

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 |

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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> | | | | | | | | | | | | | | | | | | |
| -punj | Enable/Disable bytecode counting | <on off>. Default: on | | Main -punj off | <code>isPunj/setPunj</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> | | | | | | | | | | | | | | | | | | |