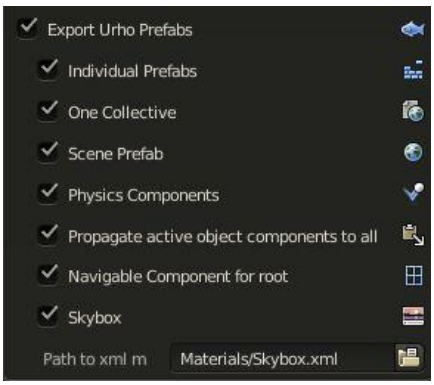
**PREFABS GENERATION OPTIONS**




Prefabs are the equivalent of AssetImporter 'node' and 'scene' commands. They are xml files used to respectively describe a node with all its components, or a hierarchy of nodes.

Their generation is toggled at the end of the main 'Urho export' panel, under 'Export Urho Prefabs'.

Three export modes are available:
- 'Individual Prefabs' to generate a prefab for each object
- 'One Collective' to generate a global prefab for all the objects
- 'Scene Prefab' to generate a prefab for the whole scene, with specific scene components

Any individual per-object parameter for StaticModel, AnimatedModel, RigidBody and CollisionShape components can be set in the 'Urho3D ~ Components' panel (see Per-Object Settings section below).


Output one prefab per exported object. This option also applies when merging objects at export ('Merge objects' enabled), as you end up with only one exported model.
Each xml file is named according to the object's name, except when 'Merge objects' option is enabled (xml file is then named according to the selected object's name).


Create one unic/global prefab containing every exported objects, while retaining hierarchy. An empty root node holds the objects.
Note: set 'Origin' to 'Local' if you want to preserve objects' transforms.
The xml file is named according to the scene's name.
Note that this option is not available when 'Merge objects' is enabled, as we end up with only one object.


Creates one unic/global scene prefab containing every exported objects, while retaining hierarchy. Octree, PhysicsWorld, DebugRenderer, Light and NavigationMesh components are created, for the scene to be usable as is.
Note: set 'Origin' to 'Local' if you want to preserve objects' transforms.
The xml file is named according to the scene's name.

If you want to benefit from Blender's instancing capabilities, you can use the 'Export Scene Prefab' addon instead, which is documented in a separate guide.


Controls whether physics components (PhysicsWorld, RigidBody and CollisionShape) should be exported for the prefab(s).
When physics is enabled, you can selectively toggle physics on/off for each object in Properties > Object > 'Urho3D ~ Components' > 'Activate Physics'.

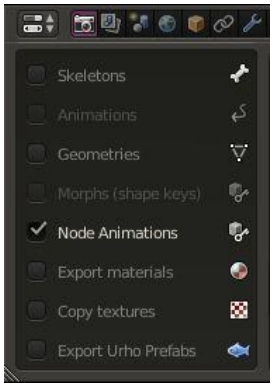

By default components settings are inherited from each exported object (per-object settings in Properties > Object > 'Urho3D ~ Components' panel, see below).
This option allows to apply settings from the 'active' (last selected) object to every exported objects (individual settings for non-active objects are discarded).


When using Navigation in your Urho3D scene, this option allows to create the 'Navigable' component at the root of the scene, allowing each node to participate in the NavigationMesh generation. Disabling this feature allows to selectively toggle Navigable component creation for each object (see Navigable section below).


When exporting as a scene ('Scene Prefab' enabled), you can optionally browse to a skybox material (xml file) and make the path relative to Urho3D 'Data' folder.
By default the path is set to Urho3D 'BrightDay' skybox.

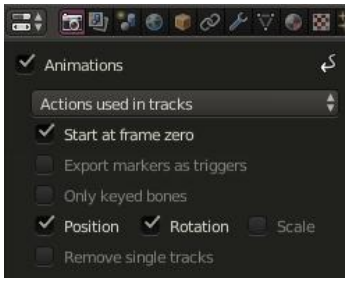
## NODE ANIMATIONS

Node animations are documented here :
https://urho3d.github.io/documentation/HEAD/_skeletal_animation.html
and have been discussed here :
https://discourse.urho3d.io/t/solved-export-animated-node-transforms-to-urho3d/1067




Simply enable the 'Node Animations' option and set the 'Animations' settings as you would do for a skeletal animation.

Note that to be able to access the 'Animations settings, you will have to (temporarily) enable 'Skeletons'.



## PER-OBJECT SETTINGS


Per-object settings are found under Properties area > Object data > 'Urho3D ~ Components'.

Note that these settings can be overridden in the main 'Urho export' panel, especially 'Navigable component for root', 'Physics Components' and 'Propagate active object components to all' settings.

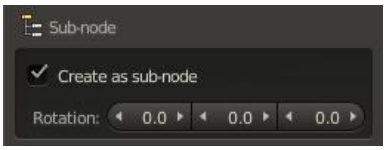
Finally note that in each panel you can press the  button to revert back to Urho3D default settings.

---


In this panel you will find StaticModel or AnimatedModel settings for the object.

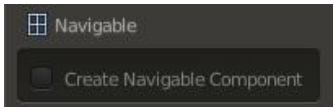
Nothing fancy here, these settings are 100% on-par with what you can find in the Urho3D Editor.

---




When exporting 'Individual Prefabs' you may want to parent the StaticModel/AnimatedModel to a sub-node to allow independent rotation (in degrees) from the root node.

---




Create a 'Navigable' component for the object, enabling it to become part of the NavigationMesh.

Note that this setting is discarded when 'Navigable component for root' is enabled in the main 'Urho export' panel.

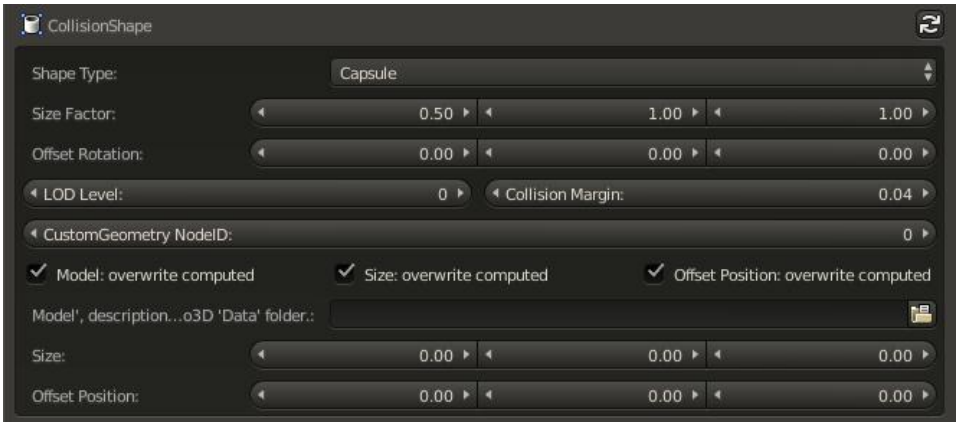
---


Enabling this option allows to both:
- trigger physics components (RigidBody & CollisionShape) generation for the object in the prefab
- display the available custom settings for the physics components.

Most of the settings are self-explanatory as they are on-par with what you can find in the Urho3D Editor. We will focus only on specific settings that are designed to give more control on what's automatically computed for you.

Finally note that to actually enabling physics export, you also need to activate 'Physics Components' option in the main 'Urho export' panel.

---

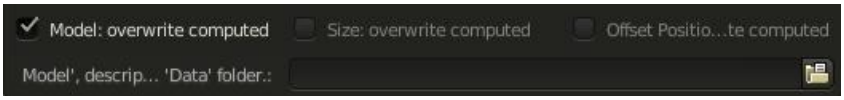



The CollisionShape panel provides following features that differ from Urho3D Editor:

By default, the exported object is used as TriangleMesh 'Model' (so you don't need to set it yourself).

However you may want to use a different model, for example a simplified geometry when strict accuracy is not mandatory, or a merged geometry (one geometry for many models), to avoid polluting Bullet's broadphase.

To do this, enable 'Model: overwrite computed value' option and browse to your *.mdl model file. Then make the path relative to Urho3D 'Data' folder.

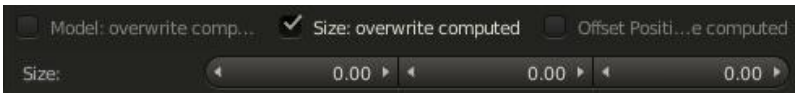



By default the 'Size' and 'Offset Position' of the CollisionShape are computed from the object's bounding box.

However you may want to use different values depending on your object topology and shape type. To achieve this you can :

- use the computed values and adjust them with a 'Size Factor' (width, height & depth). For example, when exporting a character in 'T-pose' with a Capsule shape, set width 'Size Factor' to 0.5 to halve the Capsule's width :

- completely skip the computed values and set 'Size' yourself by enabling the 'Size: overwrite computed' option.




By default the 'Offset Position' of the CollisionShape is computed from the object's bounding box.

However you may want to use different values depending on your object topology and shape type. You can set 'Offset Position' yourself by enabling the 'Offset Position: overwrite computed' option:


---


The RigidBody panel allows to set classical RigidBody behavior.

Nothing fancy here, you can find exactly the same options as in the Urho3D Editor.

---