

User Input

LQ_j

Arrival times $\{T_i(n)\}$

Demands $\{\vec{d}_i(n)\}$

ON durations $\{t_i(n)\}$

...

TQ_k

Arrival time

...

Resource Manager

New queue

Admission

- Admit the queue into one of the following classes

Hard
Guarantee

Soft
Guarantee

Elastic

Allocation

- Hard guaranteed resource allocation
Allocate $\{\vec{a}_i(n)\}$ to *Hard Guarantee*
- Soft guarantee resource allocation
Allocate $\{\vec{a}_i(n)\}$ to *Soft Guarantee*
- Left-over allocation
Fair Allocation (DRF) to *Elastic*

Allocations

Available resources

...

Node Manager_m

...