

Workload Coordinator

Responsibilities:

- Global scheduling
- Rank selection
- Parallelism logic
- Workload distribution

TCP

node0:9000

**SST Rank 0
(Node 0)**

HostScheduler
+ GPU Devices
(GPUs 0-1)

TCP

node1:9000

**Inter-rank NVLink
via SST Links**

**SST Rank 1
(Node 1)**

HostScheduler
+ GPU Devices
(GPUs 2-3)

Intra-rank:

- Local NVLink mesh
- HostScheduler dispatch
- GPU device simulation

Scalability:

- Add ranks for more GPUs
- Linear scaling to 100+ GPUs
- Independent rank processes