#### Naming Convention Asset

By Kyle Gillen (Last Updated 11/4/15)

#### What Is It?

 The Naming Convention Asset is a scriptable object asset that can be utilized to change the naming convention used in several areas of the Terrain Slicing & Dynamic Loading Kit

# **Default Naming Convention**

- Prior to update 4.2.0, the kit required the use of a strict naming convention, GroupName\_Row\_Column or GroupName\_Layer\_Row\_Column (if the world was 3D).
- In many cases this was not an issue, especially since the terrain slices generated by the Slicing Tool followed this convention.
- However, this strict convention made the kit incompatible with other third party tools, such as Terrain Composer.

# **Default Naming Convention**

- The new naming convention can be used in many areas (discussed <a href="here">here</a>), but whenever a naming convention asset is not provided, that tool or component with a naming convention field will automatically use the default naming convention.
- This means if your terrain/objects follow the default naming convention, there is no need for you to create a naming convention asset. Simply leave all naming convention fields blank.

## Creating the Asset

- To create a Naming Convention Asset, right click the folder in your project hierarchy where you wish the asset to be stored and select Dynamic Loading Kit -> Create Naming Convention Asset.
- You can also select Assets -> Dynamic Loading Kit -> Create Naming Convention Asset from Unity's top menu bar.

- By default, the Naming Convention Asset is setup to be used with Terrain Composer's naming convention, so if you are using Terrain Composer, there is no need to change any of the settings.
- Otherwise, follow the information on the following pages.

- The Format field is the meat of the naming convention asset. This field allows you to input a string with whatever characters you wish, and it's this string that controls the naming convention.
- The magic of this string is in the special characters. These characters are replaced at runtime by specific values in order to produce a full name for a specific cell.

- Each character must follow a % character to be recognized by the kit as special. The special characters are g, x, y, and z (i.e., %g, %x, %y, and %z).
- Whenever the kit encounters a %g character pair, it replaces it with the Group Name for that context.
- %x is replaced by the Column number of whatever object is being processed.
- %y is replaced by the Row.
- %z is replaced by the Layer, but should only be used in the context of 3D worlds. If you worlds are 2D, do not use the %z character pair in your naming convention.

- The second and final setting on the Naming Convention Asset is the 'Numbering Starts At 0' option.
- This option tells the kit whether the row/column/layer indexes begin at 0 or 1.
- If enabled, you're telling the kit that indexes begin at 0.
- If disabled, you're telling the kit that indexes begin at 1 (which is true of the default naming convention).

- First, let's examine what the settings would look like if we created a Naming Convention asset for the default naming convention.
- Numbering Starts At 0 would be unchecked, and the Format string would be set to %g\_%y\_%x.
- Assuming a GroupName of Terrains, the cell at row = 3 and column = 2 would be produce a full name of Terrains\_3\_2.
- This is because the %g is replaced by the GroupName (Terrains), the %y is replaced by the row (3), and the %x is replaced by the column (2). All other characters in the Format string are inserted into the full name as is (in this instance, the two underscores between %g and %y and %y and %x).

- The Format string for Terrain Composer is %g\_x%x\_y%y. In addition, numbering starts at 0 rather than 1, so the Numbering Starts At 0 option would be checked.
- Notice the x and y before the %x and %y respectively.
   These characters are not preceded by a %, and thus are not considered special. Every cell's full name will contain these characters (i.e., they will not be replaced).
- Assuming a GroupName of Terrains, the cell at row = 0 and column = 1 would be produce a full name of Terrains\_x1\_y0.

 Assuming the Numbering Starts At 0 option is unchecked and the Format string is set to the following, what would be the full name outputted for a cell at row 5, column 10 (and with a Group Name of Terrains)?

row%y||column%x||%g
(Answer is on the next page)

Answer row5||column10||Terrains

#### **Characters To Avoid**

- Internally the special characters are replaced by versions that will work with the string. Format method ({#}).
- As such you should avoid the use of {#} within your format string (where # is any number).
   All other characters are valid.

- There are several areas within the kit that the Naming Convention Asset can be used.
- To use the asset, simply drag and drop the asset into one or more of the fields discussed in the following pages.

- Slice Configuration File
  - There are two potential fields.
  - "Output Naming Convention": Providing a naming convention asset to this field will cause the slicing tool to generate slices (and TerrainData) that utilize that naming convention.
  - "Input Naming Convention": This option is only displayed when the "Slice Method" is set to "Slice Terrain Group." This can be used to set the naming convention of the group that you wish to slice.

- Scene Generation Tool
  - There are two potential fields.
  - "Output Naming Convention": Providing a naming convention asset to this field will cause the scene generation tool to generate scenes that utilize that naming convention.
  - "Input Naming Convention": This dictates the naming convention used by the prefabs that are used by the tool to generate the scenes. The tool will not be able to find the prefabs if this is not set correctly (leave it blank for default).

#### World Grid Asset

There is a single field (Naming Convention) on this asset. The naming convention provided to this field is used by any World that uses the World Grid, both for runtime loading of objects/terrains and the in editor preview functionality.