Space Guy's Bots 2.0 Manual

Introduction

Space Guy's Bots is the long-awaited update to Talking and Attacking Bots that provides many options for using AI Players in your servers.

New features since Talking and Attacking Bots v1.2

- Revamped GUI and chat commands for ease of use
- SpaceTick integration to reduce lag
- Bot behaviours allow a large degree of customisation: Stand, Walk, Jump, Crouch, Patrol, Follow, Pursue, Attack, Guard, Talk, Fighter and AI
- AI Engine allows intelligent navigation around obstacles and the ability to track targets
- Revamped weapon targeting for deadly accuracy
- Team Deathmatch 4.0 integration: computer-controlled team members can be created in a team and then manipulated using the Team DM GUI
- Bot spawns can be created and then modified using a GUI which has many more options
- Bot saving has been rewritten to accommodate all of the new features
- Bots can be set to clone the appearance of any player or use the team uniform

Installation

Download the mod from spacemods.googlepages.com, extract the .zip to your Blockland directory, and then enable AddOn_SpaceBots in your Add-Ons menu. You can then host servers using Bots. Disable the old AddOn_Bots if you have it.

Bot GUI

Most of the Bots functionality can be controlled by using the GUI included with it. Open it using **Ctrl B**, you can change this key binding in the Options>Controls menu if you want.

Use the **+** buttons beside each heading to open that part of the menu, and **–** to close it.

Create
Type a name for the bot in the text box. Choose the bot's AI Behaviour, and any options that go with it. (these are explained later)
The bot can be set to have the default "Blockhead" appearance or to clone the current appearance of any player.
The *Persistent* option means that bots respawn when they die in a minigame.
If the server has Team Deathmatch and has created teams, you can choose one of them for
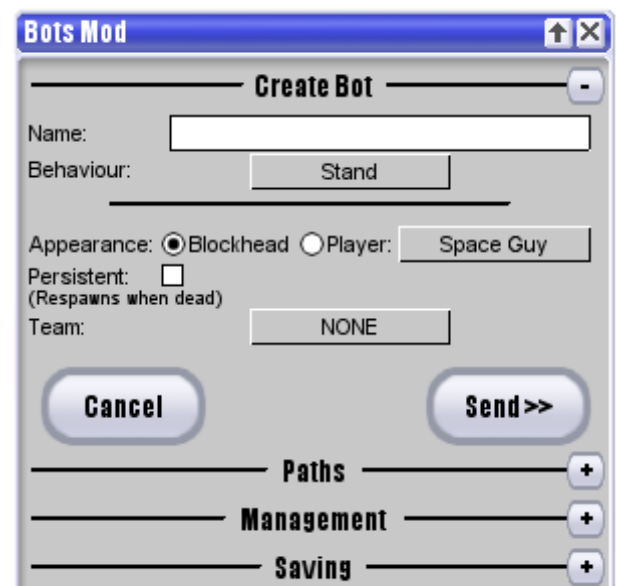
the bot to "join" when it is created. This will not affect the bot unless it is in a minigame, see *Bots and Minigames*.
Click 'Send' to create the bot. It will appear where you are standing. (You can only create bots if you are alive and your player exists)

Paths
Patrol and Guard bots can be set to follow set paths that you create for them.

First, type a name in the text box and click 'New' to start a new path. The first point on this path appears where you are standing.

Walk to each point in the path (where you want the bot to turn) and click 'Add Point'.
Click 'View Path' with a path selected to see each point in the path marked by a circle in mid-air.
Click 'Delete Path' to clear and remove the current path from the selector box. Any bots following that path will stop where they are standing, or 'Delete All' to clear and delete all the paths that you have created.
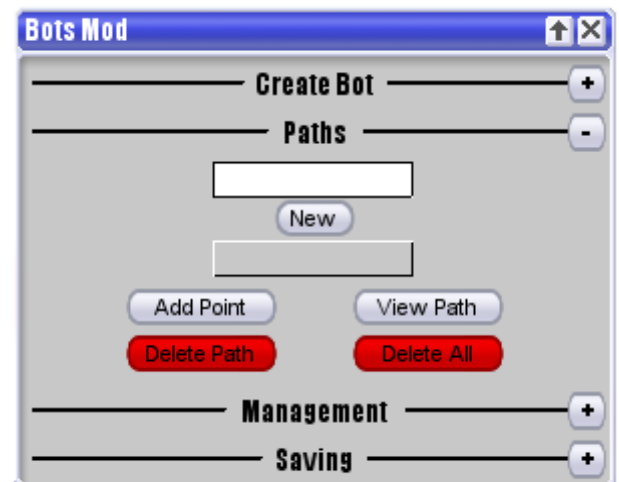
*Adding points to a path.*

Management
This section allows people to manage and delete their own bots, or Admins to delete other people's.

Select a bot from the menu, and click Delete to remove it. If you are not an Admin, you will not be able to see other people's bots in the menu.
Click 'Clear Yours' to delete all bots and bot spawns (explained later) created by you.
Admins can click 'Clear Owner's' to delete all bots created by that person.
Super Admins can use 'Clear All' to delete all bots in the server.
The Server Host can set the maximum amount of bots allowed to be created by certain ranks of people. (Player, Admin, Super Admin)
Change the values and click 'Set'. Normal players can also use this to see how many
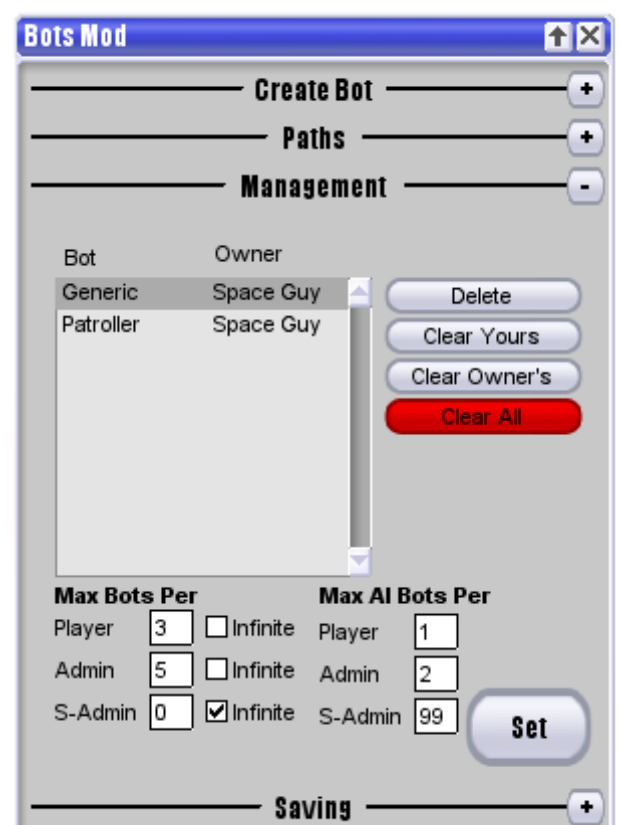
bots/AI bots they are allowed to create.
For Dedicated servers, you will have to set the max bots using the Console (explained later) or in a normal server before hosting the dedicated. These settings save as you leave the server.

Any options you are not allowed to use will be greyed out and unselectable.

Saving
Here, you can save all bots and bot spawns in the server to your computer, or if you are an admin you can upload these files and load your saves in the server. (Up to your Max Bots and Max AI Bots limits)

Type a name in the text box and click 'Save', or select a file from the list and click 'Load'. If you are not allowed to upload files the button will be greyed out.
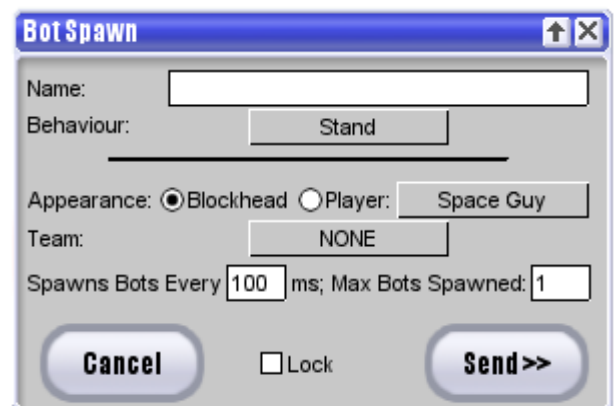
Uploading files may take some time and could cause lag in the server.

Bot Spawns

Another new feature in Bots 2.0 is the ability to create bot spawns that produce bots every few seconds.

Most of the GUI functions like the standard 'Create Bot' GUI. You can set the name, behaviour, appearance and team the bot is in.

The Spawn will create bots depending on the amount of time that you set. Bots must be spawned a minimum of once every 100ms, and at least every hundred seconds. It will spawn bots until it reaches the Max Bots Spawned limit or your server limit in Management.

Use the Lock checkbox to carry the same settings between several spawns, useful for 'Bot War' servers.

Chat Commands

Bots can also be created and used by people in your server without the Bots GUI using slash commands in Team or Global chat. Type each of these commands in the format shown, replacing *Italics* with the specified options.

/createbot *Name Persistent AIType Option TeamName*
Creates a bot with the default 'Blockhead' appearance where you are standing. Replace *Persistent* with either '1' or '0' to define whether or not the bot respawns when it dies. The *AI type* can be one of the AI types explained later. (Unrecognised types will default to 'Stand') The *Option* for it depends on which type of bot you are creating, (e.g. The Path that the bot follows) although this

cannot be more than one word without the GUI. The *Team Name* is the team the bot will join when it is created, if it exists.

/createclone *Player Name Persistent AIType Option TeamName*
This functions in the same way as /createbot, except it allows you to specify a name of a person it will copy its appearance from. If it cannot find a person with the name or part of name you specified, it will copy your appearance instead.

/deletebot
/deletebot *Name*
Typing just '/deletebot' will delete the last bot you created. If you specify a name, it will delete all bots that you have created with that name.

/clearbots
This will delete all bots you have created.

/clearplayerbots *Name*
/clearplayerbots *ID*
Admins and Super Admins can use this to delete all bots created by a person with the specified name or BLID.

/clearallbots
Super Admins can use this to delete all bots in the server.

/botjointeam *Name Teamname*
This will allow you to change the team that the bot is in. This will not affect the bot unless it is in a minigame, see *Bots and Minigames*.

/botpathpoint *Path*
This will add a point to the path *Path* wherever you are standing. If the path does not exist, it will be created.

/botclearpath *Path*
This will clear and delete the path you specified. Any bots following that path will stop where they are standing.

/botclearallpaths
This will delete all paths you have created. Any bots following paths will stop where they are standing.

/botshowpath *Path*
Each point in the path will be marked by a circle in mid-air for a second, in order.

AI Types

There are several behaviours and AI types you can set bots to use.

Stand – The bot stands still and does nothing.
Walk – The bot walks around, randomly turning and avoiding walls.
Crouch – The bot crouches on the spot. Useful for making screenshots.

Jump – The bot jumps up and down where it is standing.

Follow [Player] **–** The bot will walk directly towards the player specified, standing still on the spot if they are dead or towards the person who created it if the player leaves the game.

Pursue [Player] **–** The bot will follow the player specified (as above) and attack them with any weapons they have.

Attack – The bot will stand on the spot, firing at anyone who it can see in a cone in front of it.

Patrol [Path] **–** The bot will follow the specified path, avoiding walls in its way. If the path does not exist the bot will stand still.

Guard [Path] **–** The bot will follow the specified path, avoiding walls in its way. If it sees a player, it will follow and attack them until they are dead and then return to the path. If the path does not exist the bot will stand on the spot and attack people it sees.

Talk [Line] **–** The bot will say the line when you click it. If you are creating the bot by chat commands (/createbot or /createclone) this cannot be more than one word.

AI – The bot will attack and fight players:
>   It walks around, randomly turning and avoiding walls.
>   If there is an item in the area it does not have, the bot will pick it up.
>   If it can see a player, it will start to follow and attack them!
>   If people shoot it or shoot near it, it will go into an 'Alert' mode and try to find out what it was.
>   If it doesn't have any weapons and is shot at or sees a player, it will run a distance away until it finds a usable item.
>   It intelligently uses weapons and will strafe around players in a circle if it is using ranged weapons or closes in to attack with swords or mélee weapons.

Fighter – The bot walks around, randomly turning and avoiding walls. If it sees a player it will run towards them and attack until they are dead, and then continue walking.

Bots and Minigames

Bots are now able to join and participate in minigames like actual players. They will only join your minigame if their owner has joined it, and if 'Include All Players' Bricks' is set for the minigame.

They are also compatible with Team Deathmatch v4: If they have been set to a team, they will appear in the team's uniform with their weapons and player type. They will also not attack players in their own team, with the exclusion of Pursue bots that have been set to attack them.

They spawn at team spawns or at Spawn Points set for the game.

They will use the minigame's player type that you set and the weapons that they have or pick up. (by touching, being given by players using Throw Item or by AI bots locating them) Bots can use nearly any weapon that has been made for the game (by being included or by Add-Ons), apart from 'Special' weapons such as the Gravity Gun, Portal Gun or Wrench. Bots can also track players and adjust to the speed of the target or weapon they are holding: They are very accurate with weapons such as the Sniper Rifle.

Using the Console

The server limits and other options for Bots can also be edited using the server host's console, accessed by the `` `/¬/| `` button below the Escape key on most standard keyboards.

To change the bot limits for people, type these lines into the console and press Enter.

$Pref::SpaceBots::MaxBotsPlayer = *X*;
$Pref::SpaceBots::MaxBotsAdmin = *X*;
$Pref::SpaceBots::MaxBotsSAdmin = *X*;

Replace *X* with the number you want. Set it to -1 for infinite.

To change the limits on AI bots, use these lines:

$Pref::SpaceBots::MaxAIPlayer = *X*;
$Pref::SpaceBots::MaxAIAdmin = *X*;
$Pref::SpaceBots::MaxAISAdmin = *X*;

Again, replace *X* with the number. These cannot be set to Infinite. AI bots created will count towards your Bot limit as well.

All of the above settings will save when you close the server and re-open it.

If your server is lagging, try disabling the advanced pathfinding routines used by some types of bots:

$SpaceBots::Server::PathFinding = 0;

You may experience bots walking into walls or attempting to shoot through them at people. This setting will not save if you close Blockland, you must change the option each time. Set it to 1 to re-enable pathfinding.

Help and Support

F.A.Q:

My bots aren't joining the minigame I joined, why not?
  Bots will only join a minigame if you own it or if Include All Players' Bricks is enabled for it.

I'm getting a message telling me to reinstall the mod and bots won't move, help?
  The mod will only function if it is installed correctly: Make sure that the files are in your Add-Ons folder and not other folders like Add-Ons/Add-Ons. Also check to make sure that Support_SpaceTick.cs.noexec is in the correct folder.

The bot GUI says that the Add-On is not enabled and there isn't a Bot Spawn in the menu?
  Make sure you have enabled AddOn_SpaceBots for the server, and not the older version of "Talking and Attacking Bots" as AddOn_Bots.

Parts of bots disappear when I shoot them?
  Rotondo's Zombies mod can cause problems with other people's Bots mods.

Other Questions
If you have a problem or question to do with the mod, either send me an E-Mail, send me a Private Message on the Blockland forums or post in the Bots Mod topic. Make sure to explain your problem in **detail**, including what you were doing at the time in-game and what exactly happened, and attach or otherwise post the **console.log** file in your Blockland folder after receiving the problem.