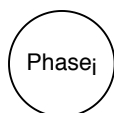




# Env Parameters

- Number of players=8
- Werewolves=2
- Villagers=6
- Signal lenght = 2
- Signal range= 2 (boolean)



Comments

Each observation is a dictionary passed to every playing agent

Observations	
Key	Val
Day	0
Status map	[1,1,1,1,1,1,1,1]
Phase	0
Targets	[-1,-1,-1,-1,-1,-1,-1,-1]
Signals	Matrix
Own id	Agent id

In this example signals are

Actions		
ID	Target	Signal 1
0	-1	-1
1	-1	-1
2	-1	-1
3	-1	-1
4	-1	-1
5	-1	-1
6	-1	-1
7	-1	-1

## Villagers

## Envrionment

## W

Reset

At the start of the episode both targets and signals are -1

Observations	
Key	Val
Day	0
Status map	[1,1,1,1,1,1,1,1]
Phase	0
Targets	[-1,-1,-1,-1,-1,-1,-1,-1]
Signals	-1 Matrix
Own id	Agent id

P<sub>0</sub>

Observation are passed only to wolves in this phase

The targets/signals are updated just for the wolves.

The phase has increased

Observations	
Key	Val
Day	0
Status map	[1,1,1,1,1,1,1,1]
Phase	1
Targets	[3,2,-1,-1,-1,-1,-1,-1]
Signals	Updated Matrix
Own id	Agent id

P<sub>1</sub>

Notice how the targets/signals of the villagers are not updated. The only updated param is the status map

Observations	
Key	Val
Day	0

Observations	
Key	Val
Day	0

Agent  
stat

boolean

Signal 2	
	-1
	-1
	-1
	-1
	-1
	-1
	-1
	-1
	-1

## ereWolves

Actions			
ID	Trg	S1	S2
0	3	0	1
1	2	1	1

In this example the signals are random, while the targets are man made

Actions			
ID	Trg	S1	S2
0	3	1	1
1	3	1	0

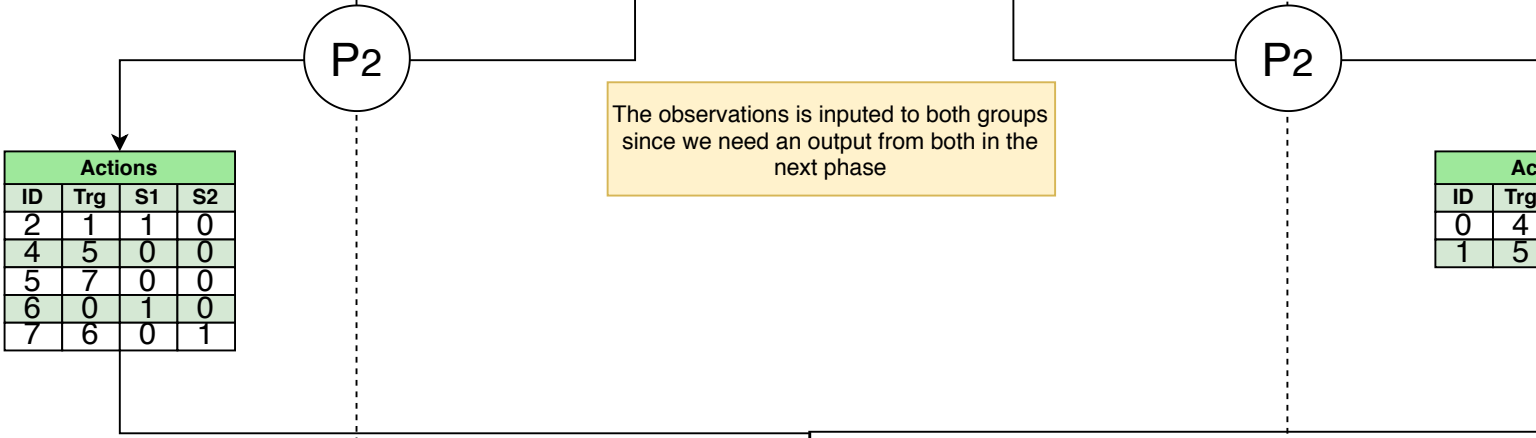
3 has been eaten, its us will become zero

Agent 3 will be  
penalized for dying,  
but its action will not  
be passed to the env

Agent 5 will be  
penalized for dying  
even though it is not

Status map	[1,1,0,1,1,1,1,1]
Phase	2
Targets	[-1,-1,-1,-1,-1,-1,-1,-1]
Signals	-1 Matrix
Own id	Agent id

Status map	[1,1,0,1,1,1,1,1]
Phase	2
Targets	[3,3,-1,-1,-1,-1,-1,-1]
Signals	Updated Matrix
Own id	Agent id



Actions			
ID	Trg	S1	S2
2	1	1	0
4	5	0	0
5	7	0	0
6	0	1	0
7	6	0	1

Ac	
ID	Trg
0	4
1	5

Observations	
Key	Val
Day	0
Status map	[1,1,0,1,1,1,1,1]
Phase	3
Targets	[4,5,1,-1,5,7,0,6]
Signals	Updated Matrix
Own id	Agent id

Actions			
ID	Trg	S1	S2
2	3	1	1
4	5	0	0
5	7	1	0
6	5	0	1
7	6	0	0

Ac	
ID	Trg
0	5
1	5

Observations	
Key	Val
Day	1
Status map	[1,1,0,1,1,0,1,1]
Phase	0
Targets	[5,5,3,-1,5,7,5,6]
Signals	Updated Matrix
Own id	Agent id

Actions			
ID	Trg	S1	S2
2	/	/	/
4	/	/	/
5	/	/	/

Ac	
ID	Trg
0	2
1	6

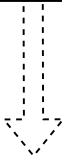




6	/	/	/
7	/	/	/

No input from the villagers is needed anymore

Observations	
Key	Val
Day	1
Status map	[1, 1, 0, 1, 1, 0, 1, 1]
Phase	1
Targets	[2, 6, -1, -1, -1, -1, -1, -1]
Signals	Updated Matrix
Own id	Agent id



Repeat for phase 1



