

Mario AI Benchmark ¹. Setup options.

Option key	Description	Value range	Example	(Get/Set)er
-echo	Output all command line options to console after initialization	<on off>. Default: off	Main -echo on	isEcho/setEcho
-ag	AgentName should extend RegisterableAgent in order for the native agent to be available from command line	AgentName or Agents implementations. Default: HumanKeyboardAgent	Main -ag ForwardAgent	getAgent/setAgent
-ze	Observation Detalization for Enemies. 0 - The most detailed	<0 1 2>. Default: 0	Main -ze 0	getZLevelScene/setZLevelScene
-vis	Enable Visualization	<on off>. Default: off	Main -vis on	isVisualization/setVisualization
-vaot	Set main View to be on top of other windows	<on off>. Default: off	Main -vaot on	isViewerAlwaysOnTop/ setViewerAlwaysOnTo
-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	getTimeLimit/setTimeLimit
-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	isPauseWorld/setPauseWorld
-pr	Enable Power restoration. Enable Power restoration by pressing speed button (A on a keyboard)	<on off>. Default: off	Main -pr on	isPowerRestoration/ setPowerRestoration
-ewf	Exit program when simulation is over	<on off>. Default: on	Main -ewf off	isExitProgramWhenFinished/ setExitProgramWhenFinished
-gv	Enable Game Viewer	<on off>. Default: off	Main -gv on	isGameViewer/setGameViewer
-gvc	Enable Continuous Updates in GameViewer	<on off>. Default: off	Main -gvc on	isGameViewerContinuousUpdates/ setGameViewerContinuousUpdates
-rfw	Set receptive field width	Any odd number $\in (0, -ll)$. Default: 19.	Main -rfw 5	getReceptiveFieldWidth/ setReceptiveFieldWidth
-rfh	Set receptive field height	Any odd number $\in (0, -lh)$. Default: 19.	Main -rfh 7	getReceptiveFieldHeight/ setReceptiveFieldHeight
Continued on next page				

¹v-0.1.9 compliant

Option key	Description	Value range	Example	(Get/Set)er
-srf	Set receptive field (grid) visible	<on off> Default: off	Main -srf on	isReceptiveFieldVisualized/ setReceptiveFieldVisualized
-mm	Mario Mode. 0 – small, 1 - large, 2 - large, fire ability is available	<0 1 2>. Default: 2	Main -mm 1	getMarioMode/seMarioMode
-mgr	Mario gravity. Than greater number, than greater gravity	Any number $\in (0, 2)$. Default: 1	Main -mgr 0.8	getMarioGravity/setMarioGravity
-cgr	Creatures gravity. Than greater number, than greater gravity	Any number $\in (0, 2)$. Default: 1	Main -cgr 1.5	getCreaturesGravity/None
-fps	Change FPS. 100 enables max FPS	<integers in [1..100]>. Default: 24	Main -fps 50	getFPS/setFPS
-lt	Level type. 0 - Overground, 1 - Underground, 2 - Castle	<0 1 2>. Default: 0	Main -lt 1	getLevelType/setLevelType
-ls	Level (Randomization) Seed	<integers in [1..maxInt] Path to the .lvl file>. Default: 0	Main -ls 42	getLevelRandSeed/ setLevelRandSeed
-ll	Level length	<integers in [1..4096]>. Default: 320	Main -ll 550	getLevelLength/setLevelLength
-lh	Level height	<integers in [1..4096]>. Default: 15	Main -lh 18	getLevelHeight/setLevelHeight
-ld	Level Difficulty	<integers in [0..maxInt]>. Default: 0	Main -ld 5	getLevelDifficulty/ setLevelDifficulty
-lde	Enable/disable dead ends on the level	<on off>. Default: off	Main -lde on	getDeadEndsCount/ setDeadEndsCount
-lca	Enable/disable cannons on the level	<on off>. Default: on	Main -lca off	getCannonsCount/setCannonsCount
-lhs	Enable/Disable hills on the level	<on off>. Default: on	Main -lhs off	getHillStraightCount/ setHillStraightCount
-ltb	Enable/Disable tubes on the level	<on off>. Default: on	Main -ltb off	getTubesCount/setTubesCount
-lg	Enable/Disable gaps on the level	<on off>. Default: on	Main -lg off	getGapsCount/setGapsCount
-lhb	Enable/Disable hidden blocks on the level ²	<on off>. Default: off	Main -lhb off	getHiddenBlocksCount/ setHiddenBlocksCount
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²If level is build with dead ends and without hidden blocks, then you will go out from dead end over visible blocks, e.g. hidden blocks are replaced with visible blocks.

Option key	Description	Value range	Example	(Get/Set)er																		
-le	Customize creatures on the level. Creatures, that will be on the level are defined with first letter of the creature kind: <table><tr><td>Creature</td><td>Short name</td></tr><tr><td>Goomba</td><td>g</td></tr><tr><td>Goomba Winged</td><td>gw</td></tr><tr><td>Green Koopa</td><td>gk</td></tr><tr><td>Green Koopa Winged</td><td>gkw</td></tr><tr><td>Red Koopa</td><td>rk</td></tr><tr><td>Red Koopa Winged</td><td>rkw</td></tr><tr><td>Spiky</td><td>s</td></tr><tr><td>Spiky Winged</td><td>sw</td></tr></table> For more details and examples see marioai-lvlgen-options-usage.pdf	Creature	Short name	Goomba	g	Goomba Winged	gw	Green Koopa	gk	Green Koopa Winged	gkw	Red Koopa	rk	Red Koopa Winged	rkw	Spiky	s	Spiky Winged	sw	List of creatures separated by comma. Default: ~ “ “ ~ (empty ~string)	Main -le off	<code>getEnemies/setEnemies</code>
Creature	Short name																					
Goomba	g																					
Goomba Winged	gw																					
Green Koopa	gk																					
Green Koopa Winged	gkw																					
Red Koopa	rk																					
Red Koopa Winged	rkw																					
Spiky	s																					
Spiky Winged	sw																					
-lb	Enable/Disable visible blocks on the level	<on off>. Default: on	Main -lb off	<code>getBlocksCoutn/setBlocksCount</code>																		
-lco	Enable/Disable coins on the level	<on off>. Default: on	Main -lco off	<code>getCounsCount/setCounsCount</code>																		
-lf	Create flat level	<on off>. Default: off	Main -lf on	<code>isFlatLevel/setFlatLevel</code>																		
-stop	Run benchmark and stop a gameplay. To continue a gameplay press a SPACEBAR key.	<on off>. Default: off	Main -stop on	<code>isStopGameplay/setStopGamePlay</code>																		
-z	Enable Scale2X on startup	<on off>. Default: off	Main -z on	<code>isScale2X/setScale2X</code>																		