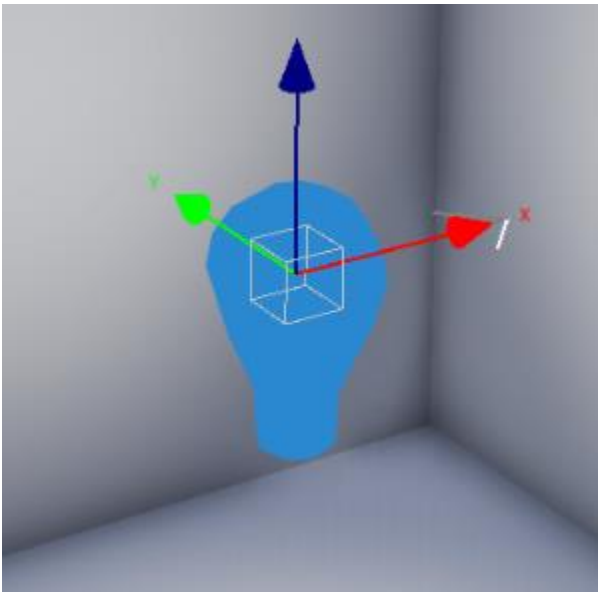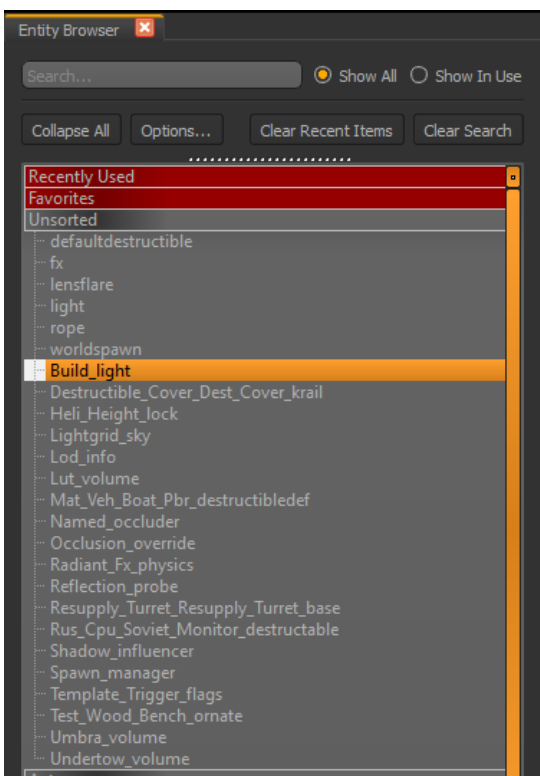# Build_light

A Build_light is a simplified and distinct version of the light entity, allowing builders a means of quickly laying down lighting, independent of lighting department workflow.

- Build lights can be omitted from the LED, and toggled on/off in render flags.
- Build lights have fewer KVPs than regular light entities, removing many attributes used for lighting polish/shaping.
- Build_light can be found in:
- Radiant: Entity Browser > Unsorted > Build_light

Build Light KVPs:

- **_color:** set light color by clicking …
- **angles:** angles triplet can be used to set rotation (can also rotate light by selecting and hitting r key to enable rotation manipulation handles)
- **fov_outer:** relevant when using PRIMARY_SPOT, "fov_outer" controls the spotlight's cone size
- **origin:** origin of the light
- **PRIMARY_TYPE:** can choose 1 of 2 options for type of light:
- **PRIMARY_OMNI:** omni lights emit light in all directions from a single point.
- **PRIMARY_SPOT:** spotlights emit light in a cone shape, width of cone set by "fov_outer"
- **radius:** range from origin that the light will illuminate
- **stops:** brightness of the light

Toggling contribution to the LED:
- Build_lights can be added/removed from the LED with the "Export build lights" checkbox, in Radiant: File>Lighting Export…

Toggling visibility in Radiant:
- Build light visibility can be turned on/off with the "Use Build Lights" render flag

Notes:

Build lights are currently set with static shadows. This means that lights will cast shadows but only from static objects. Dynamic objects will receive shadows from these lights but you will not see live shadows cast from things like characters or moving vehicles. Shadows are one of the most expensive parts of the lighting pipeline so this was the best way to manage performance without having to put much time or thought into light placement.