
LEVEL ART IN HORIZON

QUICK GUIDE

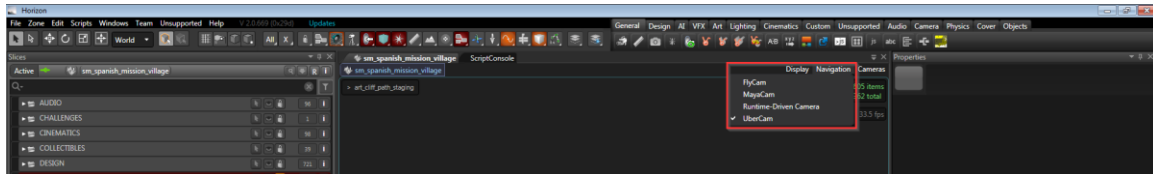


APRIL 18, 2017

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NAVIGATION

There is 4 ways to navigate in Horizon, you can change them under the Navigation tab in the viewport, as seen in the screenshot below.



FLY CAM

Basic WASD fly camera. The flying speed can be adjusted with the scrolling wheel of the mouse.

MAYA CAM

Standard maya navigation. Alt+right click to move, Alt+middle click to pan and the mouse scrolling wheel to scale.

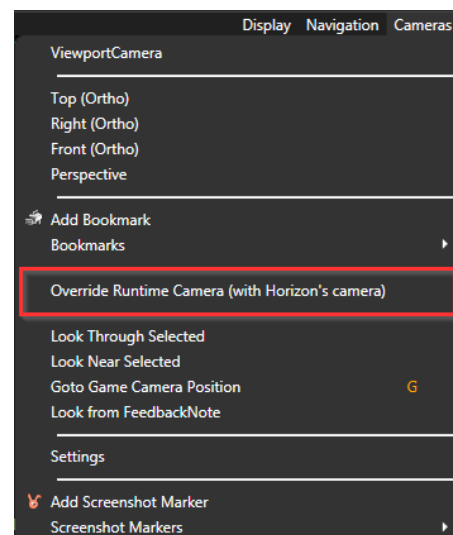
RUNTIME DRIVEN CAMERA

The viewport in Horizon will match the camera of the output (XBOne)

UBERCAM

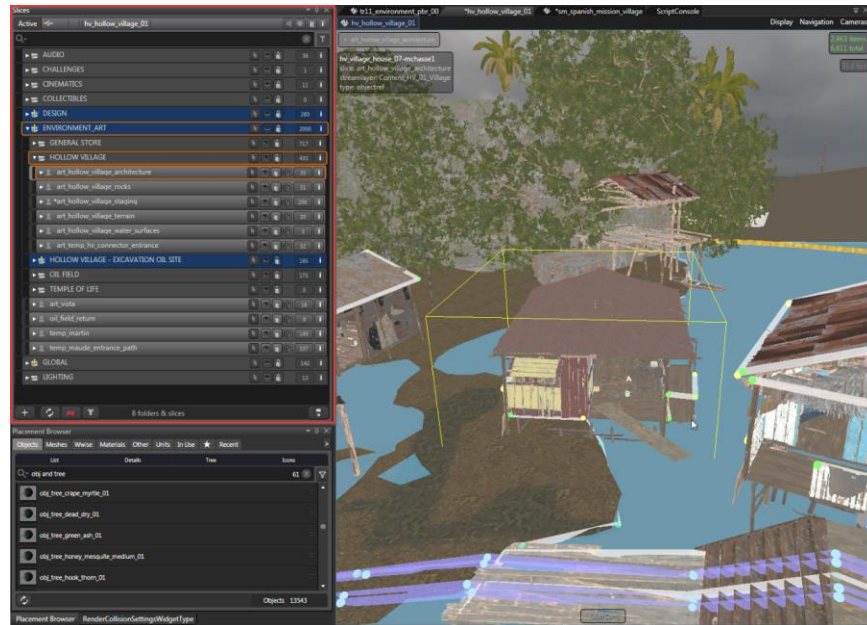
The most common used navigation option. This combine the Fly Cam with the Maya cam.

You can also override the Runtime Camera with horizon's camera. This is under the Cameras tab. This mean that the Camera on the Output (XBOne) will match the one that you have in Horizon.



FOLDERS AND SLICES MANAGEMENT

The **Slice manager** is used to store all the **Slices** created in a Unit/Zone. A **slice** is a **container** used to store spatial entities by categories. This way several people can work on a same map at the same time.



HOW TO ADD A NEW SLICE

1/ From the Slice tool, select "+" button to create new Slice.

2/ Give it a significant name by following the naming conventions established on your project.

Note : You can't rename a slice once is created.

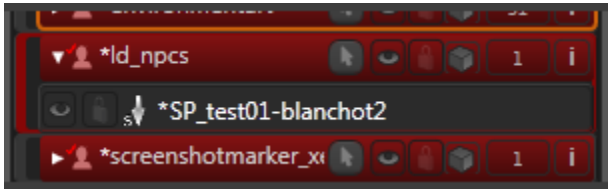
HOW TO DIVIDE THE ENVIRONMENT INTO SLICE

Usually it is a good idea to separate the main section of the environments into folders (Main tomb, connector, puzzle area...). Then divide one of these sections into multiple slices to store different kind of elements and meshes (architecture, ground, vegetation..).

It is also very useful to have everything stored in different slices, because when you create a custom ground you can select what slice to load as a reference. Ultimately, it is the level artist choice how to divide it, but keep it clean as other level artist work on the map after you.

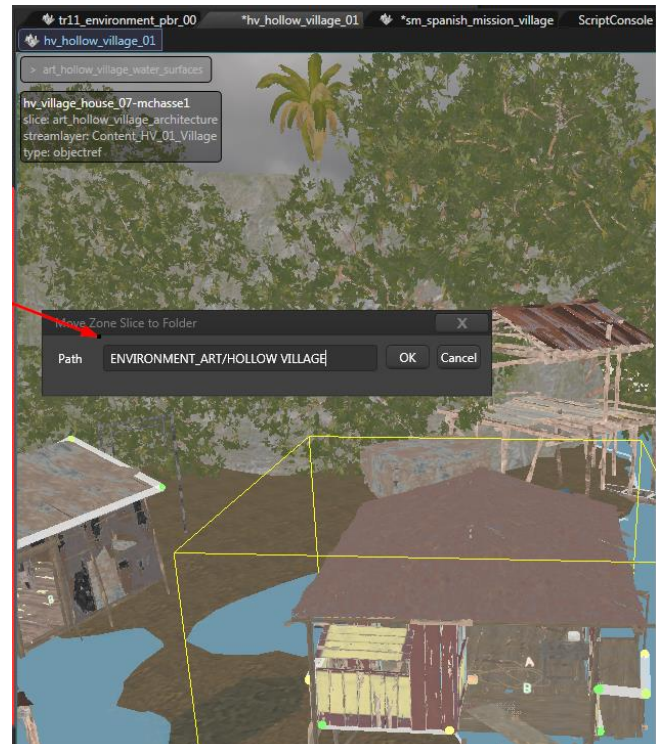
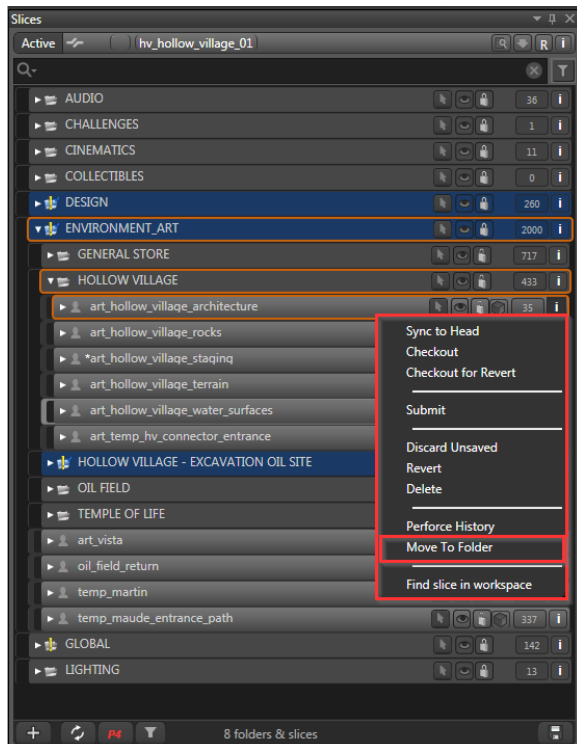
MAKE A SLICE AS A CONTEXTUAL SLICE

To make a Slice as a Contextual Slice, just click on one of them in the slice manager. You should see a **Little Red Square** all around the slice selected. Now each time you will drag and drop new stuff from the placement browser, it will store automatically in this Contextual slice



FOLDERS

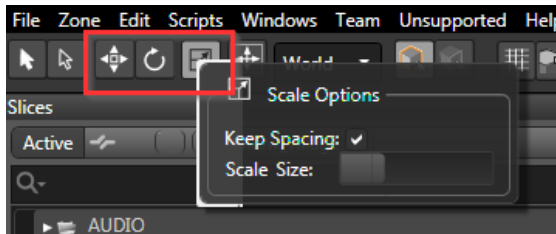
You can create folders to organize your slices. To create a folder you have to select the **Move To Folder** option in the "i" button. There, type a new name for the folder and press OK. Note that with / you can create subfolders to organize your art.



BASIC TOOLS FOR LEVEL ART

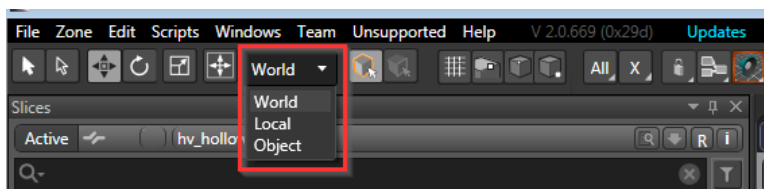
TRANSLATION, ROTATION AND SCALING PARAMETERS

By right clicking on one of these 3 icons, you can open the corresponding tool options panel.



AXIS PARAMETERS

You can select your axis constraints parameters as seen in the screenshot below. The shortcut to cycle between these parameters is the tilde key (~)



SNAP OPTIONS

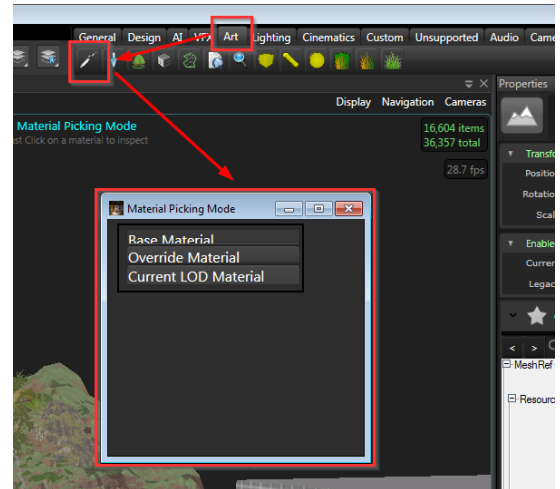
To snap an object to a surface, you can hold the **V** key and with the **middle mouse click**, you can snap an object to a surface.

PIVOT OPTIONS

To modify the pivot position of an object, you can hold the **D** key while selecting the object and move it. If you hold the **V** key as well with the **middle mouse click** you can snap it at the same time.

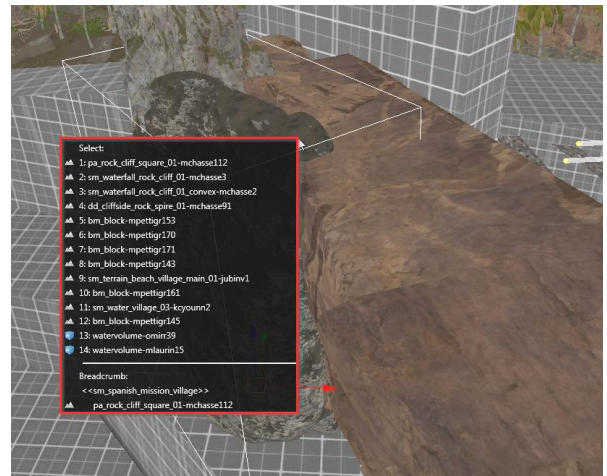
MATERIAL PICKER

Under the Art tab in Horizon, you can select the material picker. Then select the mode in the drop down menu and pick the material of any mesh or object.



MESH SELECTOR

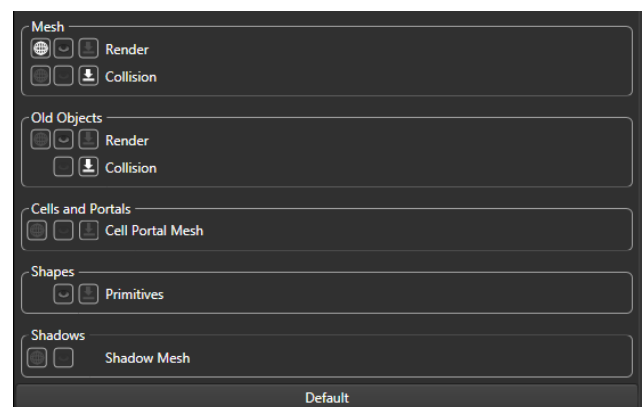
To have a drop-down list of all the meshes/objects below your mouse cursor in the scene, hold **CTRL** and **right click** with the mouse.



PLACEMENT OPTIONS

Under Windows>Placement Options

Very useful if you want to display collision in horizon, or if you want to snap on the collision of a mesh instead of the render mesh.

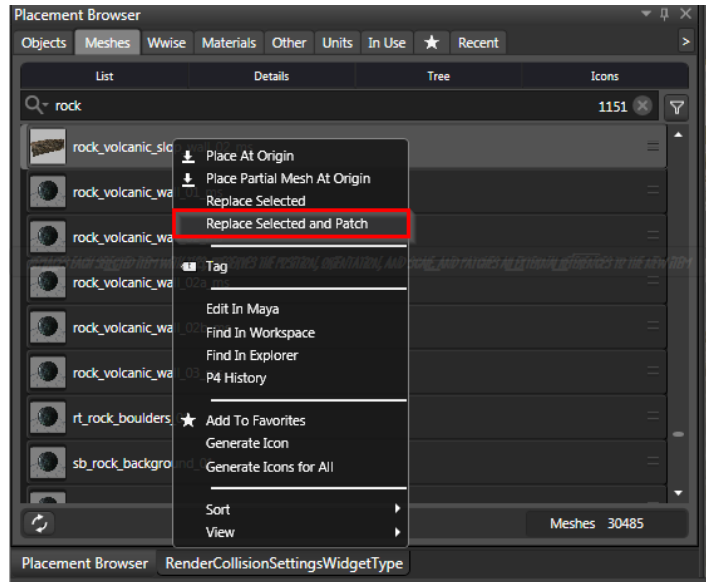


PLACEMENT BROWSER

Under Windows>Placement Browser

Search by keywords for your mesh/object
You can also use conjunctions like **and** between key words to search for a set of meshes for example.

You can replace a mesh or an object in the map by clicking on Replace Selected and Patch while selecting an object. The mesh will be replaced by the location of the pivot.

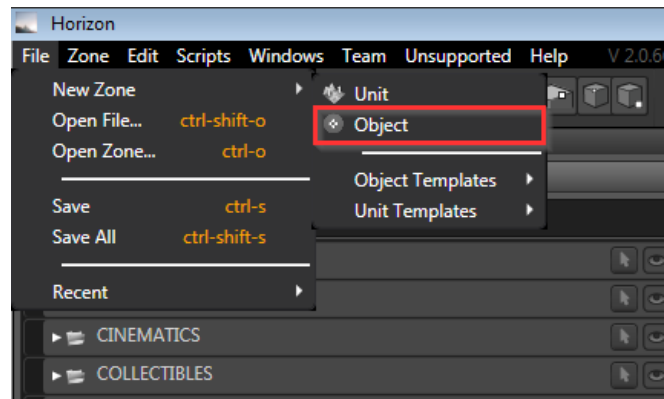


OBJECTS

CREATING A NEW OBJECT

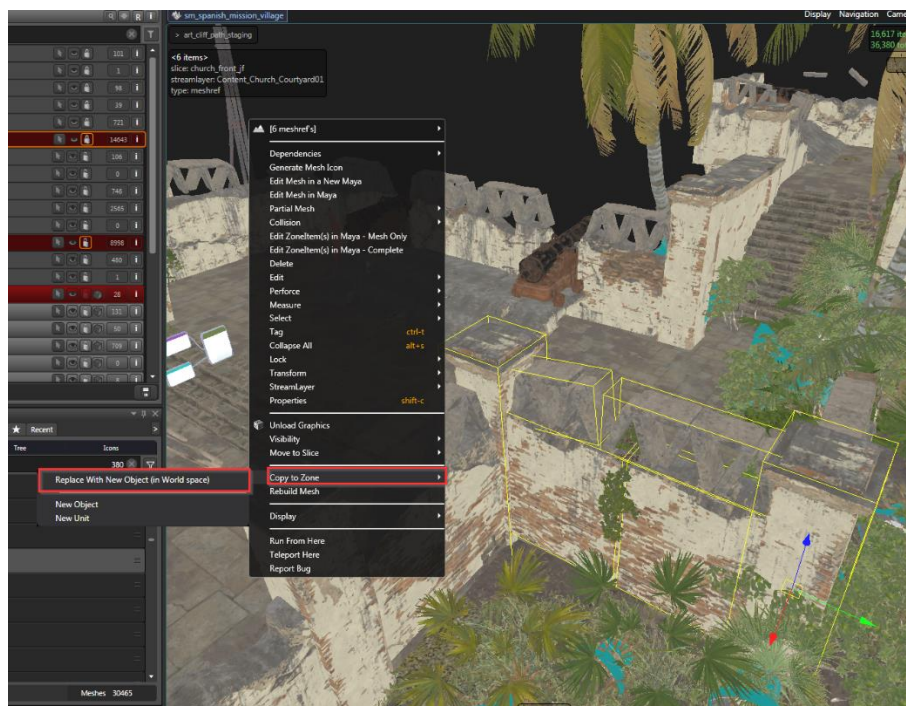
Under File>New Zone>Object

Place whatever you want in the 3D viewer, and default slice will be created for you. Save your object under the objects directory in the appropriate unit folder. Your new object will now show up in the Placement Browser under the Objects tab and you can now use it



CREATING A NEW OBJECT FROM AN EXISTING SETUP

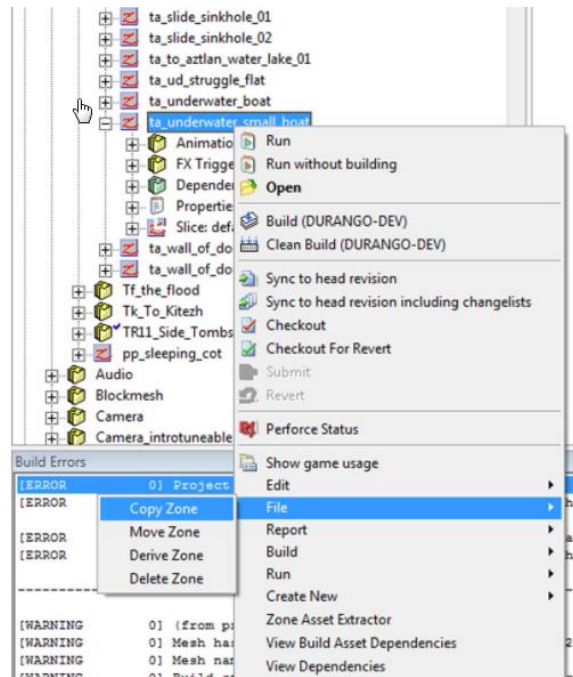
If you have an existing setup that you like, and you would like to create an object for it, you can select the meshes you want to put inside of an object, right-click>Copy to Zone>Replace with new object in World Position. What this will do is that it will replace your current setup with the new object at the same world position. Note that the central pivot of the combined assets will be located at 0,0,0 in the object.



DUPLICATING AN OBJECT

Select the object you want to duplicate in the 3d viewer or the placement browser, and right click and select **Find>Find in Workspace** to bring up the object in Game Gui. Select the zone object and right click and select File>Copy Zone

Name your duplicate object and save it into the appropriate unit folder. Your new duplicated object will now show up in the Placement Browser under the Objects tab and you can now use it



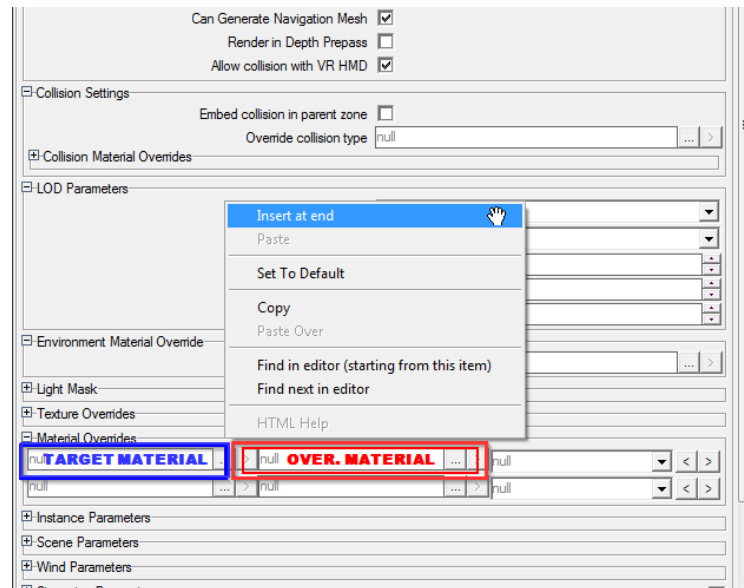
MATERIAL AND COLLISION OVERRIDES

MATERIAL OVERRIDE

To create a material override, locate the **Materials Overrides** section in the Common Properties panel while selecting an object.

Right click in **Materials Overrides** section and select insert at end. Then identify the **target material** on the left if needed (the one you want to replace) and set the **override material** on the right. Note that if you have only one material applied to an object, you don't need to assign a target material, however it is still recommender. You can assign more than one material override to a single object, if this object has more than one base material.

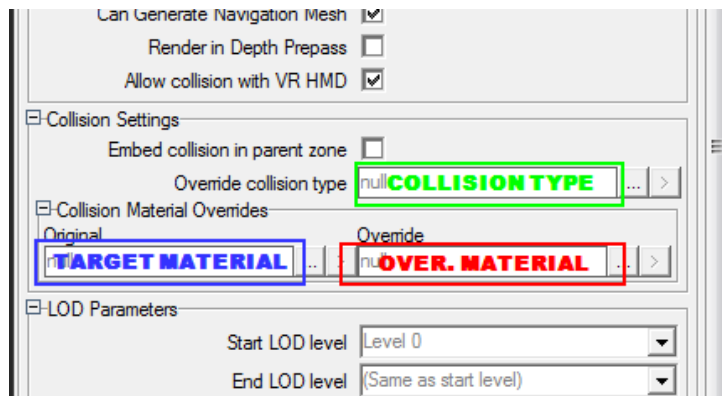
NOTE THAT HAVING A MATERIAL OVERRIDER IS AN EXTRA COST, AS THE ENGINE WILL STILL CALCULATE ALL THE MATERIALS BELOW THE MATERIAL OVERRIDE, SO BE CAREFULL.



COLLISION MATERIAL OVERRIDE

To create a collision override, locate the **Collision Settings** section in the Common Properties panel while selecting an object.

Right click in **Collision Materials Overrides** section and select insert at end. Then identify the **target material** (Original) on the left if needed (the one you want to replace) and set the **override material** on the right. Note that if you have only one material applied to an object, you don't need to assign a target material, however it is still recommender. You can assign more than one material override to a single object, if this object has more than one base material.



COLLISION TYPE OVERRIDE

To create a collision type override, locate the **Collision Settings** section in the Common Properties panel while selecting an object. Then select a new **collision type** in the **Override collision type** box.

You can find the most used collision material types here:

D:\tr11\tr11_dev\assets\collisiontypes\All_Col_Montreal