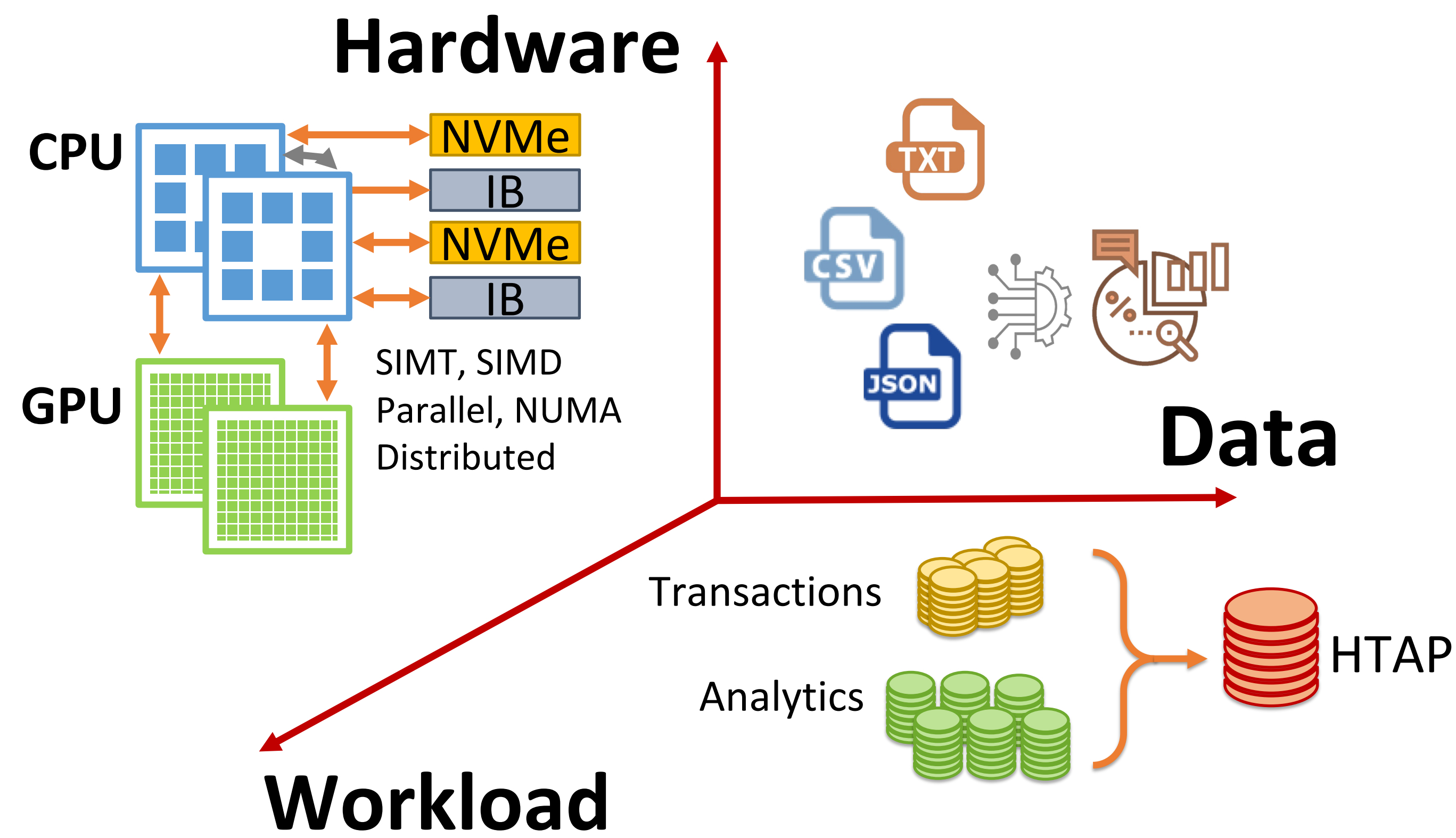


Proteus: taming heterogeneity through virtualization & JIT adaptivity

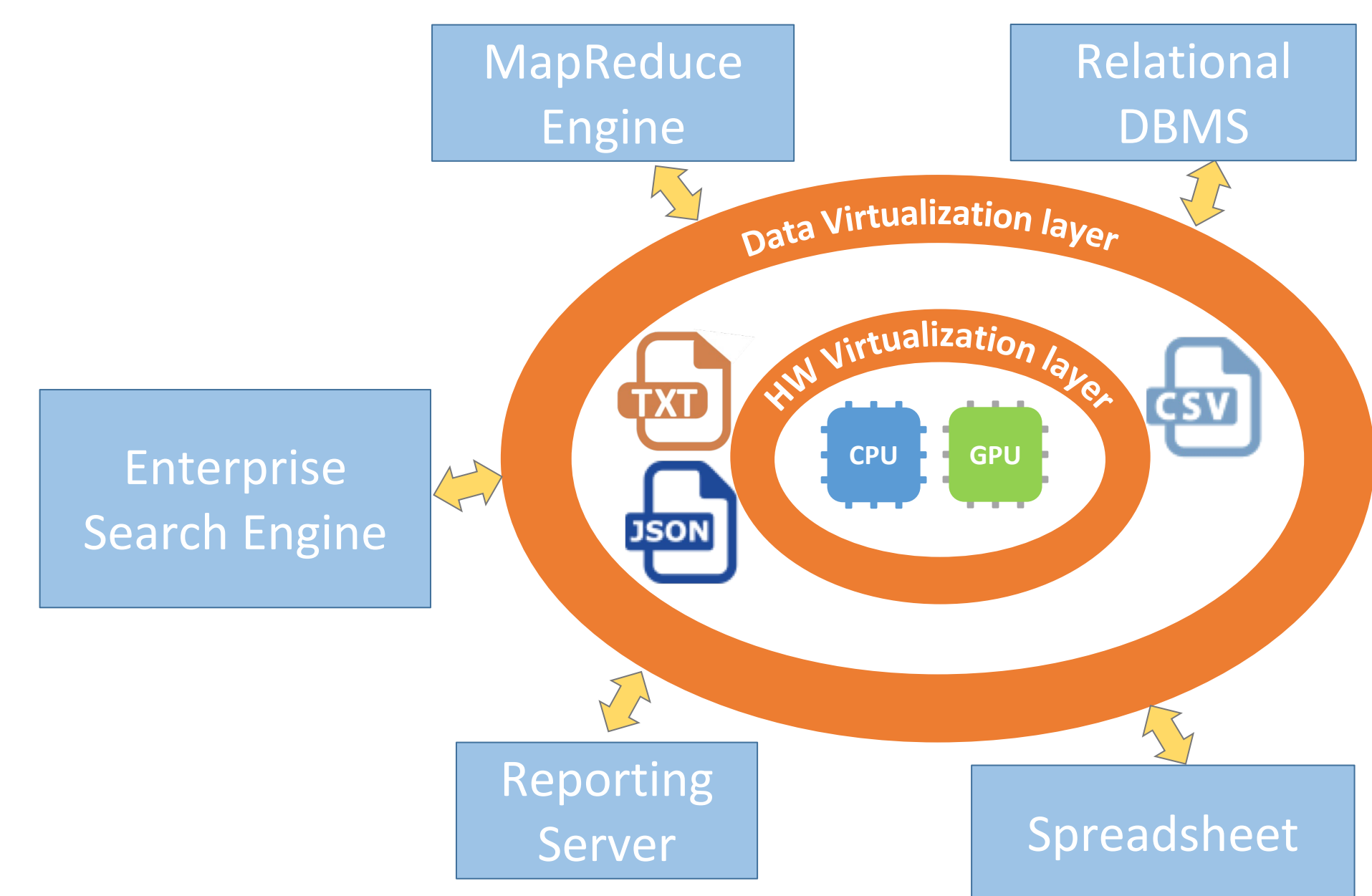
Data-Intensive Applications and Systems Laboratory

Catching up with an Evolving Landscape



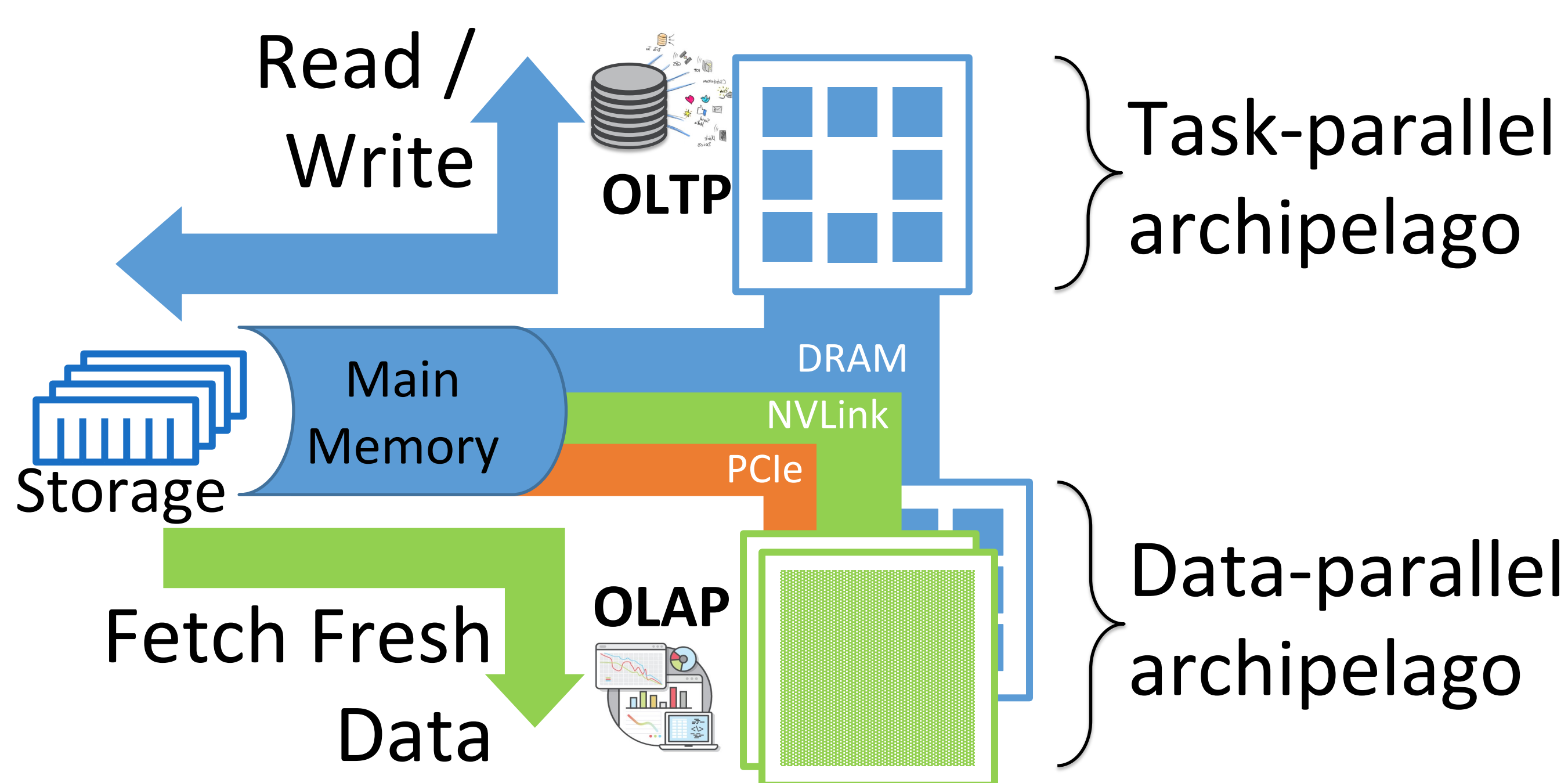
Next generation systems must adapt

Data, Hardware & Workload Virtualization



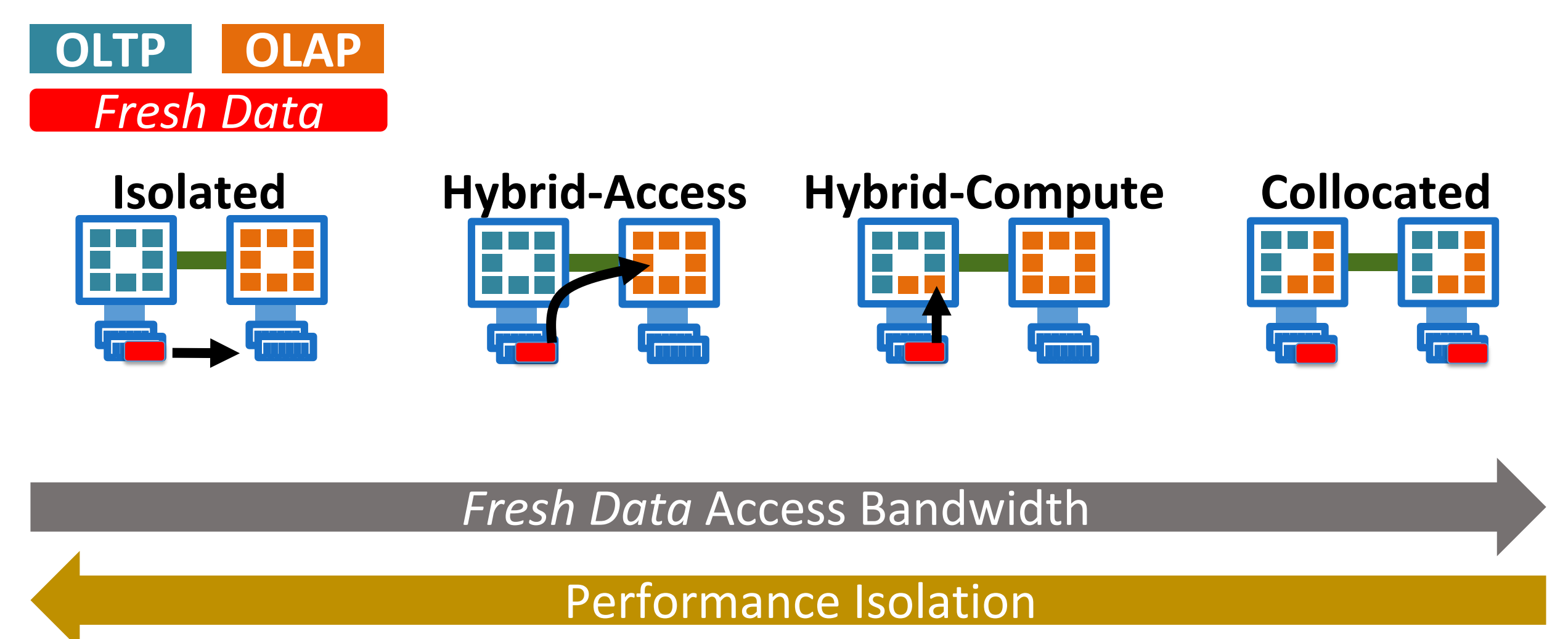
Virtualize and JIT specialize to remove overheads

Elasticity & Isolation in Heterogeneous HW



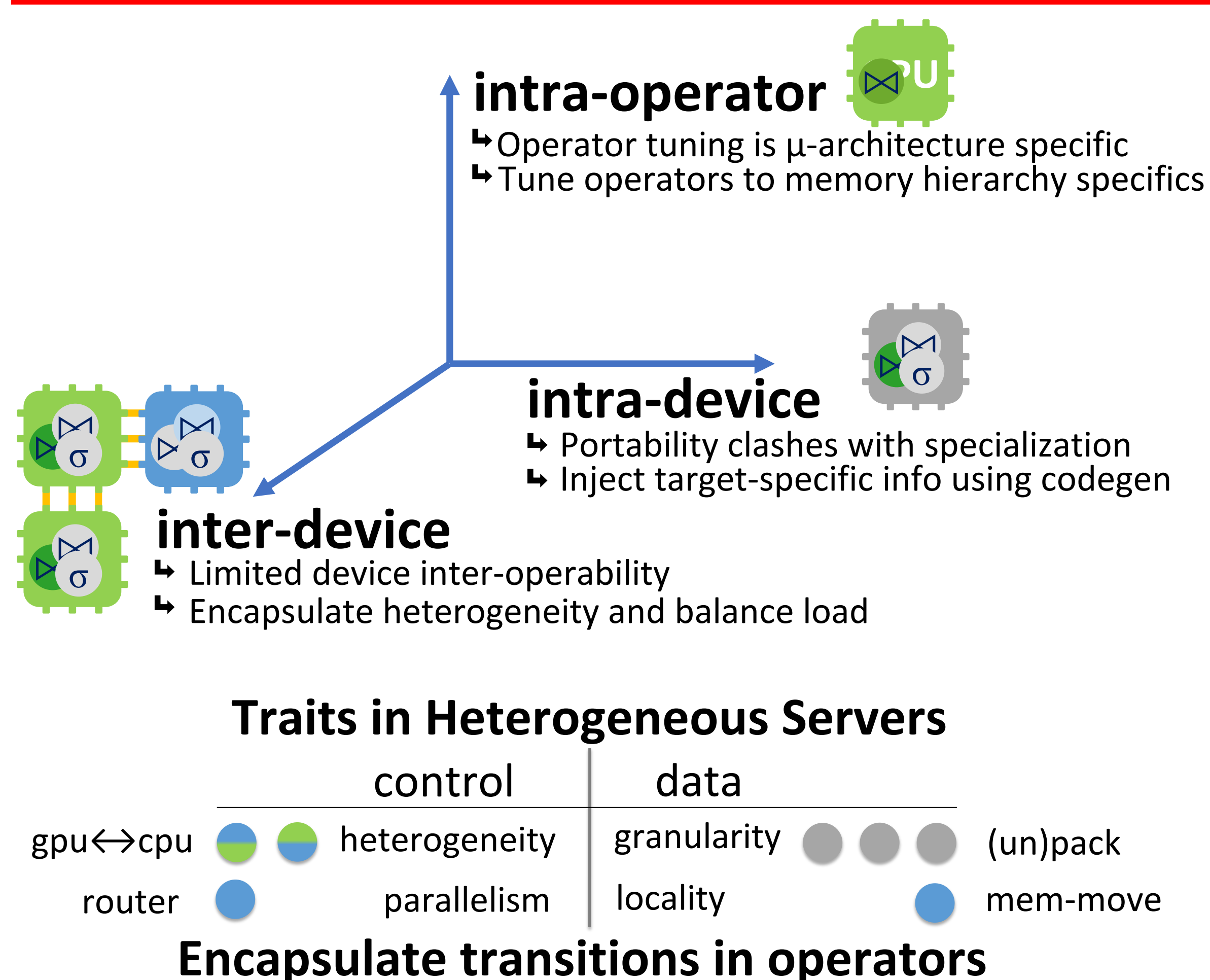
HW to performance isolation via logical partitioning

Adaptively Navigating the HTAP Spectrum

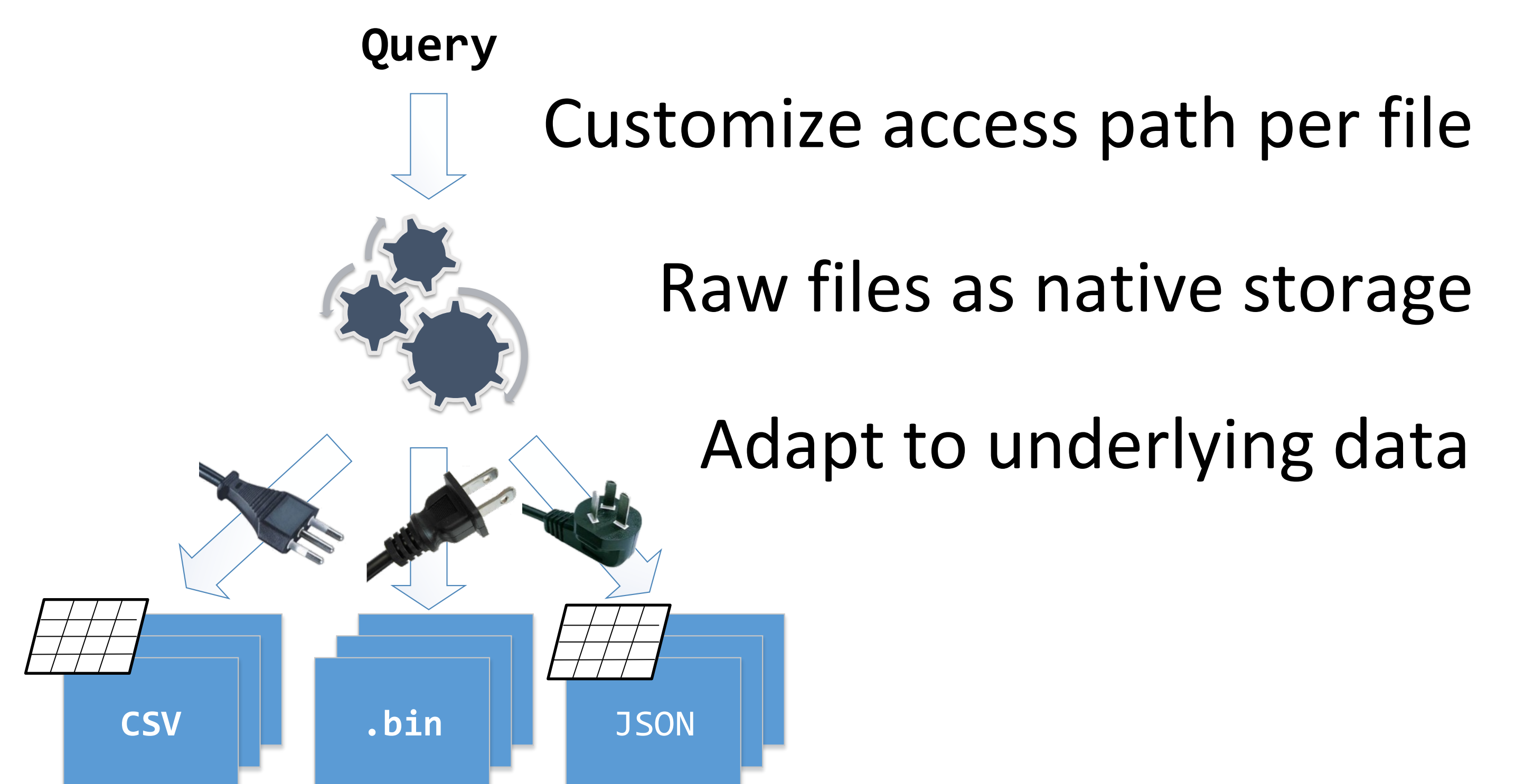


Reconcile fresh data movement with HW efficiency

Heterogeneous Hardware



Heterogeneous Data



Efficient execution via Accelerator-level Parallelism

Adapt access paths to data & queries

Fast Analytics on Fresh Data through JIT Code Generation & GPU-acceleration

