Worldbuilder Guide

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By Adriane Yves

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Legends:

Tags:
[Worldbuilder Bug:]
[Script Bug:] - Extra note: Things that are related to Scripts are also colored Orange
[Game Bug:]
CRASH
indestructible - Blue ones are those who are related to options/interface that can be selected/used in worldbuilder.

E.g. ☐ Indestructible ☐ AI Recruitable and many more
[In Skirmish Maps Only:]

Object properties menu:

Object Properties

General
Name:
Team:
Script:

Logical
Initial Health %
☐ Enabled
☐ Unsellable
Max HP
☐ Targetable
☐ Indestructible
Aggressiveness:
☐ AI Recruitable
☐ Powered
Veterancy:
☐ Selectable

Distance
Stopping: | Targeting: | Shroud:

Visual
XY Pos: | Z:
Weather: | Angle:
Time:

Sound
Attached Sound:
☐ Customize | ☐ Enabled | ☐ Looping
Loop Count: | Priority:
Volume: | Min Volume:
Min Range: | Max Range:

Pre-built upgrades

Helpful Videos:

- Tile blending information by cncHD:
[Zero Hour World Builder Part 7] Blend Single Edge and Auto Edge Out

Noted Bugs:

- **[Worldbuilder Bug:]** Resizing the map will remove your manually placed impassable tiles

- **[Script Bug:]** The Show Timer script won't display a counter with the value of 0.

- **[Game Bug:]** When owned by a civilian player, some faction units like Chem_GLAVehicleToxinTractor will show their upgraded turret model even when they don't have the scrap upgrades.

- **[Worldbuilder Bug:]** After reopening the map or selecting new object, those Units/ Structures you set as *Dead* in Initial Health in Object properties will display 100% instead of *Dead* -- its only a text bug for structure, but for vehicles and infantry .. this *Dead* can make your unit unselectable and invulnerable .. also not make them even dead..
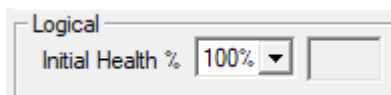
- **[Worldbuilder Bug:]** If all teams spawn in one specific location regardless of any settings, then there will be a waypoint without a name there. Delete it to solve the problem.

- **[Worldbuilder Bug:]** In the Object Properties Window in worldbuilder, the "Selectable" box is bugged out and doesn't work. (Unless you owned the Worldbuilder 2.6 and up.)

- Trains will ignore a Station Waypoint if placed near to it. (Unless the Trains and its wagons/carts are preplaced.)

- **[Worldbuilder Bug:]** There is a limit to how much "bridge" you can place in a map. After you reach the limit, and you extend one bridge, another will disappear bit by bit. Can be exploited to make a pretty decent prop.

- **[Script Bug:]** You can **CRASH** Worldbuilder by typing into the Warning Box of any Script Command that does not have options.

- [Script Bug:] If you try to display a timer that hasn't started, it will CRASH the game.

- A team which is recruited from paradrop units will never execute the Oncreate order. However if you order the recruited team to merge with another team, they will execute the Oncreate order directly. Application: AI uses Tank drop, you recruit those 4 battle masters and in the same recruit script, merge recruited battlemaster team with an empty team named Reserves. In reserve, you can have all sort of actions there whether it is to hunt, or guard.

- If you have teams that garrison somewhere, don't give them an idle script because that keeps firing every frame even after they garrison

- [Script Bug:] To use the add and remove commandbutton script, you need to remove the extra space on the end of the command button name. Just ignore the [???]

- [Script Bug:] Do not change the border size using scripts while a permanent reveal script is still active. This will really mess stuff up.

- [Worldbuilder Bug:] If you make the unit Disabled via object properties tab it will make unit collision broken for incoming units , (e.g unit will not go around to the disabled unit , instead it will go through the disabled unit.)

- [Game Bug:] Large buildings like skyscraper and bank will broke generals power points planes (it will cause plane turn around its target or misplaced the target completely , make sure you place them in good place.

- In Trains, Do not connect 2 transport cabs, make sure theres a separator between the transport cabs or else one of it might not be transportable.

- In Trains, Make sure all train carts are facing were the train engine was facing or else the game CRASH .

- If you transfer a unit to a player at the very beginning of the game, its special power countdown will appear in the top right. Anytime after the first few frames will be okay.

- [Script Bug:] You need to use a condition (like IF timer named expired) before using the display counter in civilian folder or else double display counter will occur.

- [Script Bug:] [In Skirmish Maps Only:] all civilian player units no matter what will be merged into their player team name at the start of the game. * For example:
I created a player called: ARMY which is civilian. All of its units will then inherit the name teamplayerARMY, regardless of what team you put it in.

- [Game Bug:] The Tugboat is an unfinished unit and wants to move on land. Don't use the follow waypath script to move it - instead use the exactly follow waypath script to make it go where you want. (Only in Zero Hour - Maybe fixed in some mods out there.)

- [Game Bug:] The partisan units under civilian>infantry is incomplete coded units ... They where cut unit after all and probably EA just left them rotten ...(Even though it's cut it's still repairable with map.ini coding since all animations and models are still intact in the game files)

- [Script Bug:] Script "reveal at waypoint -- permanently" ,requires you to input unique reveal name for you to undone the reveal, Same reveal name makes the script bugged out and doesn't work.

- [Script Bug:] [In Skirmish Maps Only:] Script Spawn Unnamed Unit <Type> in <Position> can CRASH your game

- [Script Bug:] All Scripts that are related to changing relationships have this bug where if you made a player a friend his already built structure wont give a shroud clear(You can transfer the player twice or more to fix this bug).

- **[Script Bug:]** The recruit command from team scripts will make the teams move to the bottom left of the map. To fix this you must order the team to perform a secondary action after the recruit command:

  For example:

  <u>IF</u>
  True
  <u>Then:</u>
 Recruit this <Team Name>
  This <Team name> Guards

- **[Worldbuilder Bug:]** The trees shadows only appear if you placed a tree like palm tree in the map.

- **[Game Bug:]** Do NOT set crushable prop " indestructible " in Object Properties Menu (Like Sandbags or Fences) , it still can be crushed, once crushed , its crushed model will never disappear.

- **[Script Bug:]** **[In Skirmish Maps Only:]** ,
  The " Permanently reveal map at waypoint " command requires a condition if used and not just "If True".

- **[Worldbuilder Bug:]** Unselectable buildings become selectable after taking 25% damage.

- **[In Skirmish Maps Only:]** , Civilians can't use or recognize teams.

- Units/structures that are Pre-placed outside the map are considered invulnerable and invisible or inexistent to other units
  (For Example if you guys tried to script a unit to enter a vehicle which is outside the border of the map , it will simply not do it.)

- **[Script Bug:]** The "Control of Team X transfers to Player X" script does not update power or radar display correctly. It also does not update the color blips on the minimap.

- [Worldbuilder Bug:] If you have the Script Window open, and then open the Team Window then nothing you do in the Team Window will be saved. So please close the scripts before opening Teams.

- [Game Bug:] Do NOT place the trains outside the border, they must be inside the game world in order to make them work properly.

- [Script Bug:] Particle Cannons can CRASH your Game. Be careful when using the Script -- " Unit X use Ability 'Command_FireParticleUplinkCannon' to follow Waypoint Path X path "

If your Waypoint Path is too short, and the Particle Beam is STILL active and reaches the end of the Path, it will CRASH your Game. So by making the path longer, it fixes that problem.

Making the Waypoint " Bi-Directional " works fine as well.
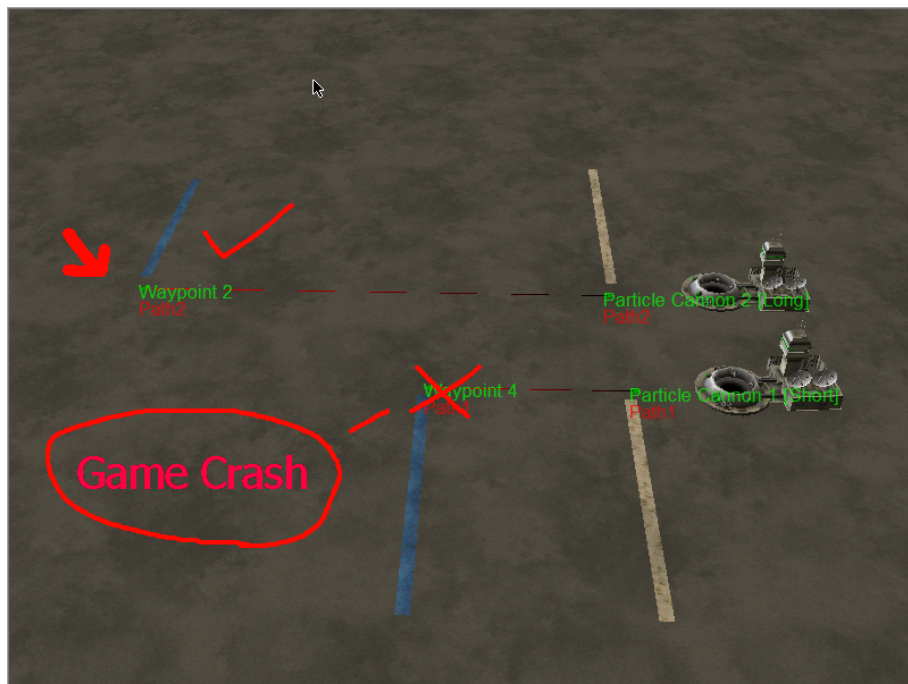
Useful Bug Exploits:

- [Game Engine Exploit:] If you want a removable, invisible barrier for ground units in your map, you can sink a large structure like a command

center into the land and then make it Unselectable through scripts.

The structure's geometry barrier will remain above ground, stopping units from walking across it. Don't use structures that can be garrisoned or ones that spawn units like the supply centers.

Tips/Info from our community:

- If you want to transfer teams/units to another team/player, there are 5 applicable action.

  1. Control of Team 'teamX' transfers to Player 'X' script
  - Bugged, try to avoid this one.
  2. Unit 'X' is transferred to the command of Player 'X' script
  - Transfers named units individually.
  3. All assets of Player 'X' are transferred to Player 'X' script
  - Transfers everything from one player to another.
  4. Team 'teamX' merges onto Team 'teamX' script
  - Transfers everything from one team to another, including player teams.
  5. Team name brute force…
 [Human players Only:] [In Skirmish Maps Only:] …
  Just do this steps:
    1. Go to" Edit Teams "
    2. .In PlyrCivilian make a new team called teamplayerX
       (Change X to number 0-7)

Team Builder

(neutral)	Team Name	O
PlyrCivilian	(default team)	
SkirmishAmerica	teamplayer0	
SkirmishChina		
SkirmishGLA		
SkirmishAmericaAirForceGeneral		
SkirmishAmericaLaserGeneral		
SkirmishAmericaSuperWeaponGe		
SkirmishChinaTankGeneral		
SkirmishChinaNukeGeneral		
SkirmishChinaInfantryGeneral		
SkirmishGLADemolitionGeneral		
SkirmishGLAToxinGeneral		
SkirmishGLAStealthGeneral		

3. Apply the team name on the structure/unit you wanted to be transferred
And you're done.
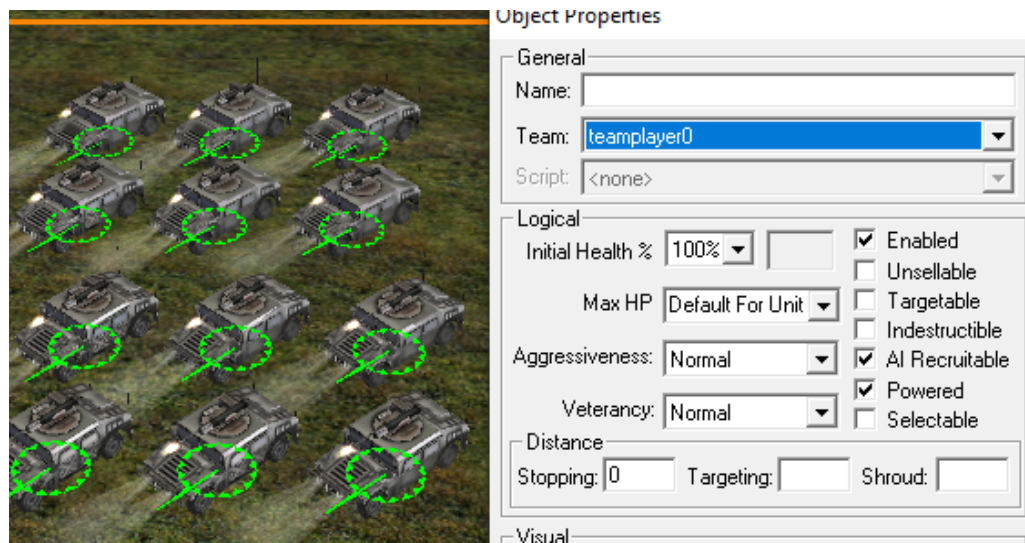
- If you don't knew you can copy the scripts in the script preview
(You can use this feature to paste / show us your scripts in worldbuilder discord in terms of DEBUGGING your scripts.)

Script Preview:

```
*** IF ***
    Player 'PlyrCivilian' has Equal To  1  unit or structure of type 'Tank_ChinaVeh
*** THEN ***
    Spawn Unit 'B_Crate1' of type '100DollarCrateForBuildings' on Team 'teamPlyrCivil
    Spawn Unit 'B_Crate2' of type '100DollarCrateForBuildings' on Team 'teamPlyrCivil
    Spawn Unit 'B_Crate3' of type '100DollarCrateForBuildings' on Team 'teamPlyrCivil
    Spawn Unit 'B_Crate6' of          '100D   C    F  B  i ld ng       T   'teamPlyrCivil
    Spawn Unit 'B_Crate7' of                                            teamPlyrCivil
    Spawn Unit 'B_Crate8' of                                            teamPlyrCivil
    Disable Script 'G_Money
*** ELSE ***
    Enable Script 'G_MoneyMu
    Disable Script 'G_Money
```

Undo

Cut

Copy

Paste

Delete

Select All

Right to left Reading order

Show Unicode control characters

Insert Unicode control character   >

OK

Verify

New Folder...

New Script...

Edit...

Copy Script

Delete

Patch "GC_"

- If you want a perfectly straight line, you can use the Lock Angle tool to keep the cursor moving on the grid. Even better, you can use the ramp to make a straight bit of land in any four directions.

- If you have a long load time after closing a script, you can untick the " Auto Verify " box to speed things up. It will not check scripts for errors, so you have to hit " Verify " when you want that Question Mark to appear.

(Image - Worldbuilder 2.3 and Up)

- [In Skirmish Maps Only:] An enemy player with the Civilian Faction
doesn't give you experience points when you kill their units.
(Only other civilian faction can gain exp from other civilians)

  Unless you use this code via map.ini:

  ```
  PlayerTemplate FactionCivilian
   PlayableSide     = Yes
  End
  ```

- Pilots inherit the names of their died Tanks.
- Hijacker name overwrites the Tanks name.

- [In Skirmish Maps Only:] , putting scripts in the civilian player folder and
using it on a skirmish ai faction folder won't work, and vice versa. Scripts,
counters and flags have to be localised.

  (So a tip: If you're making a Multiplayer Mission, you can place a building
off of the map and use that as a jumper/trigger instead of flags.

  For example:

Structure X outside the map is destroyed by a script -- both Skirmish Ai player and plyrCivilian can use it as a condition for their own scripts.)

- Using the "Exactly follow a waypath" script for units and teams makes them ignore impassable terrain and all obstacles. If there is a waypoint under a bridge, then they will go through it and along the ground.

- Only three(3) "\n"'s can be used in one string in a map's .str file. Any more than this and the game will CRASH when it is used (unless you're using it for a "Display a popup message box" script).

  For example:

  Map_Intro01   ←- String name
  "Date: June 5th
  \nTime: 05:29
  \nLocation: The moon
  \nOther Info: It's cold.
  \n ←- Add this and it will CRASH when it reaches this line in-game"
  End

- [In Skirmish Maps Only:] You can force civilian buildings to build units (e.g. Arms dealer that being placed under the control of Civilian player)

  For Example:

  Object X uses the command button Command_ConstructGLAVehicleX

- The script condition "unit / team inside of an area or enters an area" does still works even the team or unit is on transports.

- Using the Script "Start follow specific unit using camera" makes the followed unit visible even the unit goes into the fog of war and make them visible in barrage of particle fx like bomb smoke and fire smokes. It also prevents them from entering garrisons or transports properly.

- Reveal script like permanently reveal a waypoint for a player also affects and triggers the Script Condition "IF Team got discovered by player "

- Normally Teams/units can only accepts one command at a time .. new orders will override the previous commands.

- " Unit attack everything in an Area " script is only run once … once the enemy unit escapes or cleared out in the area.. the unit will no longer attacks anyone who goes back in the specified area.

- "Unit/Team begins Hunting " scripts makes the team/unit attack nearest units in the map - it refresh every seconds and that's explains huge performance degradation in the game when you overuse it.

- If you untick " Selectable " for a structure (using the new wb 2.6+) it will be rendered unselectable. But if you Also change the time or weather model it will allow you to target that building but not select it.

- The highest you can raise/lower the ground from a flat surface before it becomes unbuildable is 15 in the Height Brush.
  For example, from a flat surface 100 units high, you can raise it to 115 units and it would still be buildable

- Do not spawn those units that still literally still exist in the map, or else the game will CRASH .

- Upgrades with unique researchsound ("composite armor installed sir" instead of just "upgrade complete") can't be disabled by Eva disabler script.

- From: Unknown Editor:
  Why using Unit X spawns …. scripts randomly causes CRASH [In Skirmish Maps] … (No longer random though)

Lets say we try using 'teamplayer1' to access player1's default team ...
It's Right, Isn't it?
THAT IS WRONG if player1 is AI
cause it's default team will then be called 'team<SkirmishPlayerName>'
only accessible from it's Player
If we want to use PlyrCivilian to do that ... We'd require to spawn the
NAMED Object in 'teamPlyrCivilian' and use "Transfer unit to PLAYER"
script, not it's TEAM <== which we can not properly access
So, This is WHY game crashes:
WRONG TEAM NAME given to scripts
and correct, This script Logic SUCKs
but it's how it is and we can't do a s*** about it, so ... we might as well
come around it

Things you must remember about the AI:

- AI players where hardcoded to not build on specific area if there's a enemy player near to it

- Skirmish AI have different AI folders, this folders DO NOT or CANNOT connect to each other - AI Cannot use the scripts from other Skirmish AI faction folders .. example --

<p style="text-align:center">(this will not work)
China script from SkirmishChina Folder cant access Usa
script from SkirmishAmerica Folder</p>
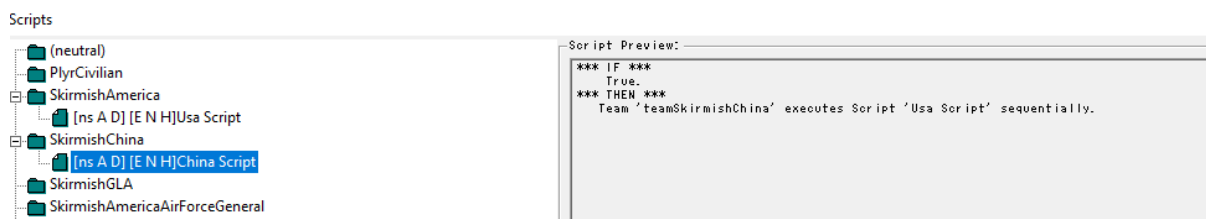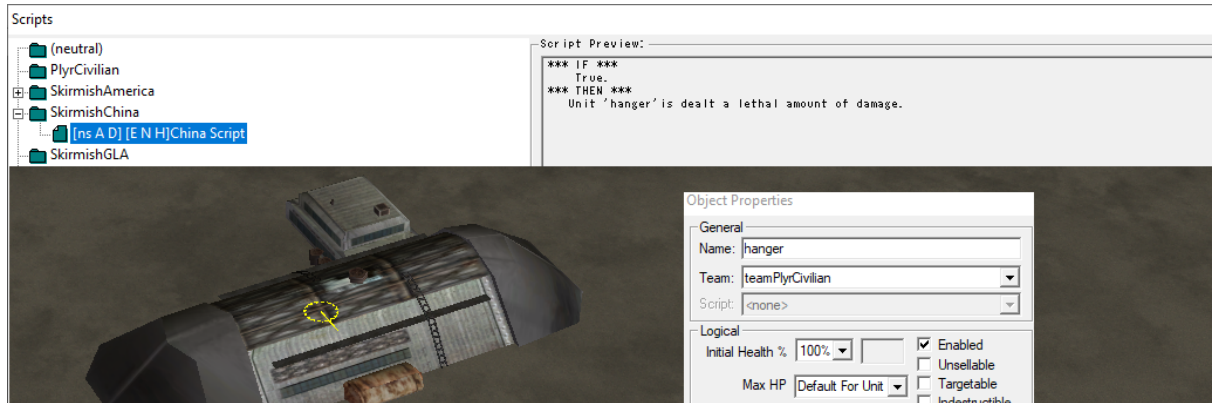
- AI players were hardcoded to rebuild structure infinitely in skirmish.(So its enough to only have 1 script that tells AI to build a building.)

- Repairing isn't prioritized by AI ,Workers/Dozers will build structures if said so in scripts and leave the structure which he is currently repairing.

- Waypointing notes:
  AI will use use "A" Path (1 Starting point - with multiple End points)
  AI can use "H" Path or but its broken as shite (2 or More Starting point connected to each other - with multiple End points)

- [In Skirmish Maps] The AI Civilian factions can gain exp from killing other enemy civilian factions or players (Human players can't gain exp from killing the civilians).

Things that can cause crashing saves:

- Duplicate player teams will corrupt saves.
  "How do I know if there are any 'Duplicate player teams'?" I hear you ask. Well… we don't quite know yet. But it can be fixed using Worldbuilders "Fix Teams" function, under the "Validation" menu.