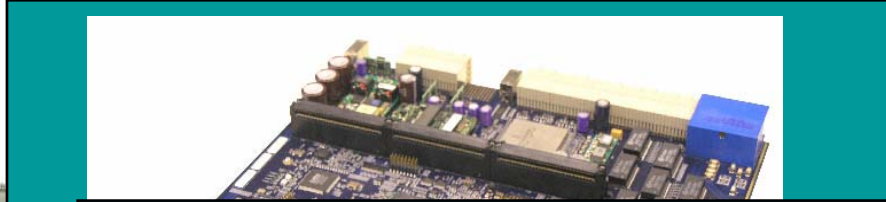


- Instantiate new application
- Open socket
- Instantiate fast-path

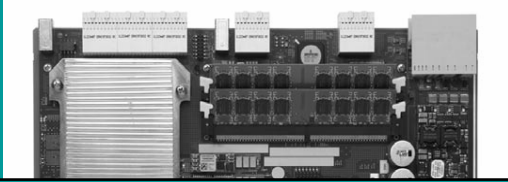
Other ATCA Components



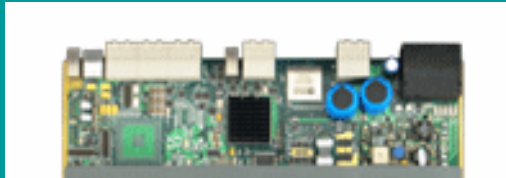
Sun – dual 8-core UltraSparc



Diversified Technologies
10 GbE Switch Blade



Motorola – dual Cavium NPs
with 16 MIPS cores each



Motorola – 4xAMC carrier,
with 10Gx1G switch



Artesyn - AMC Compute blades



Bitstream - AMC FPGA blades