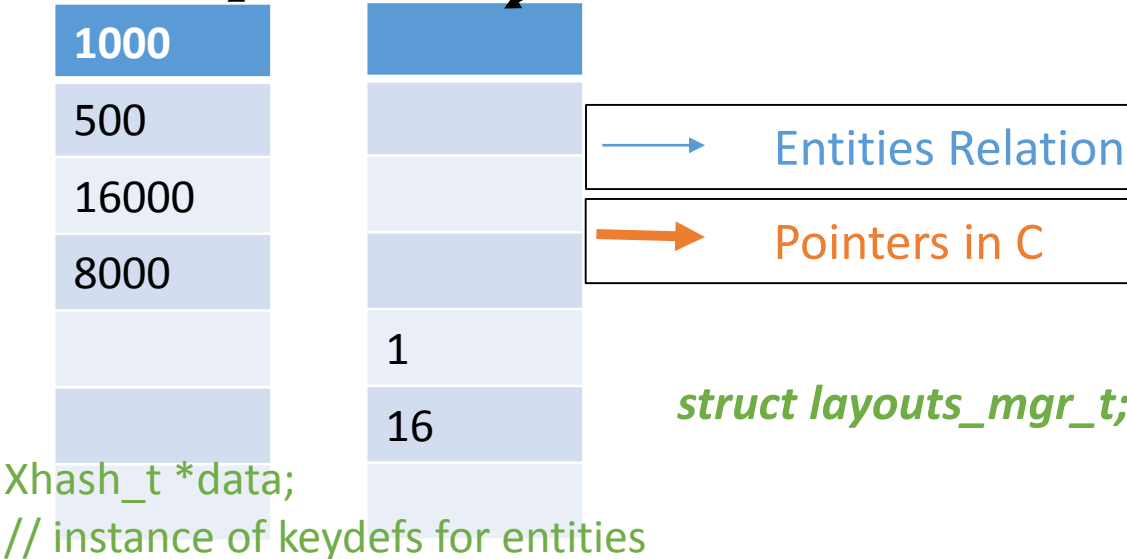
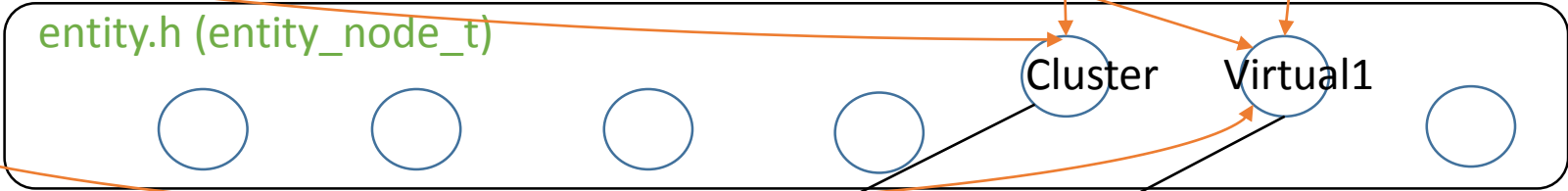
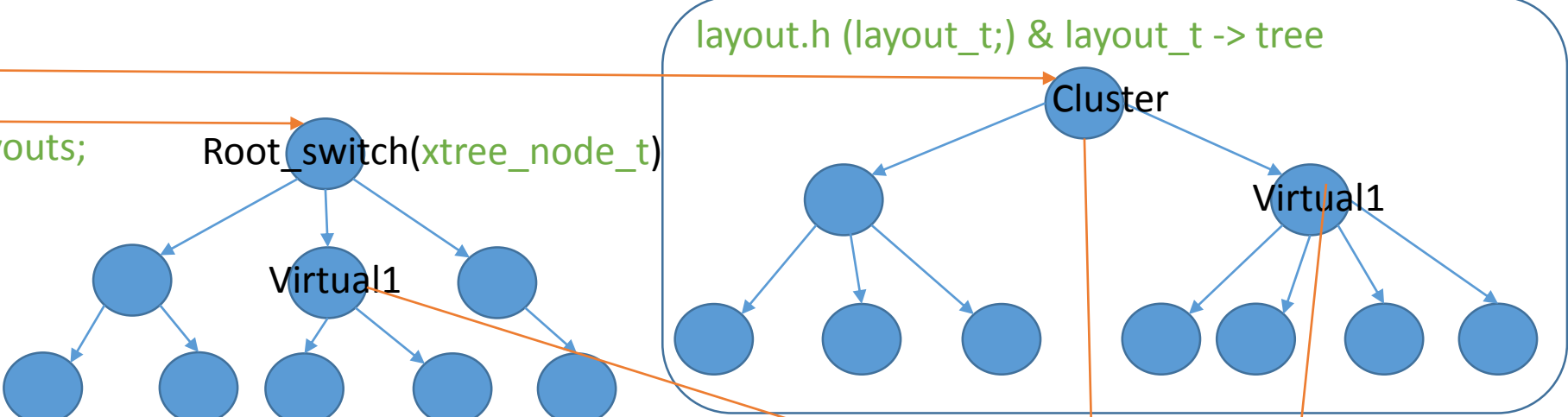




cons_res_partition
cons_res_topology
power_temperature

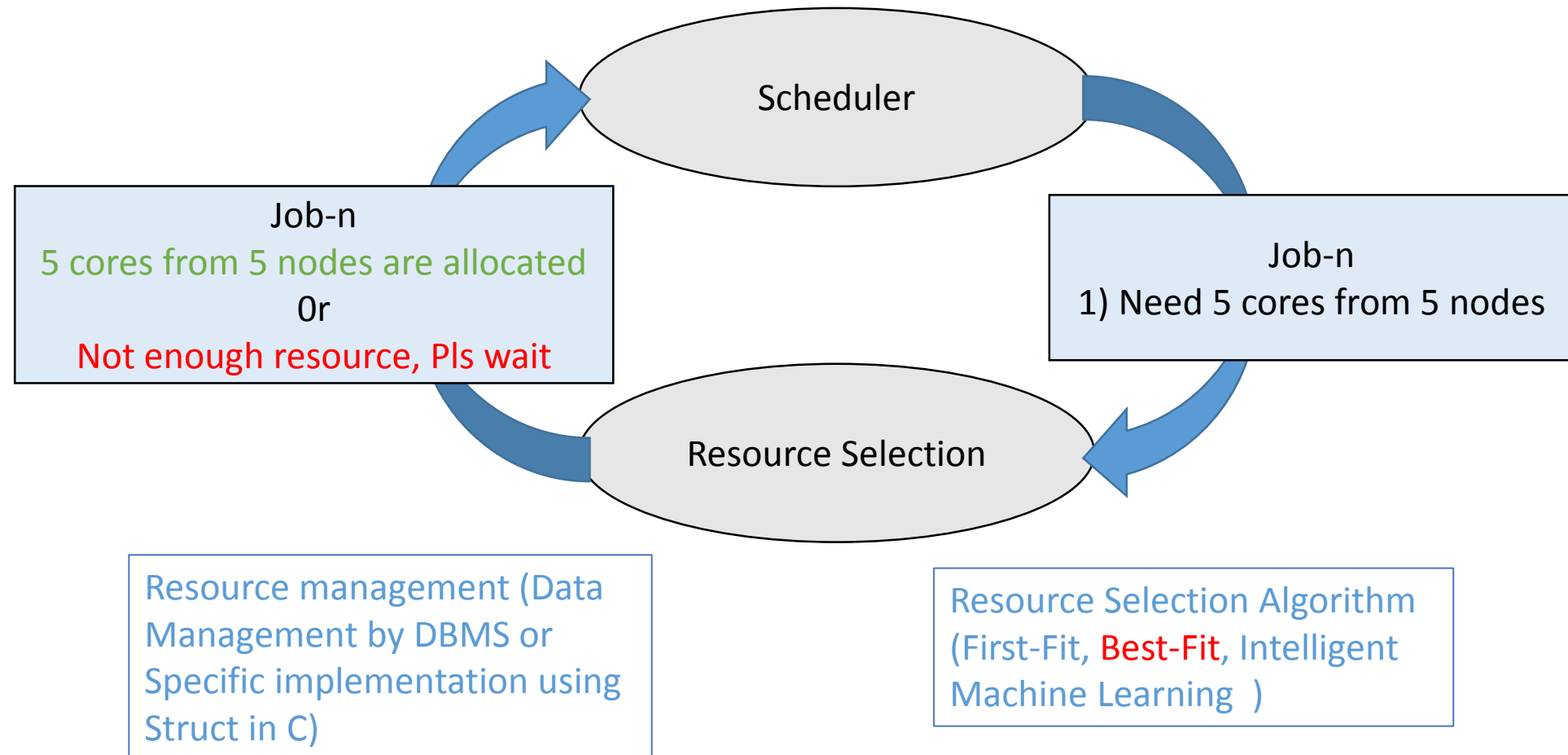
Cluster
Virtual0
Virtual1
Virtual2
Socket0
Core0
Core1

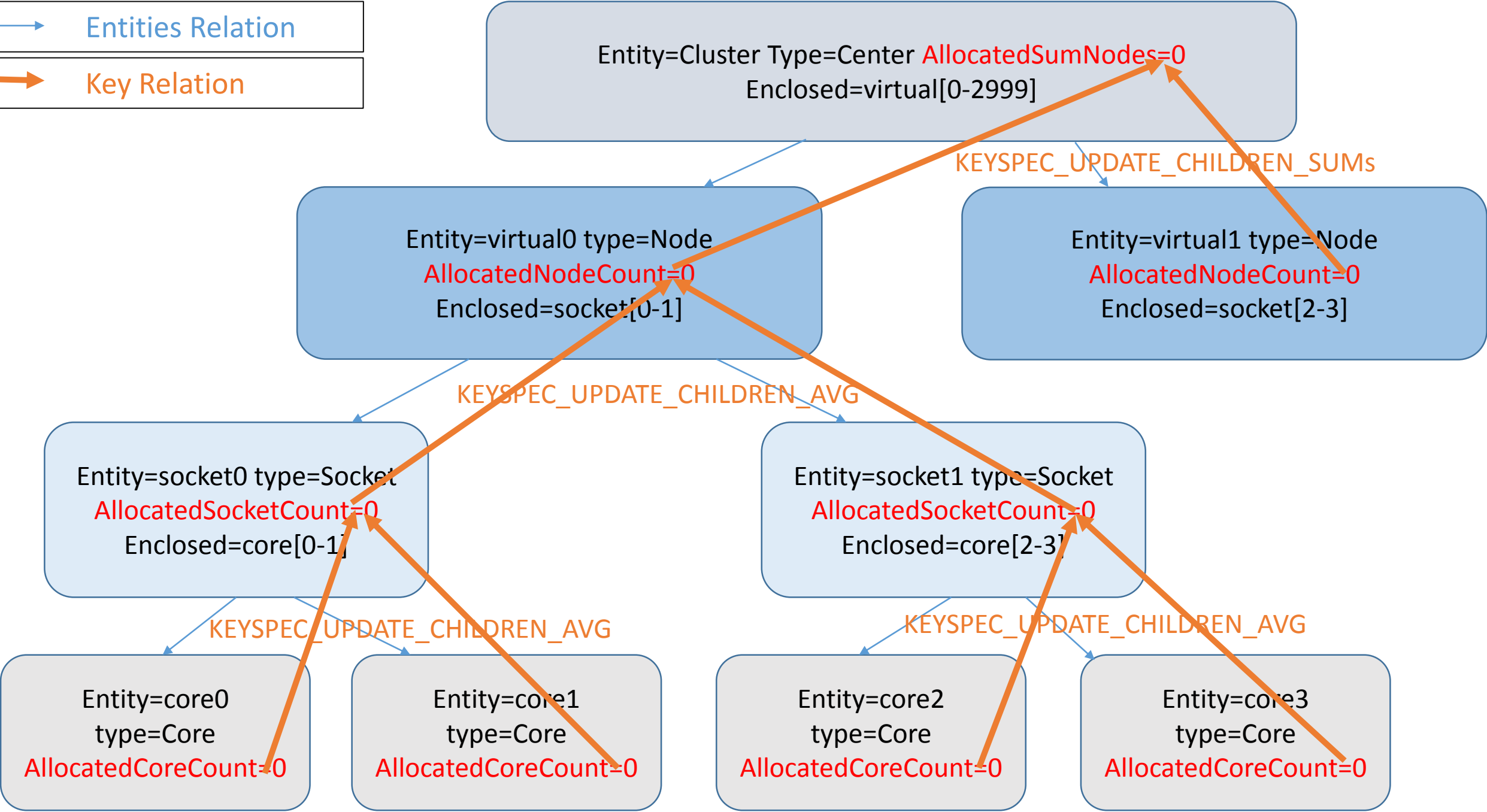
Cons_res_partition.NumNodes
Cons_res_partition.AllocatedNodes
Cons_res_partition.NumCores
Cons_res_partition.AllocatedCores
cons_res_topology.AvailableNodeCnt
cons_res_topology.AvailableCpuCnt
power_temperature.AvailableSumPower



Job management  
1) Specifying Job details  
2) Assign job's priority  
3) Job Queue management

Job Selection Algorithm  
(FIFO, **Backfill**, Fairshare,  
Auction, Intelligent Machine  
Learning )





Entity=switch0 Type=Switch AvailableNodeCntInLevel2=1  
AvailableCpuCntInLevel2=24 Enclosed=switch[1-2]

Entity=switch1 type=Switch  
AvailableNodeCntInLevel1=1  
AvailableCpuCntInLevel1=24  
Enclosed=switch[3-4]

Entity=switch2 type=Switch  
AvailableNodeCntInLevel1=0  
AvailableCpuCntInLevel1=0  
Enclosed=switch[5-6]

Entity=switch3 type=Switch  
AvailableNodeCntInLevel0=1  
AvailableCpuCntInLevel0=8  
Enclosed=virtual[0-1999]

Entity=socket4 type=Switch  
AvailableNodeCntInLevel0=1  
AvailableCpuCntInLevel0=16  
Enclosed=core[2000-2999]

Entity=virtual0  
type=Node  
AvailableNodeCnt=1  
AvailableCpuCnt=8

Entity=virtual1999  
type=Node  
AvailableNodeCnt=0  
AvailableCpuCnt=0

Entity=virtual2000  
type=Node  
AvailableNodeCnt=1  
AvailableCpuCnt=16

Entity=virtual2999  
type=Node  
AvailableNodeCnt=0  
AvailableCpuCnt=0

Entity=switch0 Type=Switch IdleWattsInLevel2=1  
MaxWattsInLevel2=24 Enclosed=switch[1-2]

Entity=switch1 type=Switch  
IdleWattsInLevel1=399720  
maxWattsInLevel1=330  
Enclosed=switch[3-4]

Entity=switch2 type=Switch  
IdleWattsInLevel1=0  
MaxWattsInLevel1=0  
Enclosed=switch[5-6]

Entity=switch3 type=Switch  
IdleWattsInLevel0=239880  
MaxWattsInLevel0=170  
Enclosed=virtual[0-1999]

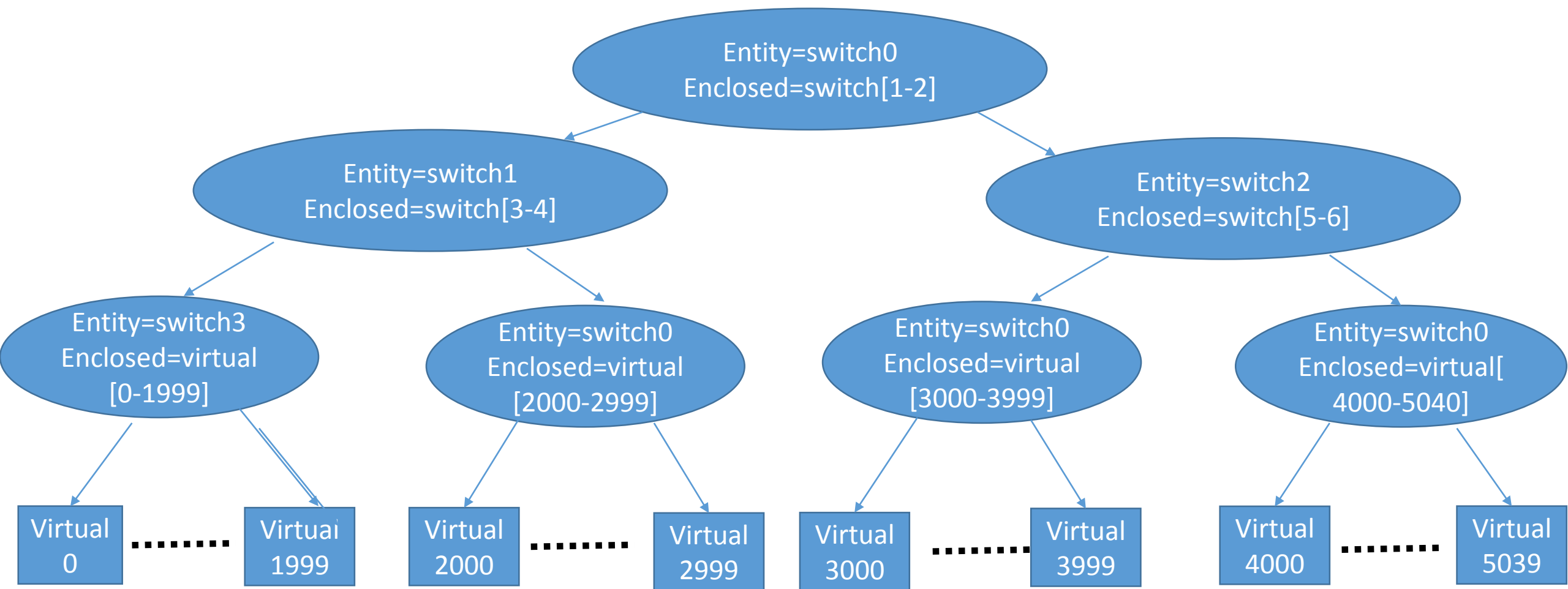
Entity=socket4 type=Switch  
IdleWattstinLevel0=9900  
maxWattsInLevel0=160  
Enclosed=core[2000-2999]

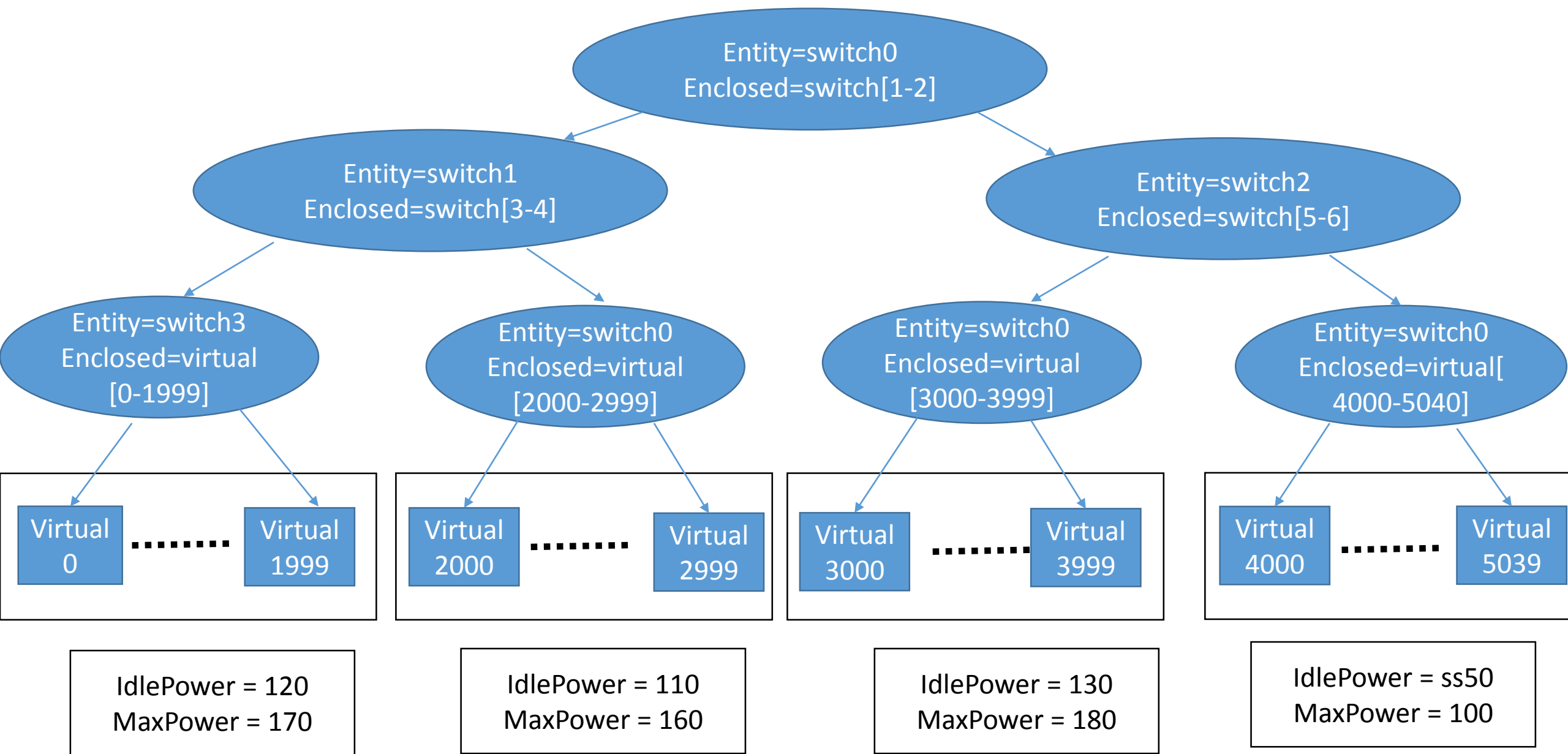
Entity=virtual0  
type=Node  
IdleWatts=0  
MaxWatts=170

Entity=virtual1999  
type=Node  
IdleWatts=120  
MaxWatts=0

Entity=virtual2000  
type=Node  
IdleWatts=0  
MaxWatts=160

Entity=virtual2999  
type=Node  
IdleWatts=110  
MaxWatts=0







### Partition-0

Node - 0

Node - 1

Node - 2

Node - 3

### Partition-0

Node - 4

Node - 5