

Mario AI Benchmark ¹. Setup options.

Option key	Description	Values range	Example
-echo	Output all command line options to console after initialization	<on off>. Default: off	Main -echo on
-ag	AgentName should extend RunnableAgent in order for the native agent to be available from command line	AgentName or Agents implementations. Default: HumanKeyboardAgent	Main -ag ForwardAgent
-ze	Observation Detailization for Enemies. 0 - The most detailed	<0 1 2>. Default: 0	Main -ze 0
-vis	Enable Visualization	<on off>. Default: off	Main -vis on
-vaot	Set main View to be on top of other windows	<on off>. Default: off	Main -vaot on
-tl	Time limit. Option value: [1..MAX-INT], units: marioseconds (1 MrSEC == 16 interactions with Environment). To give to the Agent the opportunity of infinite time per level use Option value = -1	<int>. Default: 200	Main -tl 42
-pw	Pause of the World. Freezes animation all the sprites and disables Mario interaction with creatures. Mario still can run and get level observation	<on off>. Default: off	Main -pw on
-pr	Enable Power restoration. Enable Power restoration by pressing speed button (A on a keyboard)	<on off>. Default: off	Main -pr on
-ewf	Exit program when simulation is over	<on off>. Default: on	Main -ewf off
-gv	Enable Game Viewer	<on off>. Default: off	Main -gv on
-gvc	Enable Continuous Updates in GameViewer	<on off>. Default: off	Main -gvc on
-rfw	Set receptive field width	Any odd number $\in (0, -ll)$. Default: 19.	Main -rfw 5
-rfh	Set receptive field height	Any odd number $\in (0, -lh)$. Default: 19.	Main -rfh 7
-srf	Receptive field (grid) visible	<on off> Default: off	Main -srf on
-mm	Mario Mode. 0 - small, 1 - large, 2 - large ability is available	<0 1 2>. Default: 2	Main -mm 1

¹v-0.1.7a compliant

Option key	Description	Values range	Example																		
-fps	Change FPS. 100 enables max FPS	<integers in [1..100]>. Default: 24	Main -fps 50																		
-lt	Level type. 0 - Overground, 1 - Under-ground, 2 - Castle	<0 1 2>. Default: 0	Main -lt 1																		
-ls	Level (Randomization) Seed	<integers in [1..maxInt]>. Default: 0	Main -ls 42																		
-ll	Level length	<integers in [1..4096]>. Default: 320	Main -ll 550																		
-lh	Level height	<integers in [1..4096]>. Default: 15	Main -lh 18																		
-ld	Level Difficulty	<integers in [0..maxInt]>. Default: 0	Main -ld 5																		
-lde	Enable/disable dead ends on the level	<on off>. Default: off	Main -lde on																		
-lc	Enable/disable cannons on the level	<on off>. Default: on	Main -lc off																		
-lhs	Enable/Disable hills on the level	<on off>. Default: on	Main -lhs off																		
-ltb	Enable/Disable tubes on the level	<on off>. Default: on	Main -ltb off																		
-lg	Enable/Disable gaps on the level	<on off>. Default: on	Main -lg off																		
-lhb	Enable/Disable hidden blocks on the level ²	<on off>. Default: off	Main -lhb off																		
-le	Customize creatures on the level. Creatures, that will be on the level are defined with first letter of the creature kind: <table><tr><th>Creature</th><th>Short name</th></tr><tr><td>Goomba</td><td>g</td></tr><tr><td>Goomba Winged</td><td>gk</td></tr><tr><td>Green Koopa</td><td>gk</td></tr><tr><td>Green Koopa Winged</td><td>gk</td></tr><tr><td>Red Koopa</td><td>rk</td></tr><tr><td>Red Koopa Winged</td><td>rk</td></tr><tr><td>Spiky</td><td>gk</td></tr><tr><td>Spiky Winged</td><td>gk</td></tr></table> For more details and examples see marioai-lvlggen-options-usage.pdf	Creature	Short name	Goomba	g	Goomba Winged	gk	Green Koopa	gk	Green Koopa Winged	gk	Red Koopa	rk	Red Koopa Winged	rk	Spiky	gk	Spiky Winged	gk	List of creatures separated by comma. Default: “ “ (empty string)	Main -le off
Creature	Short name																				
Goomba	g																				
Goomba Winged	gk																				
Green Koopa	gk																				
Green Koopa Winged	gk																				
Red Koopa	rk																				
Red Koopa Winged	rk																				
Spiky	gk																				
Spiky Winged	gk																				
-lb	Enable/Disable visible blocks on the level	<on off>. Default: on	Main -lb off																		
-lco	Enable/Disable coins on the level	<on off>. Default: on	Main -lco off																		
-lf	Create flat level	<on off>. Default: off	Main -lf on																		
-stop	Run benchmark and stop a gameplay. To continue a gameplay press a SPACEBAR key.	<on off>. Default: off	Main -stop on																		

Table 1: Setup options for the Mario AI benchmark. Options can be set up via `CmdLineOptions.setArgs()` method that accepts both array of strings and a single string or by setting individual options with corresponding methods.