Material Config XML

Example XML:

```xml
<materials version="3">
    <material name="mat_name" render_template="generic:DIFFUSE_TEXTURE:NORMALMAP" version="2">
        <diffuse_texture□file="texture/file/path/my_texture_df"/>
        <bump_normal_texture□file="texture/file/path/my_texture_nm"/>
    </material>
</materials>
```

TEMPLATES ARE **NOT** MODULAR!
A full list of template variables can be found in `shaders/base.render_template_database`

- `<materials/>` contains all of the material xml for the file.
  - Typically uses `version="3"`
- `<material/>` contains the information of a material.
  - Typically uses `version="2"`
- `<diffuse_texture/>` a variable that often uses a texture with the identifier _df at the end.
- `<bump_normal_texture/>` a variable that often uses a texture with the identifier _nm at the end.
- `<material_texture/>` a variable that often uses a texture with the identifier _gsma at the end. (Gloss, Specular, Metalness, Alpha)
- `<reflection_texture/>` is a variable that loads a cubemap to a material that accepts cubemaps.
  - `<reflection_texture type="cubemap" global_texture="current_global_texture/>"` will use the Environment set cubemap.
  - `<reflection_texture type="cubemap" file="texture/file/path/my_cubemap"/>` will use a locked cubemap and wont change from environments.

Special Use Cases

- `<material/>` control options:
  - `name="mat_name"` give your material a name to go with your models material name.
  - `render_template="template_name"` a full list of templates can be found in `shaders/base.render_template_database`
  - `unique="true"` is usually used for materials that will change per-unit. Unit contours for example.

- ○ `src="name"` will clone the values from an existing `<material>` to your current material.
  - ○ cloned materials can be modified further by including variables or textures to override the source copy.
- ○ `decal_material="id"` graphic mesh faces with the material will use the `decal_material` variable for hit effects.
  - ○ List of decal IDs can be found in `lib\tweak_data\tweakdata.lua` `self.materials = {list}`
- ○ `diffuse_color="255 255 255 255"` potentially unused. (Red, Green, Blue, Alpha)
- ○ `version="2"` most if not all templates use version 2.
- • `<variable/>` control options:
  - ○ Animations can control some variables using the listener type.
    - ○ Standard variable: `<variable name="il_tint" type="vector3" value="1 1 1"/>`
    - ○ Listener variable: `<variable name="il_tint" type="listener" value="light::color" object="lo_lightobject"/>`

Revision #11
Created 21 August 2020 04:45:15 by Rex
Updated 2 July 2021 16:43:16 by Rex