## Add New (empty) Houses Tutorial

Add custom tooltip | Schedule Alterations



Did your house turn into a storage for all your projects? You want to add a "commercial" lot without replacing the existing ones? This tutorial teaches how to add to the game custom buildings that can be decorated like a regular Player's House.

**Small Disclaimer**: while writing this I misunderstood the meaning of ~=, so everything works but the explanation might be wrong.~= means "not equal to" but for some reason I thought it meant "null or equal to"

### Requirements:

- A notepad (preferably Notepad++);
- Lua folder patch

Before starting make a backup of both your save file and SimsRevData/Game Data. For many of these passages your pc will ask for Admin permission, accept every time. I also recommend running Notepad++ as Admin.

We'll need the following folders, I recommend keeping them all open for easier access:

- Documents\Electronic Arts\Mysims\SaveData(1, 2 or 3);
- SaveData\Buildings;
- SaveData\LocationInteriorDefs;
- SimsRevData\GameData\LocationDef.

### Step 1: Preparing the files

The houses in MySims are made by 3 files: a LocationDef.xml that determines things like if a sign is required, or the outside audio; the Building.xml is the CAB building blocks used; the LocationInteriorDef.world.xml is obviously all the info about the inside.

You can make your own buildings by copying already existing ones (I recommend keeping the copied files in a separate place for now) and changing the file names and the "interior world file" inside the Building. To make things easier I included premade files (based on the player's house), which also speed up the process if you want to add more than one house.

|   | CustomHouseDef_Building.xml   |
|---|-------------------------------|
|   | CustomHouseDef.xml            |
| B | CustomHouseInterior.world.xml |

### Naming Conventions:

- The official files share part of the name, which depends on the CharacterDef of the owner sim. The houses we're adding belong to the player so any name works as long as it's the same for all files;
- For this tutorial to work the file must start with "Custom";
- the LocationDef file ends with "Def.xml", the Building file ends with "Def Building.xml", the LocationInteriorDef ends with "Interior.world.xml";
- Do not use spaces while naming the files.

### Step 2: Placing the files in the folders

There's not much to do here but I prefer to keep it a separate step. If you are using my premade files you need to copy them in the following folders:

- CustomHouseDef.xml in SimsRevData\GameData\LocationDef
- CustomHouseDef Building.xml in SaveData\Buildings
- CustomHouseInterior.world.xml in SaveData\LocationInteriorDefs (Do not put this in any subfolder like \Online or the game won't read it)

## Step 3: Adding the house to a map

For this tutorial I will use the TownSquare and the lot n.6, simply because that's what I have empty. You can technically place it anywhere following this tutorial by taupexmauve/taupemauve, but I recommend an official lot for now so you can remodel it. Go to your SaveData folder and open townSquare.world.

```
<Building Name = "TownHallDef.xml" LotID = "1 ">
         <Guid> 003164947D3E1030</Guid>
         <Translation>122.510101 0.55 45.692299 </Translation>
         <Rotation>0 325.000031 0 </Rotation>
         <ObjectDef>LocationDefs/TownHallDef.xml</ObjectDef>
         <Script>Building</Script>
         <SaveName>Buildings/townSquare TownHallDef Building.xml/SaveName>
-</Building>
Suilding Name = "HotelDef.xml" LotID = "2 ">
         <Guid> 003164947E8E8A66</Guid>
         <Translation>94.9785 0.05 85.011597 </Translation>
         <Rotation>0 145.000015 0 </Rotation>
         <ObjectDef>LocationDefs/HotelDef.xml</ObjectDef>
         <Script>Building</Script>
         <SaveName>Buildings/townSquare_HotelDef_Building.xml</SaveName>
-</Building>
<Building Name = "FloristDef.xml" LotID = "5 ">
                   00319A765D659373</Guid>
         <Translation>87.362701 0.05 63.198502 </Translation>
         <Rotation>0 55.000015 0 </Rotation>
         <ObjectDef>LocationDefs/FloristDef.xml</ObjectDef>
         <Script>Building</Script>
         <SaveName>Buildings/townSquare FloristDef Building.xml</SaveName>
 -</Building>
```

Copy one of these buildings and change the names and the LotID to the ones you need.

#### Two things to note:

- See the Guid value? that's a Global Unique ID so every game item with a guid needs its own separate value. They're usually randomly generated so I use the lazy method of changing just a few of the numbers/letters so it's different enough (If there are a bunch of zeros at the beginning of the value I leave them there because I don't know what they do);
- You'll notice the building file name is slightly different. This is because, in order to
  properly show in game, in this step you need to add at the very beginning of your
  building file "worldName\_" (hence "townSquare\_CustomHouseDef\_Building.xml").

Also if your new house is in an official lot you need to find the LotControllers and change them like this:

```
<LotController Name = "Lot 6 Undeveloped/Moved Out">
       <Guid> 003164948105DD91</Guid>
       <Script>LotDecorative</Script>
       <Translation>0 0 0 </Translation>
       <Rotation>0 0 0 </Rotation>
       <TuaTable>
     <TableName>T266206448</TableName>
     <Table name = "T266206448">
                                        <undeveloped type = "boolean">true</undeveloped>
        <lotId type = "number">6</lotId>
       <developed type = "boolean">false</developed>
       <isMaterial type = "boolean">false</isMaterial>
       <movedOut type = "boolean">true</movedOut>
</Table>
      /T...m.hl.a.
  <LotController Name = "Lot 6 Developed">
       <Guid> 00000E0F1F0DABEB</Guid>
       <Script>LotDecorative</Script>
       <Translation>0 0 0 </Translation>
       <Rotation>0 0 0 </Rotation>
       <LuaTable>
     <TableName>T266207048</TableName>
     <Table name = "T266207048">
                                        <undeveloped type = "boolean">false</undeveloped>
       <lotId type = "number">6</lotId>
       <developed type = "boolean">true</developed>
       <isMaterial type = "boolean">true</isMaterial>
       <movedOut type = "boolean">false</movedOut>
</Table>
```

Basically the "isMaterial" boolean needs to be false in the Undeveloped one and true in the Developed one, otherwise the game will think the lot is empty and keep the debris(?) of the empty lot.

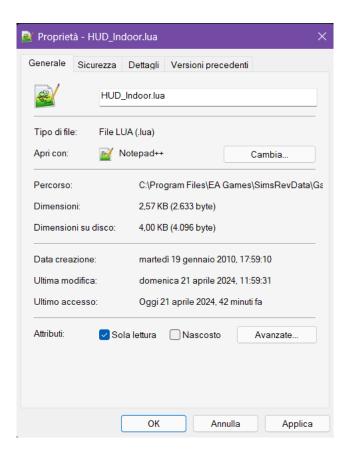
Now save everything, open your game and check if the house functions and you can enter it without the game crashing. If it does it means some name files do not match or you didn't rename the building file. If the building doesn't spawn at all you might have to change Guid value.

The inside of the premade house looks like this:



Step 4: make the interior editable

Now we're going to edit a few of the Lua files. By default most of them are not editable, to change this right-click on a file and go to Properties.



My pc is not in english but see the checkmarked "Sola lettura"? That means "read only", so if you remove the checkmark the file becomes easily editable.

Now we will need the following files:

- HUD\_Indoor.Lua
- OPSUI.Lua
- (Optional bc it works anyways) Controllers\Controller\_DM.Lua

In all of these files you need to find the line " if (( worldName ~= "LocationInteriorDefs/PlayersHouseInterior.world.xml" ) and ( string.find(worldName, "LocationInteriorDefs/Online/") == nil )) then":

```
function Controller_DM:Setup()
    self.player = GetPlayerGameObject()

local w = GetWorld()
    if (w == nil ) then
        Ea:Fail( "Controller_DM setup found no current world!")
        return false
    end -- verify current world

local worldName = GetWorldName()
    if ((worldName ~= "LocationInteriorDefs/PlayersHouseInterior.world.xml") and (string.find(worldName, "LocationInteriorDefs/Online/") == nil )) then
    self.locationOwner = w:FindMyOwner()

*unction HUD_Indoor:Run()
    -- Don't show the DM button unless it's the player's house
    -- Currently we show DM button in all houses in the shared level
    local worldName = GetWorldName()

if ((worldName ~= "LocationInteriorDefs/PlayersHouseInterior.world.xml") and (string.find(worldName, "LocationInteriorDefs/Online/") == nil )) then
    return
    end
```

Edit every instance of this line you can find to "if (( worldName ~=

"LocationInteriorDefs/PlayersHouseInterior.world.xml") and (string.find(worldName,

"LocationInteriorDefs/Online/") == nil ) and ( string.find(worldName,

"LocationInteriorDefs/Custom") == nil )) then". The piece of code we added detects if a LocationInteriorDef starts with "Custom" and enables the Decoration Mode/Object Placement Screen.

# And that's it! Below are some optional steps for adding more details:

### Optional 1 - Add decorations:

Custom houses by default have no decorations, asgoreagenda made <u>this tutorial</u> for unlocking decorations for the player's house so we can apply it here by following the same steps but instead of "LocationInteriorDefs/PlayerHouseInterior.world.xml" using the custom interior name.

# Optional 2- Custom tooltip (overworld only, does not work for minimap) (Premade files available)

27 apr 2024: This is now compatible with Optional 3, a.k.a.

The first thing we'll do is go to GameData\CharacterDefs and duplicate PlayerDef.xml, for this tutorial we will rename the copy "CC\_Generic.xml". This is a fake sim that will tell the game how to call the building, the "CC\_" prefix will be used to fix issues caused by nonexistent sims.

Now go to your SaveData\LocationInteriorDefs, open your custom interior file and set "CharacterDefs/CC\_Generic.xml" as the owner.

Going back to GameData, we need to go to Lua and open Building.lua. Search for the function "Building:TODTimerCallback" (it's like the fourth function of the file).

```
function Building:TODTimerCallback( timerID, context )
     if ( self.DPDTouchState == 1 ) and ( self.DPDTouchTimer == timerID ) then
         self.DPDTouchTimer = nil
         self.DPDTouchState = 2
          -- local x, y, z = GetGameObjectPosition( self )
         -- local x2D, y2D = GetScreenPosition(x, y + 3.0, z)
         local owner = self:GetOwnerName()
         if ( owner ~= nil ) then
             UI SetSub("TownName", GetTownName())
             -- ShowToolTips( x2D, y2D, "STRING HOUSE " .. owner )
             AttachToolTipToCursor( "STRING HOUSE " .. owner )
         else
             -- ShowToolTips( x2D, y2D, "STRING_HOUSE WORKSHOP" )
             if (IsCurrentWorldShared() == false) then
                 AttachToolTipToCursor( "STRING HOUSE WORKSHOP" )
         end
     end
```

Now we're going to do something that's optional, but will be useful if you plan on having many custom tooltips.

See the line that says "local owner = self:GetOwnerName()"? We're going to add below it a dashed line, an empty one and another dashed line. As a reminder I also added "Space for custom tooltips" and "End space for custom tooltips" to the dashed lines. Now copy the four lines from "if (owner ~= nil ) then" to "AttachToolTipToCursor( "STRING\_HOUSE\_" .. owner )" and paste them between the dashed lines.

```
function Building:TODTimerCallback( timerID, context )
   if ( self.DPDTouchState == 1 ) and ( self.DPDTouchTimer == timerID ) then
       self.DPDTouchTimer = nil
       self.DPDTouchState = 2
        -- local x, y, z = GetGameObjectPosition( self )
        -- local x2D, y2D = GetScreenPosition(x, y + 3.0, z)
       local owner = self:GetOwnerName()
                                ----SPACE FOR CUSTOM TOOLTIPS-----
       if ( owner ~= nil ) then
           UI_SetSub("TownName", GetTownName())
            -- ShowToolTips( x2D, y2D, "STRING_HOUSE_" .. owner )
           AttachToolTipToCursor( "STRING HOUSE " .. owner )
                         -----END SPACE FOR CUSTOM TOOLTIPS-----
       if ( owner ~= nil ) then
           UI SetSub("TownName", GetTownName())
           -- ShowToolTips( x2D, y2D, "STRING_HOUSE_" .. owner )
           AttachToolTipToCursor( "STRING HOUSE " .. owner )
       else
             - ShowToolTips( x2D, y2D, "STRING HOUSE WORKSHOP" )
           if (IsCurrentWorldShared() == false) then
               AttachToolTipToCursor( "STRING HOUSE WORKSHOP" )
           end
       end
   end
```

Now we're going to change the first "if" after the dashed lines into "elseif" and edit the copied text like below:

Save everything and open the game, your house should now display the text "[Name of your town]\_Custom House". If it works you can now edit the text however you want, if you don't want the town name attached just remove "GetTownName()" in the line AttachTipToCursor.



As previously said the name doesn't display in the minimap, instead you have something like "STRING\_HOUSE\_CC\_Generic.xml" and the icon will be determined by the main interest of the building.

If you want to add other custom tooltips copy-paste the four lines you already have but change "if" into "elseif":

```
UI_SetSub("TownName", GetTownName())
AttachToolTipToCursor( GetTownName() .. "_Custom House")

elseif ( owner == "CharacterDefs/CC_ComicCon.xml" ) then
   UI_SetSub("TownName", GetTownName())
AttachToolTipToCursor( GetTownName() .. " Comics and Games")

elseif ( owner == "CharacterDefs/CC_Cult.xml" ) then
   UI_SetSub("TownName", GetTownName())
AttachToolTipToCursor( "Normalissima chiesa" ) --"Absolutely normal church"
```

These are the custom tooltips I have as of now.

### We're not over yet!

Remember the CC\_ prefix? we're gonna use it now. Open Scheduler.Lua and search for "function Scheduler\_OwnerlsPresentFilterFunc(sim, world)".

```
function Scheduler_OwnerIsPresentFilterFunc(sim, world)

if (DebugMenu:GetValue("TutorialMayorEnabled") and not IsTutorialComplete("Tutorials_Complete")) then
    return true
end

if (world:IsOwner(sim)) then
    return true
end

local owner = world:FindMyOwner()
local player = GetPlayerGameObject()
if (owner.ContainingWorld == world and owner.autonomyMode("kBase") and owner.autonomyMode("kBleep")) then
    return true
else
    if (owner.ContainingWorld == world and owner == player and not player:IsSleeping()) then
    return true
end
end
end
return false
```

The sims wait for the building owner before entering, since our CC characters don't exist in-game nobody will visit this building anymore. To fix this we tell the game to "pretend" that our custom sims are always home:

Now we need ForSaleSign\_Interaction\_Relocate.lua and ForSaleSign\_Interaction\_KickOut.lua, specifically search for the line "local ownerName = building:GetOwnerName()":

It should be the same in both files. Basically the game recognizes our characters as official townies so you're allowed to relocate them and kick them out, however doing so will softlock the game because you'll get stuck waiting for a sim that doesn't really exist.

Now I'm not 100% sure of how this works, but I tried to apply the same principle from Scheduler.Lua here:

```
local ownerName = building:GetOwnerName()
if not (string.find(ownerName, "CharacterDefs/CC_") == nil) then -- if characterDef does NOT start with "CC_"...
return false -- do not show interaction? I guess?

elseif (ownerName == nil or ownerName == "CharacterDefs/PlayerDef.xml") then
    return false
end
```

Do the same on both files, save and run the game to test if it's working. With these tweaks you can remodel a custom building if it's in an official lot, but you won't be able to move it or kick out the owner.

## Optional 2.5 - Choose Minimap Icon

This is actually quite simple, open HUD\_Map.Lua and scroll until you find a lot of lines starting with "which":

```
if which == "STRING HOUSE WORKSHOP" then
elseif which == "STRING HOUSE CharacterDefs/Nc_TrainStationManager | Def.xml" then
elseif which == "STRING HOUSE CharacterDefs/Nc_TrainStationManager | Def.xml" then
elseif which == "STRING HOUSE CharacterDefs/Nc_TrainStationManager | Def.xml" then
elseif which == "STRING HOUSE CharacterDefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc_Dromatcherdefs/Nc
```

Duplicate any of those lines (preferably the one with the icon you want) and change the CharacterDef with the one of your custom character. As an example I'm showing what I did for my custom buildings, you don't need to separate them from the others but I'm trying to keep better track of the parts of code I edit.

```
elseif which = "STRING HOUSE Characterples/NFC Discobl J Def. xml" then xetum "uitexture-map-icon-discor" yetum "uitexture-map-icon-discor" tetum "uitexture-map-icon-discor " tetum "uitexture-map-icon-d
```

# Optional 3 - Schedule alterations (Allow only specific sims inside) (works also for outside)

If you have Natalia in town, have you ever noticed only certain sims visit her? That's because her house has a function which determines who can enter, useful if you want to make your custom place a secret hideout, or an exclusive club.

Go once again to GameData\Lua and open Scheduler.lua, you'll find the following code:

We're going to copy this below and change a few things: first of all the function needs a unique name (ex. Scheduler\_CustomFilterFunc), then you just have to add the characters you want to allow inside (you can copy the file names from GameData\CharacterDefs). Below I made an example with Morcubus, Brandi and Esma.

```
--Filter to only allow specific NFCs into interior.

function Scheduler_CustomEiterFunc(sim, world)

if (world:IsOwner(sim)) then

return true

else

if (sim.objectDefName == "Townie_Spooky_Morcubus_Def.xml" or sim.ObjectDefName == "Townie_Spooky_Brandi_Def.xml" or sim.ObjectDefName == "Townie_Spooky_Bsma_Def.xml" then

return true

else

return false

end

end
```

As a last thing press CTRL+F and search for "function Scheduler:YarnInitialize()":

```
function Scheduler:YarnInitialize()

Scheduler AddWorldEnterCondition("LocationInteriorDefs/HotelInterior.world.xml", Scheduler_OnlyHotelGuests)
Scheduler_AddWorldEnterCondition("LocationInteriorDefs/HotelUpstairs.world.xml", Scheduler_OnlyHotelGuests)

Scheduler_AddWorldEnterCondition("LocationInteriorDefs/SecretAgentHouseInterior.world.xml", Scheduler_VirginiaFilterFunc)
Scheduler_AddWorldEnterCondition("nook_classic_01.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_desert_01.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_desert_02.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_desert_04.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_forest_01.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_forest_01.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_forest_01.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_forest_02.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_forest_03.world", Scheduler_NeverEnterFilterFunc)
Scheduler_AddWorldEnterCondition("nook_forest_03.world", Scheduler_NeverEnterFilterFunc)
```

We're going to duplicate one of these lines, add our custom interior name and the new function we just made:

```
function Scheduler:YarnInitialize()

Scheduler_AddWorldEnterCondition("LocationInteriorDefs/HotelInterior.world.xml", Scheduler_OnlyHotelGuests)

Scheduler_AddWorldEnterCondition("LocationInteriorDefs/HotelUpstairs.world.xml", Scheduler_OnlyHotelGuests)

Scheduler_AddWorldEnterCondition("LocationInteriorDefs/SecretAgentHouseInterior.world.xml", Scheduler_VirginiaFilterFunc)

Scheduler_AddWorldEnterCondition("nook_classic_O1.world", Scheduler_NeverEnterFilterFunc)

Scheduler_AddWorldEnterCondition("nook_desert_O1.world", Scheduler_NeverEnterFilterFunc)

Scheduler_AddWorldEnterCondition("nook_desert_O2.world", Scheduler_NeverEnterFilterFunc)

Scheduler_AddWorldEnterCondition("nook_desert_O3.world", Scheduler_NeverEnterFilterFunc)

Scheduler_AddWorldEnterCondition("nook_desert_O4.world", Scheduler_NeverEnterFilterFunc)

Scheduler_AddWorldEnterCondition("nook_forest_O1.world", Scheduler_NeverEnterFilterFunc)

Scheduler_AddWorldEnterCondition("nook_forest_O1.world", Scheduler_NeverEnterFilterFunc)

Scheduler_AddWorldEnterCondition("nook_forest_O3.world", Scheduler_NeverEnterFilterFunc)
```

Save, run the game and we're done! Remember that sims will go to places that match their interests so it's unlikely that, for example, Goth Boy would go to a fun place like the Candy Club.