

Slicing in 5G networks

Alessandro Spallina

A slice simulator with MDP resolution

Last Call	Update
<ul style="list-style-type: none">• Switch to mdptoolbox library• Assuming:<ul style="list-style-type: none">- histogram of arrivals (toy program: $H_a = [0.5, 0.5]$)- histogram of departures (toy prog.: $H_d = [0.6, 0.4]$)- limited server number (toy prog.: 1)- limited queue size (toy prog.: 2)• Cost mapped in the reward: $\alpha \sum_k C_k + (1-\alpha) n C_n$ (k job, n server) (toy prog.: assuming no costs for lost jobs)	<ul style="list-style-type: none">• Taking account of lost jobs in the reward: $\alpha \sum_j (C_j * j + E[L] * C_l) + (1 - \alpha) * C_s * n$ $E[L]$ - expected number of lost jobs• First results (see attached zip archive)