Thresholds kept the same for all experiments :

- Stimulation threshold (ST) = 0
- Object threshold (OT) = 1
- Decay rate (DR) = 0.95
- Mortality Threshold = 0.6
- Initial number of ARBs = 10

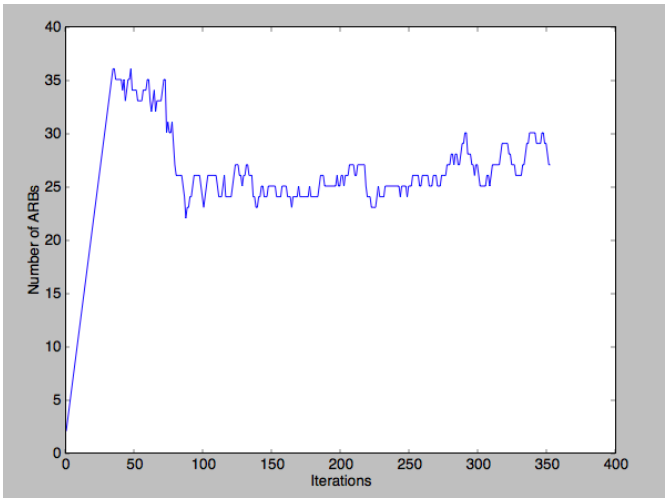
Experiment 1
Resource level of initial ARBs : 15
NAT : 0.4

Network after 19 frames :

Network after 92 frames :

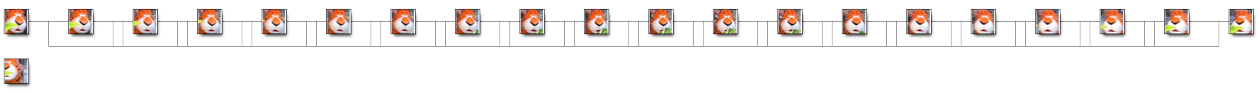
Network at the end :

How the number of ARBs changed during the duration of the video :

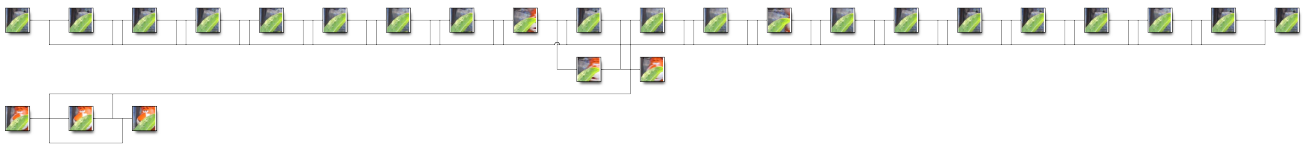


Experiment 2
Resource level of initial ARBs : 50
NAT : 0.4

Network after 20 frames :

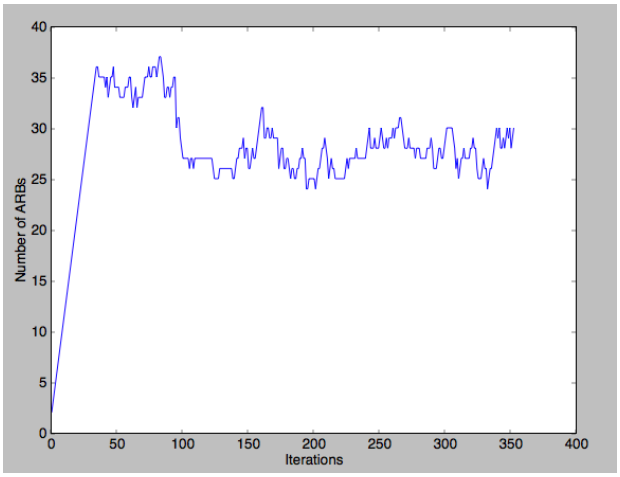


Network after 122 frames :



Network at the end :

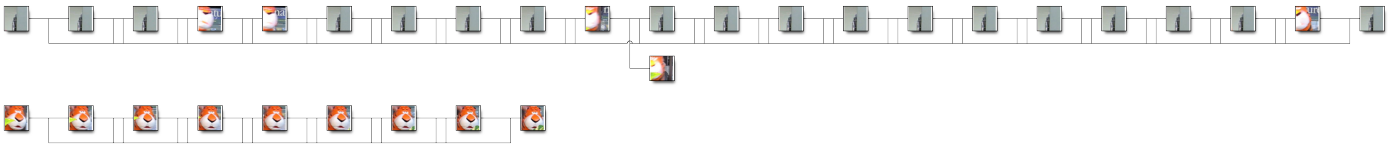
How the number of ARBs changed during the duration of the video :



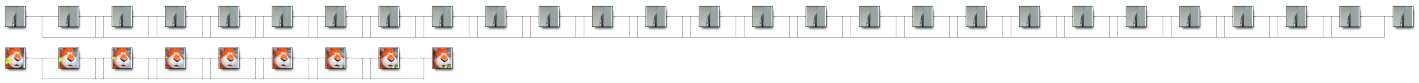
Experiment 3
Resource level of initial ARBs : 15
NAT : 0.4
Do NOT delete the initial ARBs

Network after 20 frames :

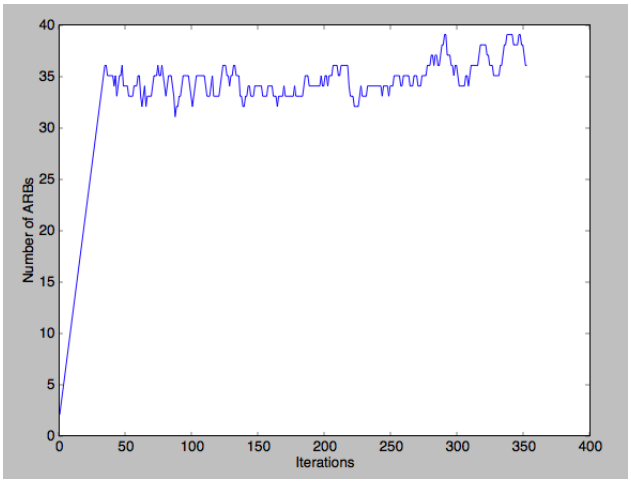
Network after 89 frames :



Network at the end :



How the number of ARBs changed during the duration of the video :



We are searching the frame using the ARB with the highest resource level and its connected ARBs. So we will see the same tracking results as experiment 1, there are just a couple of extra nodes in the network (which are not being used).

Experiment 4
Initial ARBs' Resource level : 15

The end number of ARBs with different NAT values :