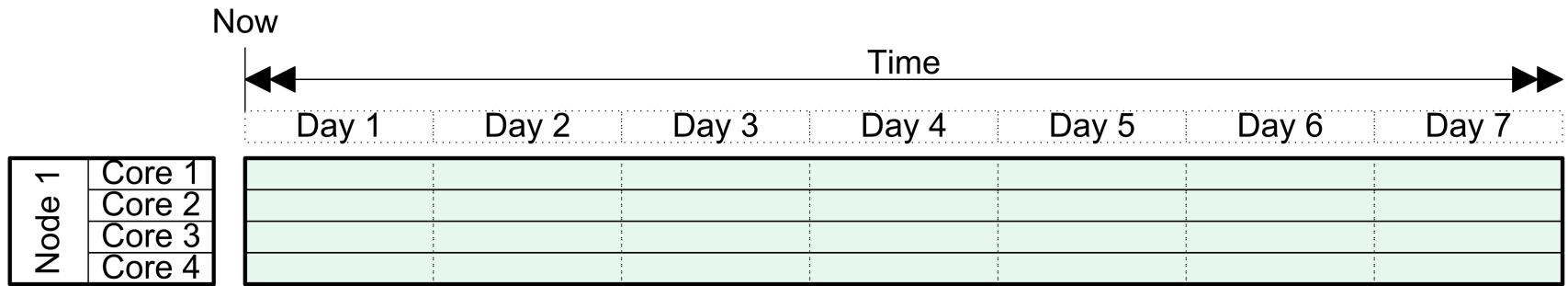


Scheduling Tetris

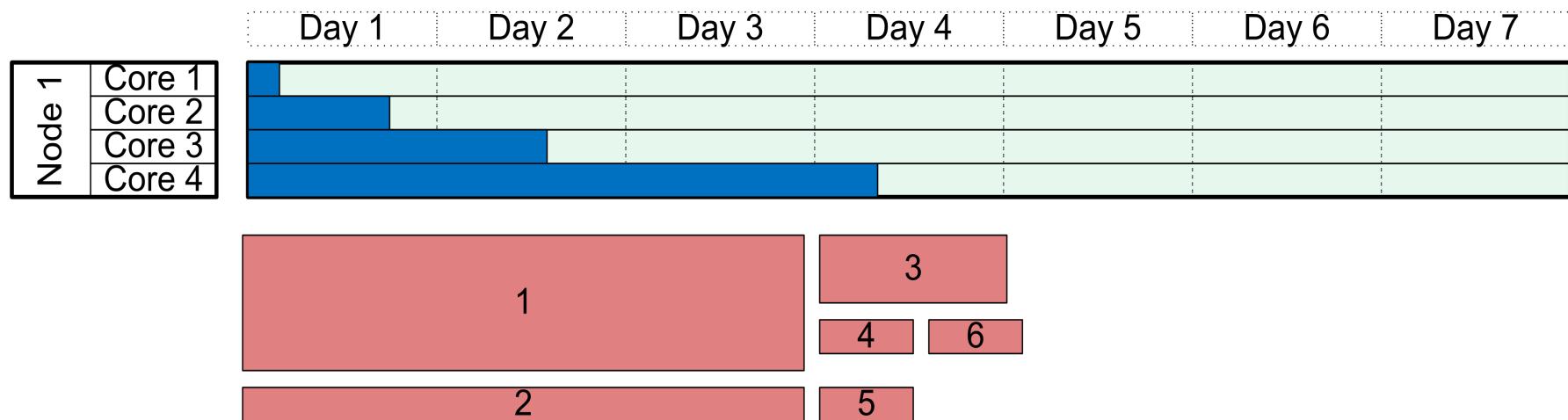
Visualizing single node cluster



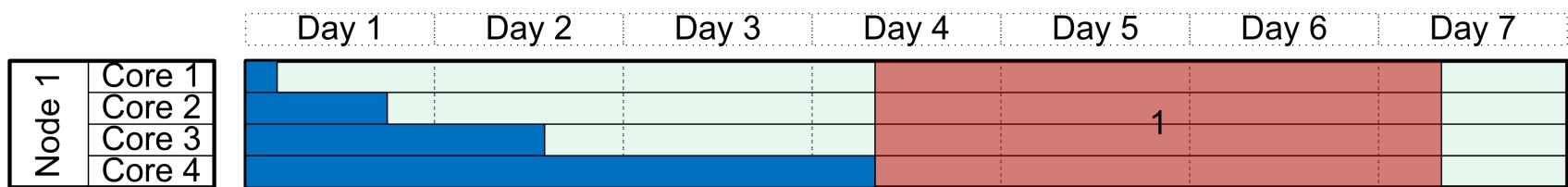
Running jobs

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Node 1	Core 1						
	Core 2						
	Core 3						
	Core 4						

Scheduling jobs in order of priority



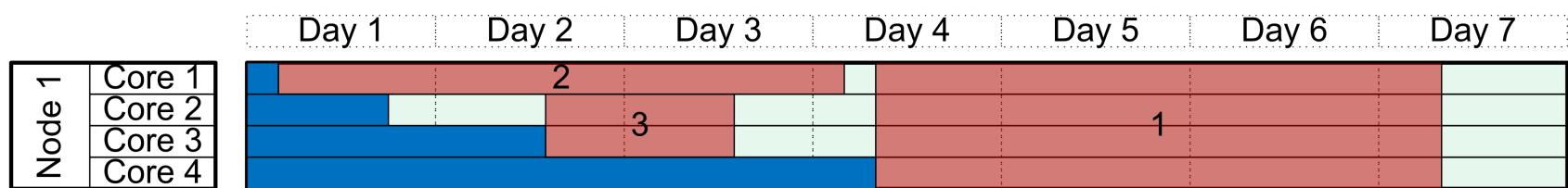
Scheduling jobs in order of priority



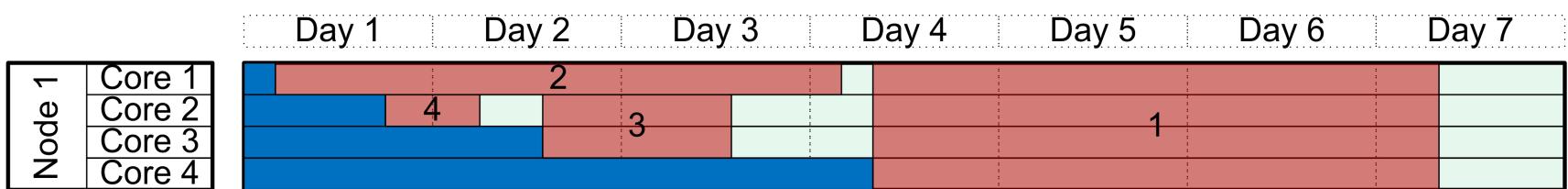
Scheduling jobs in order of priority

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Node 1	Core 1	2					
	Core 2						
	Core 3						
	Core 4						

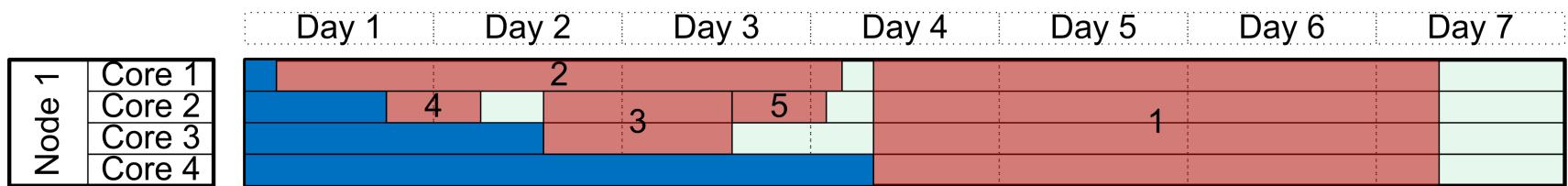
Scheduling jobs in order of priority



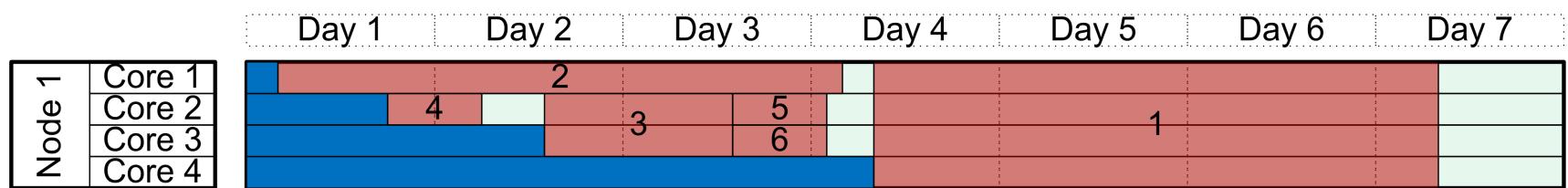
Scheduling jobs in order of priority



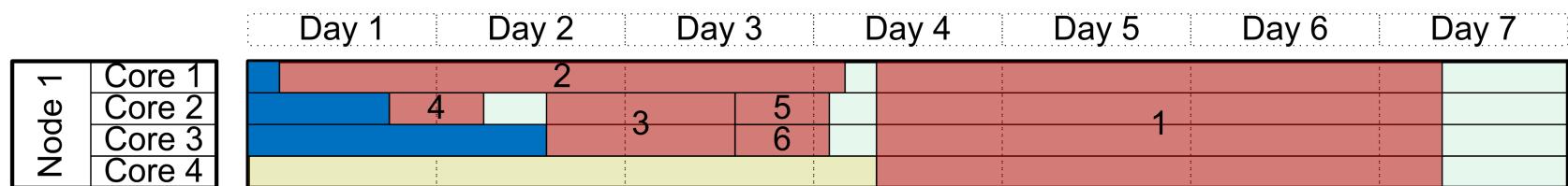
Scheduling jobs in order of priority



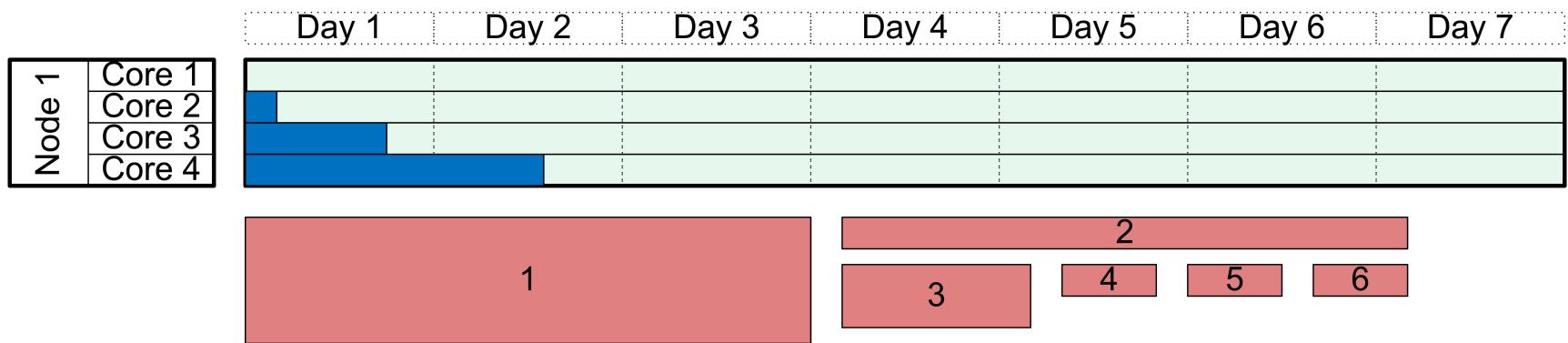
Scheduling jobs in order of priority



A Job finishes early



Jobs are rescheduled



Jobs are rescheduled

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Node 1	Core 1						
	Core 2						
	Core 3						
	Core 4						

A Gantt chart illustrating job scheduling across 7 days for 4 cores on Node 1. The chart shows the following tasks:

- Core 1: Task from Day 1 to Day 2.
- Core 2: Task from Day 1 to Day 2.
- Core 3: Task from Day 1 to Day 3.
- Core 4: Task from Day 1 to Day 4.

Jobs are rescheduled



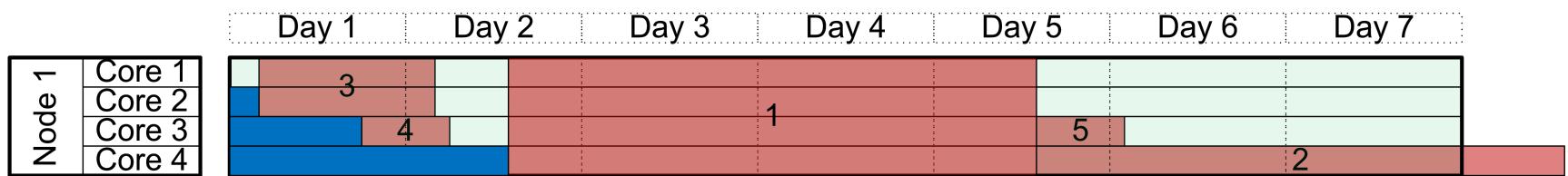
Jobs are rescheduled



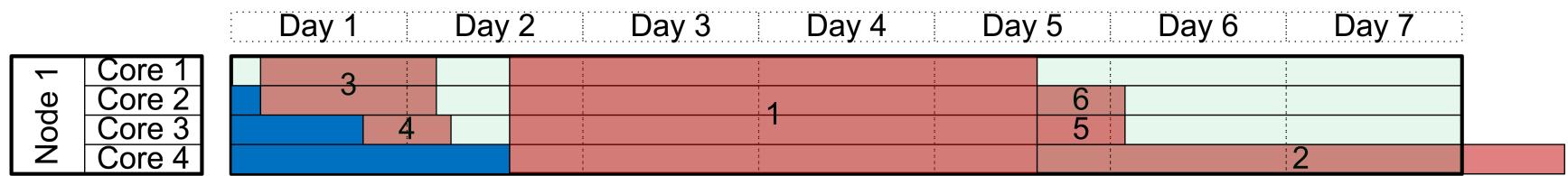
Jobs are rescheduled



Jobs are rescheduled



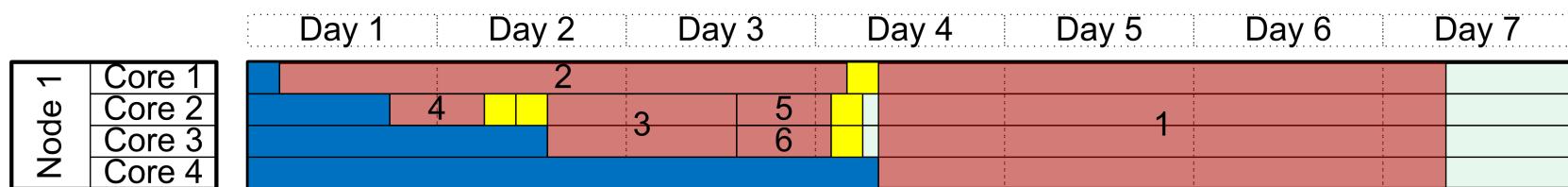
Jobs are rescheduled



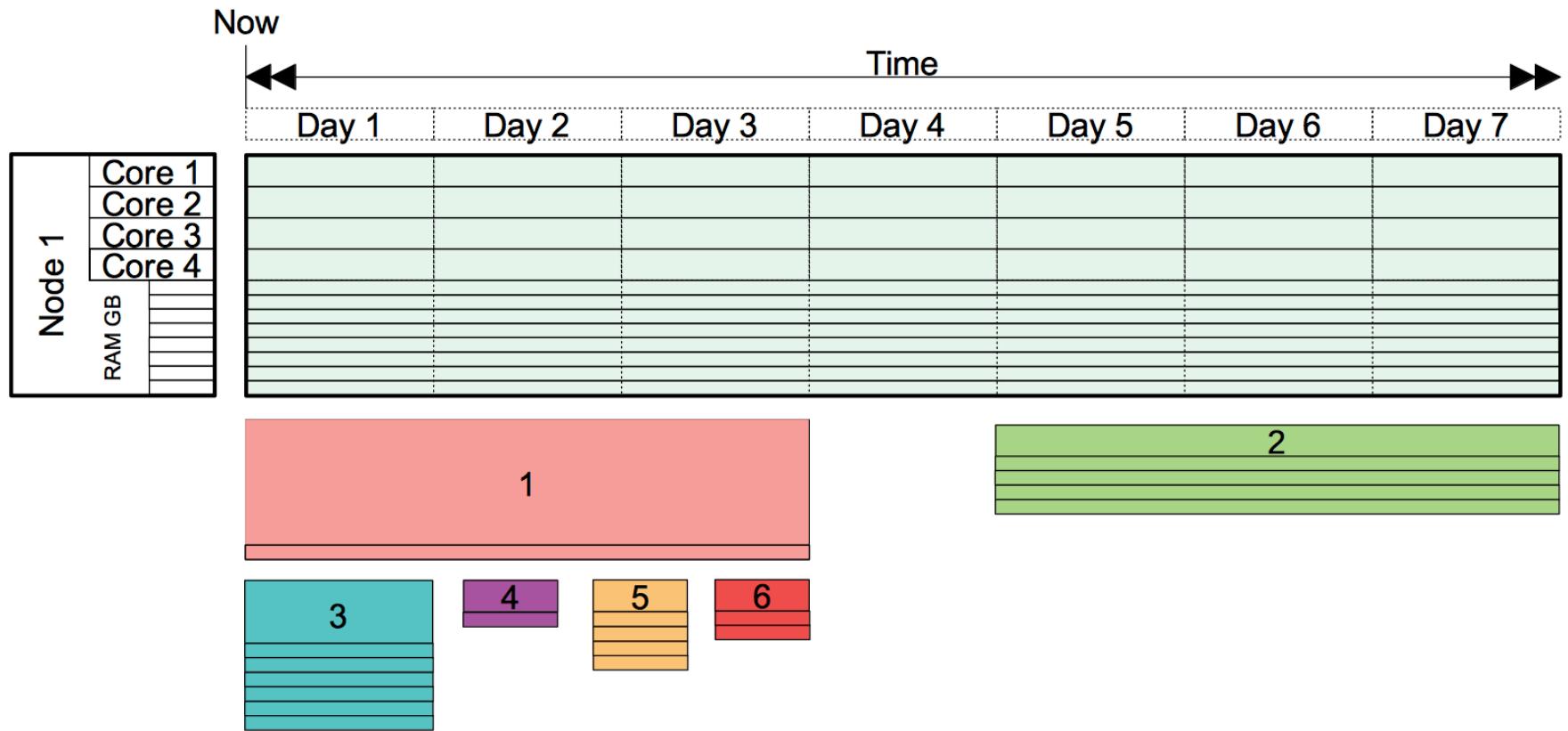
Single node cluster

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Node 1	Core 1	2					
	Core 2	4					
	Core 3		3	5			
	Core 4			6		1	

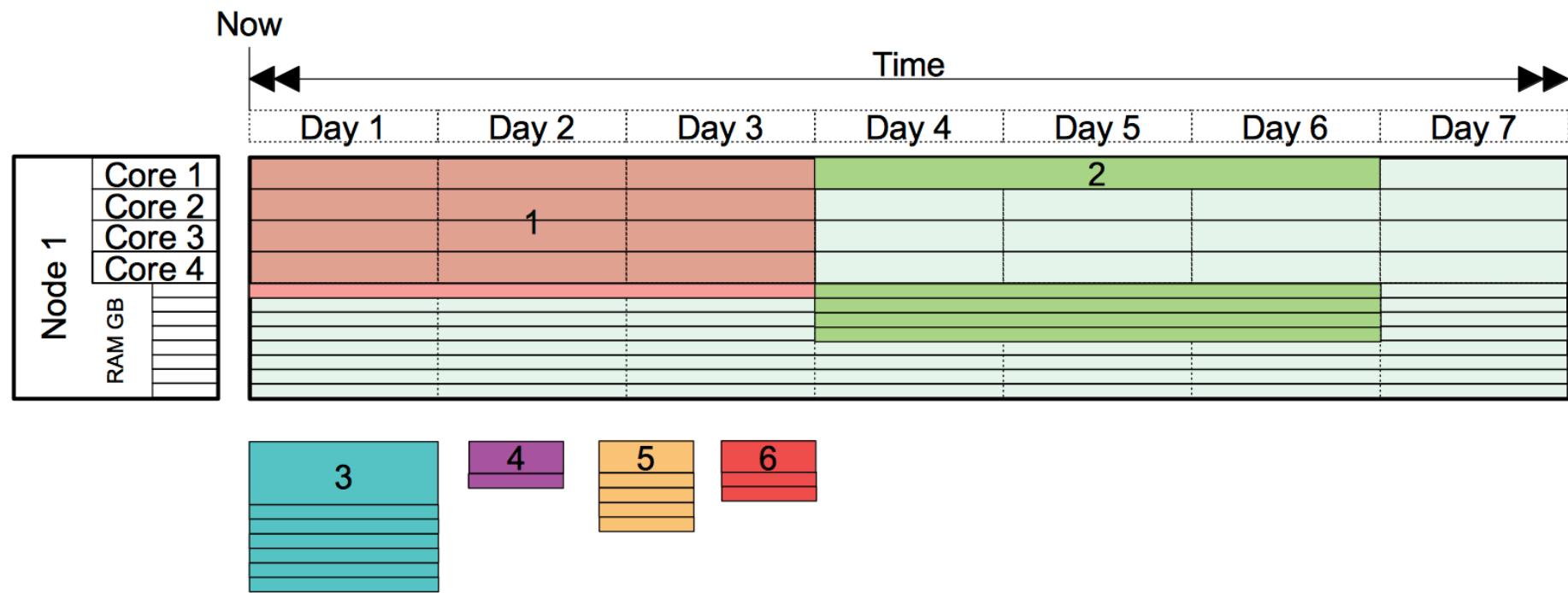
Short serial jobs and Backfill



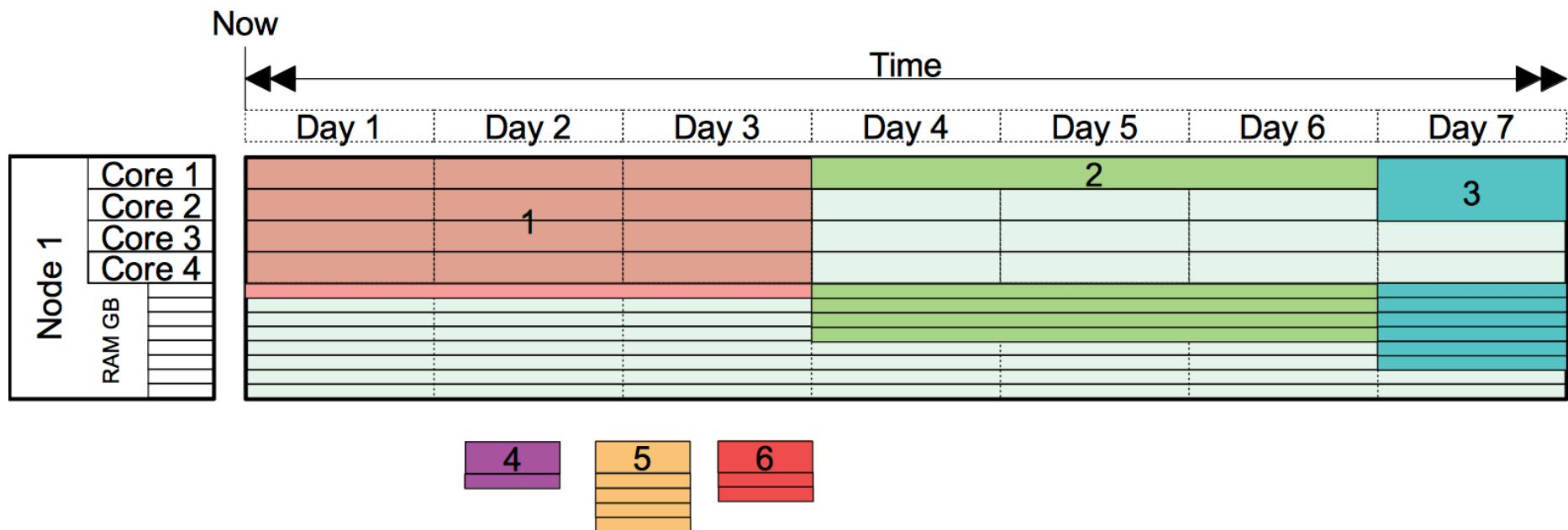
Scheduling Cores and Memory



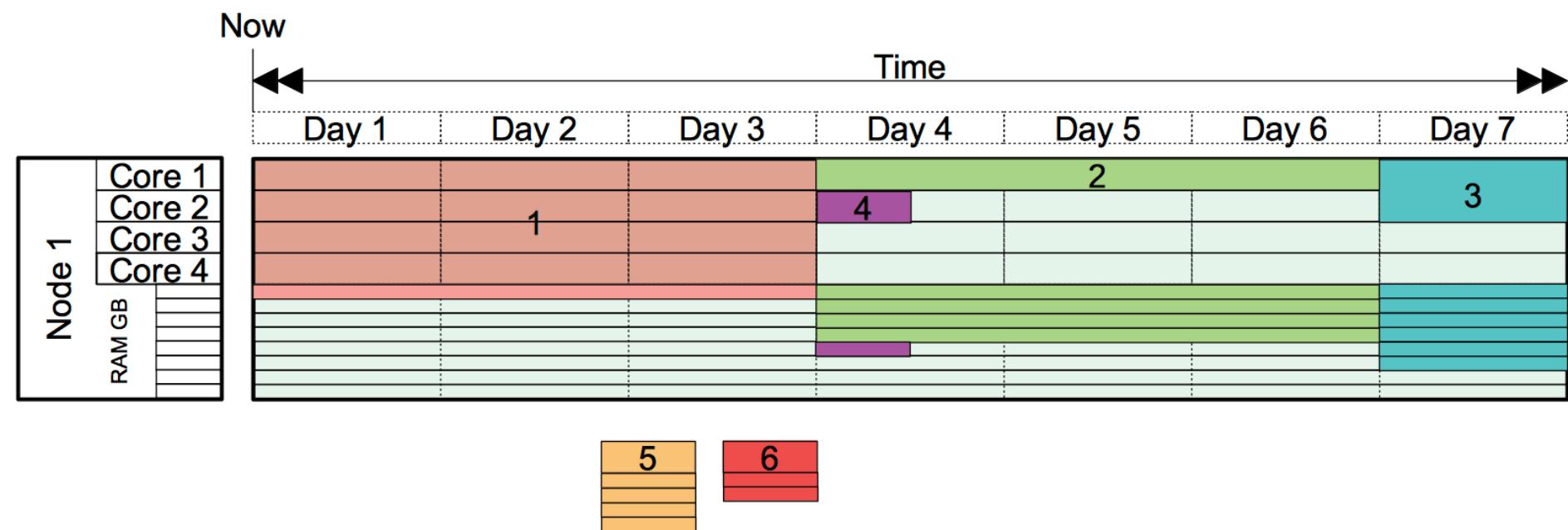
Scheduling Cores and Memory



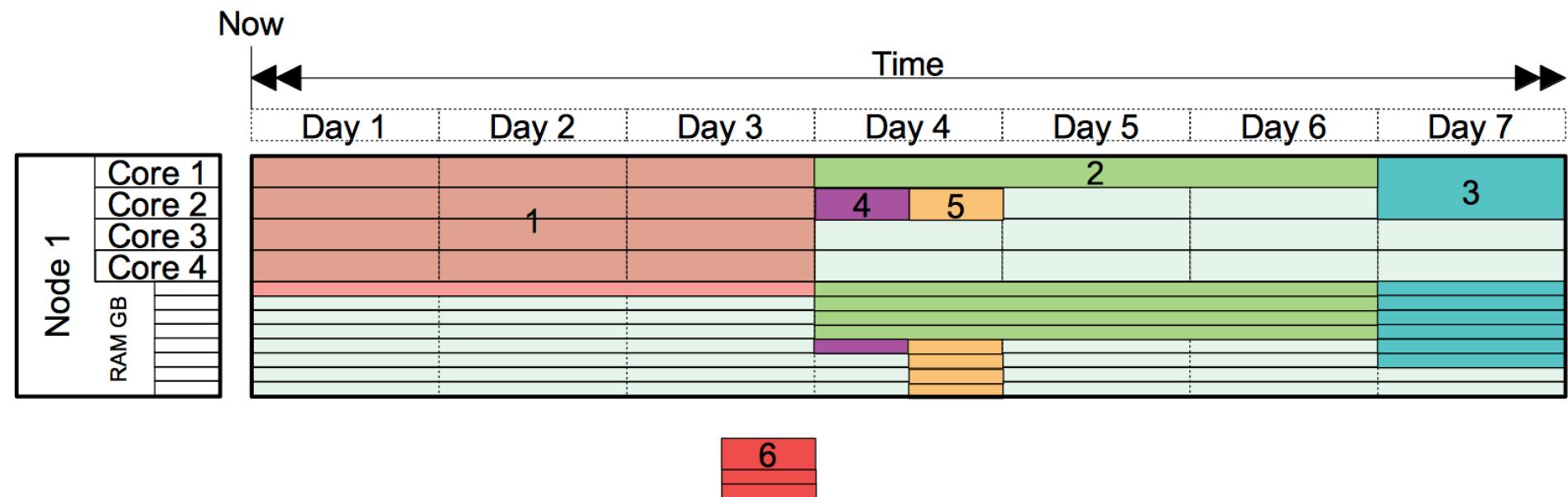
Scheduling Cores and Memory



Scheduling Cores and Memory



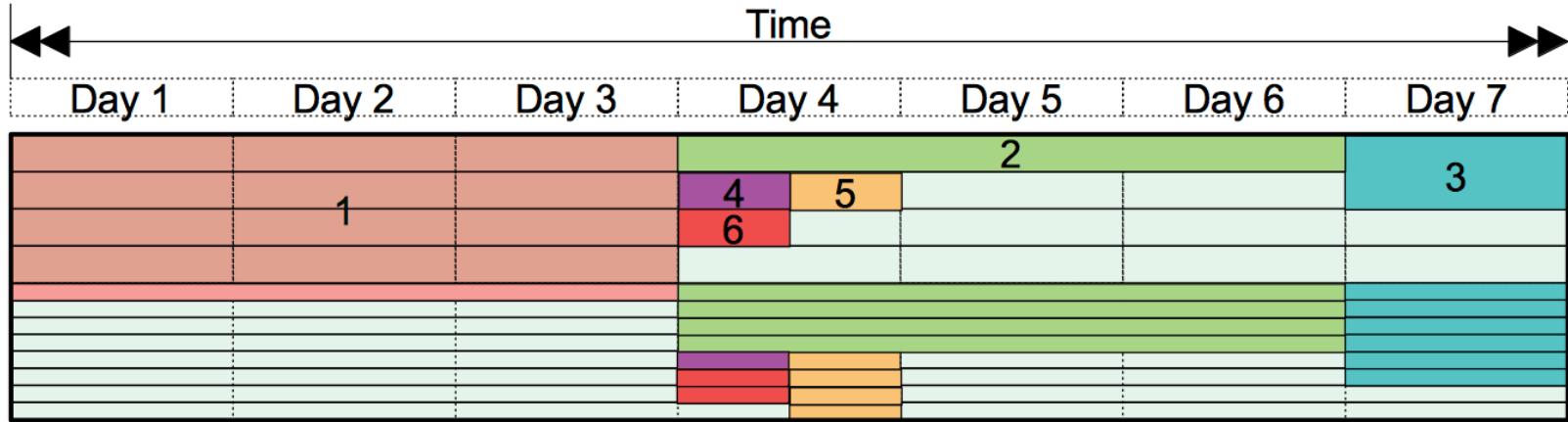
Scheduling Cores and Memory



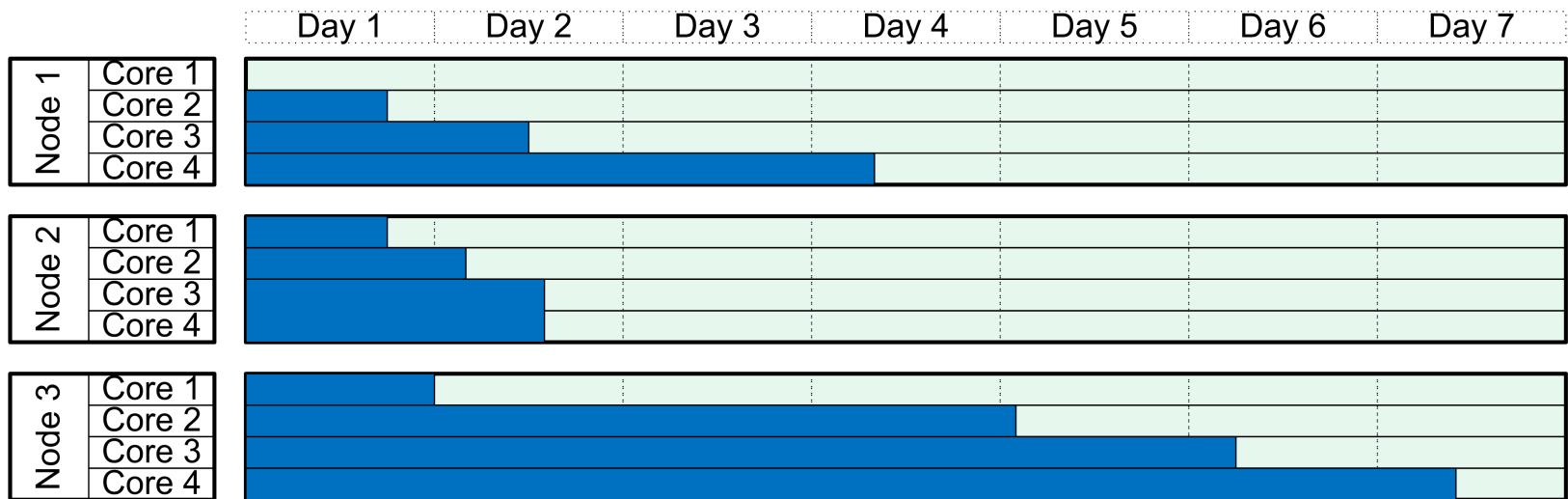
Scheduling Cores and Memory

Now

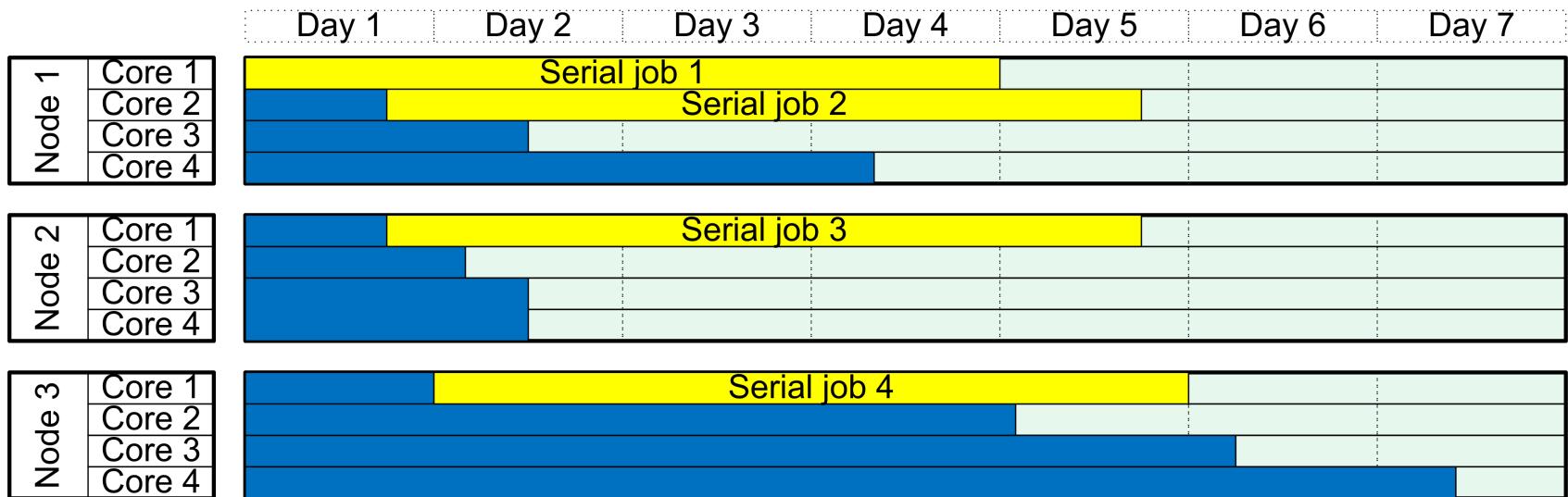
Time



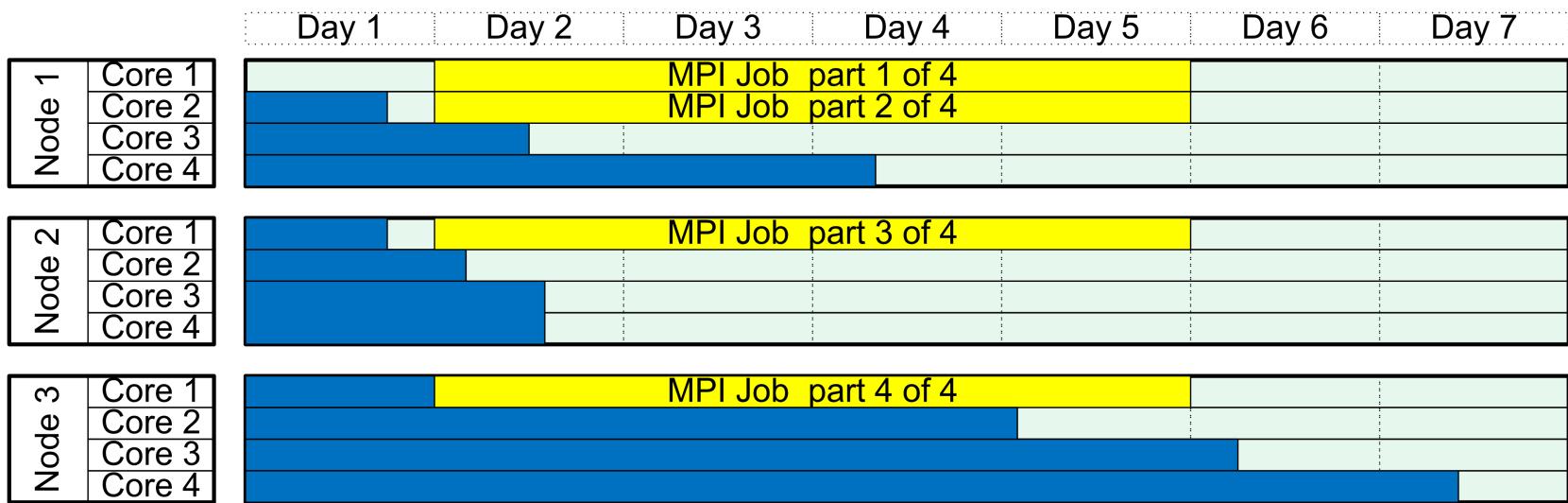
Visualizing Multinode cluster



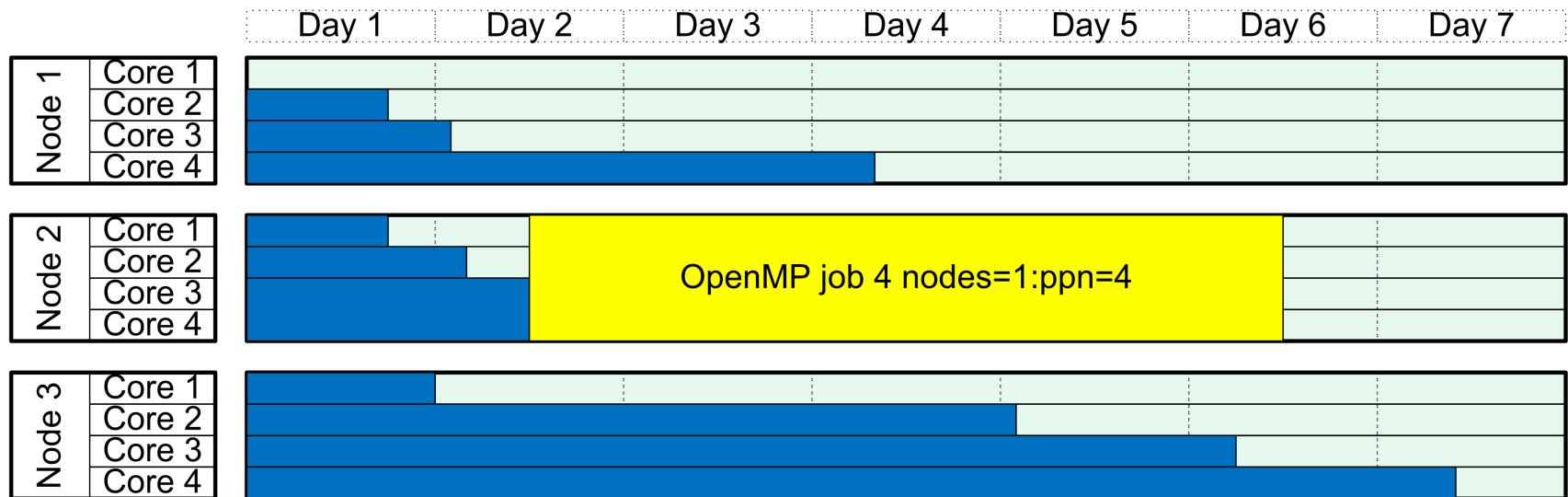
Many Serial Jobs



MPI job



Single node multi-core job (OpenMP, Gaussian, Threads)



Hybrid Job

