Object Xml

Example XML:

```
<dynamic_object>
 <diesel materials="units/path/material_config" orientation_object="rp_rootpoint_object" />
 <sequence_manager file="units/path/sequence_manager" />
 <bodies>
  <body name="body_static" enabled="true" template="static">
   <object name="c_collision" collision_type="box" padding="-2.5" />
  </body>
 </bodies>

 <decal_surfaces default_material="stone">
  <decal_mesh name="dm_decalmesh" enabled="true" material="steel" />
 </decal_surfaces>

 <graphics>
  <object name="g_graphics" enabled="true" shadow_caster="true" />
 </graphics>
</dynamic_object>
```

- `<diesel/>` is a required table that holds a path to the materials and root object.
  - `materials="path"` leads to the material config the unit will use.
  - `orientation_object="rp_rootpoint"` the object that acts as the origin of the unit, must be an Empty object.
- `<sequence_manager file="path"/>` is its own table defining the sequence manager the unit will use.
  - **Warning!** `<extension name="damage" class="UnitDamage" />` is required in the units extensions!
- `<bodies/>` is the table that holds collision information.
- `<body/>` is the table that holds the objects that will be used as collision.
  - `name` is the name of the body you are making.
  - `enabled` is a toggle for if collision should be enabled.
  - `template` is the physics template of the body.
    - `static` is solid collision.
    - `editor` is editor only collision.
    - a full list of templates can be found in `settings/physics_settings.physics_settings`.
    - templates can be edited in object by adding properties seem in the physics_settings file.

- `<object/>` is the table that holds the referenced object. (The same object can be used more than once)
  - `name` is the name of the object being used.
    - Using empties will bind the body to the empty for constraints.
  - `collision_type` is the shape/type of collision.
    - `box` is a box.
    - `sphere` is a sphere.
    - `capsule` is a pill shape.
    - `convex` is a convex shape based on your used object mesh.
    - `mesh_mopp` is a paper thin collision that is 1:1 the shape of your objects mesh.
  - `two_sided` is a toggle for if your collision should be double sided. (Very buggy!)
  - `padding` is the additional thickness in cm of your object.
    - Default 0 leaves models 2.5cm thicker, use -2.5 to correct it.
    - Does not apply to mesh_mopp collision.
- `<decal_surfaces/>` is the table that holds a list of meshes to act as decal surfaces. (Blankets that allow decals to spawn)
  - `default_material` is used if no decal material information is avaliable when hit.
- `<decal_mesh/>` is a table that holds a specific object to act as a decal surface.
  - `name` is the name of the object being used as the decal mesh.
  - `enabled` is a toggle for if decal_mesh should be enabled.
  - `material` to be used when shot/hit.
- `<graphics/>` is the table that holds all of the graphics objects.
  - `<object/>` is a table that is used to control the selected graphic.
    - `name` is the name of the object being used as the graphic.
    - `enabled` is a toggle for if the graphics should be visible.
    - `shadow_caster` is a toggle for if the graphics object should cast a shadow. (typically used by shadow_caster material objects. `s_shadowcaster`)
- `<constraints/>` is a table that holds all of the constraint information.
- `<constraint/>` is a table that constrains objects together.
  - `enabled` is a toggle for if the constraint should be active.
  - `type=""` sets the type of constraint.
    - `static`
    - `ragdoll`
  - `<param body_a="body_a" body_b="body_b"/>` Attaches A to B.
    - Attaching to world requires `@world` to be used as `body_a`.
  - `<param pivot="position:a_object"/>` Sets the position to pivot from.
  - `<param twist_axis="yaxis:a_object" twist_min="-10" twist_max="10" twist_freedom="1"/>` Sets the twist axis and control.
  - `<param plane_axis="xaxis:a_object"/>`
  - `<param cone_y="60" cone_z="60" cone_freedom="12"/>` Limit the angle the constraint can rotate.
  - `<param damping="8" spring_constant="600" min_restitution="0"/>` Spring settings.

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