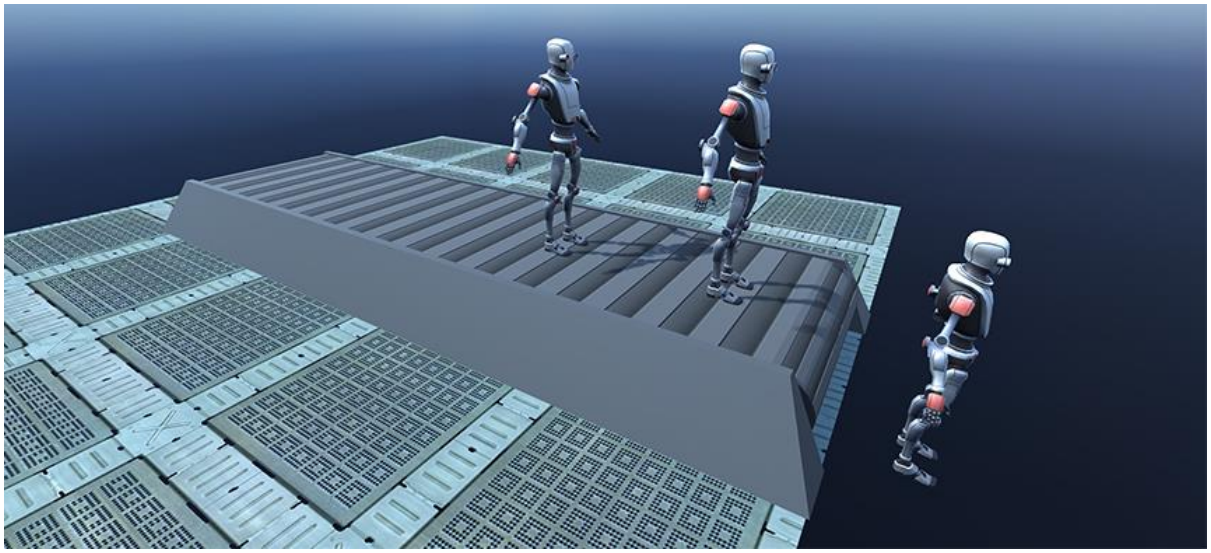
Updated: 10/10/2016

Working Conveyor Unity Asset User Guide

Created by: N00BZILLA STUDIOS



This guide has been written for those who have purchased the Working Conveyor asset from the Unity Asset Store, to help developers get the most out of the product.

The Working Conveyor asset has been designed as a simple game asset for prototyping game designs that require a scripted, working/moving conveyor model that can move game objects.

The textures and models used on the asset are intentionally very basic/ neutral and are intended for testing and development.

A video showing the conveyor asset working can be seen on youtube at:
https://youtu.be/s193kcGzWig

PLEASE NOTE: With the update, the way in which the conveyor interacts with objects has changed. The script no longer freezes the rotation and gravity of the object. Objects now interact with the conveyor in a far more realistic sense.

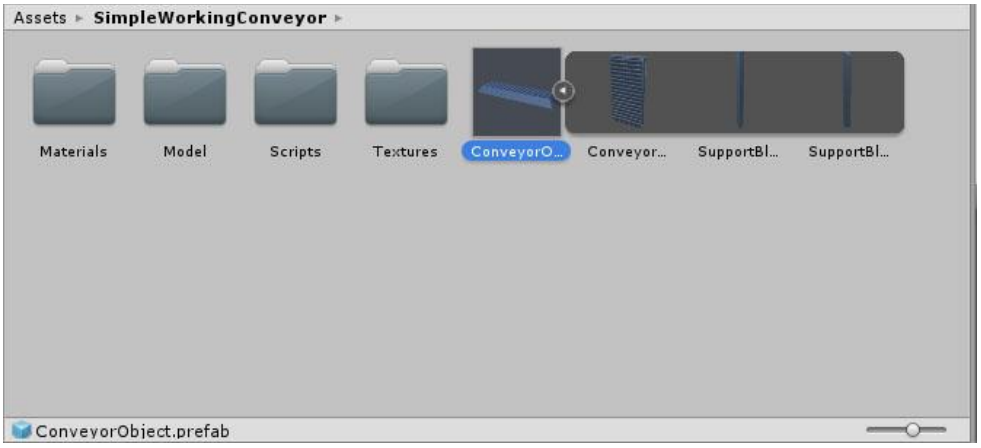
If you enjoyed using this asset then I would be very thankful for any reviews on the asset store:

https://www.assetstore.unity3d.com/#!/content/63374

Updated: 10/10/2016

How to use the working conveyor in your scene

Once the SimpleWorkingConveyor package has been imported into your asset folder, open it to observe the included files as shown below.



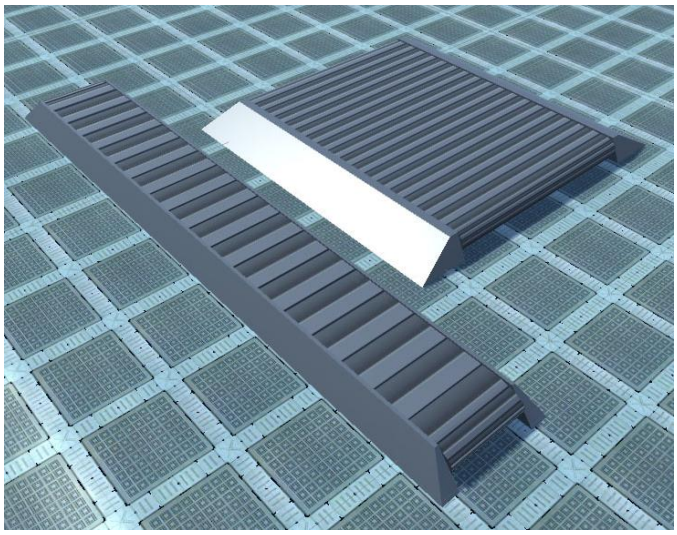
The main file you will be using is the ConveyorObject.prefab, which can be click drag and dropped into your scene ready for action.

The ConveyorObject prefab is characterised by three parts:

1. ConveyorBelt: The most important/ functional part of the prefab.
2. SupportBlock1: Simple mesh that act as a visual supporting guide for the conveyor's belt.
3. SupprotBlock2: The mirror of SupportBlock1.

Size, Position and Rotation

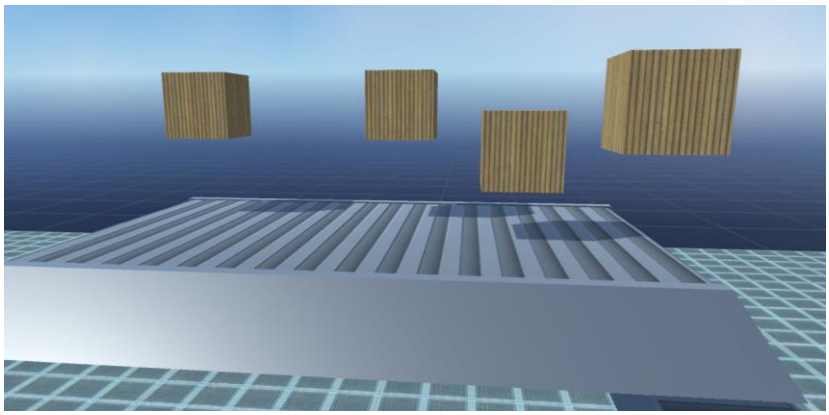
The ConveyorObject prefab can be adjusted in terms of its position, rotation and its scale in the inspector. To change the size of the conveyor, the scale can be adjusted at the Parent object level (ConveyorObject) and the conveyor should still work as required. In this way the conveyor can be lengthened or widened as necessary.



Updated: 10/10/2016

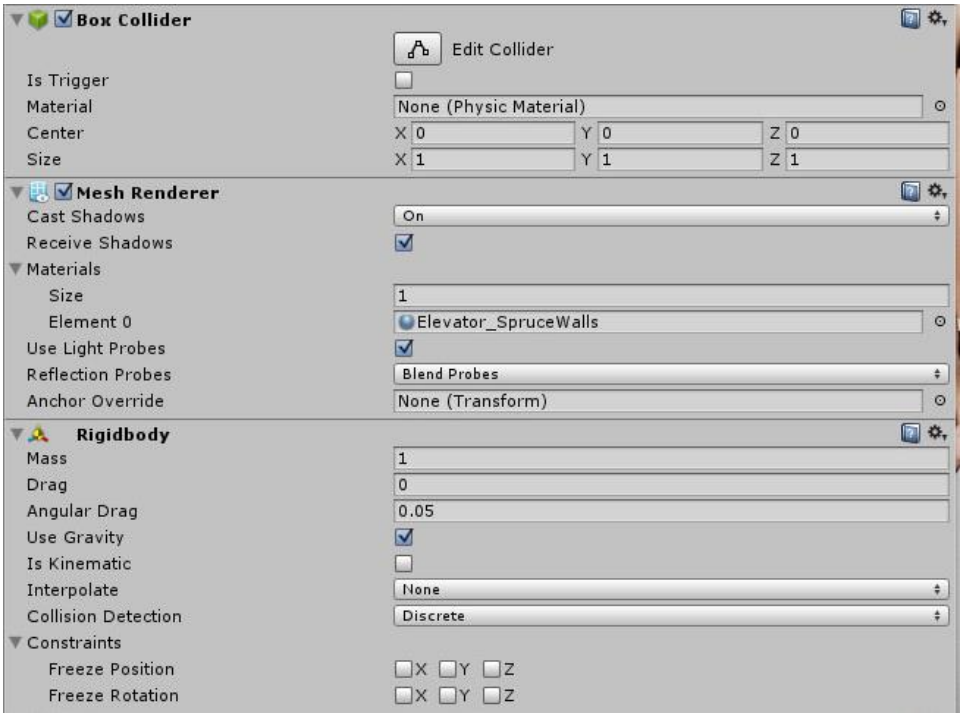
Setting Up Objects to be Moved by the conveyor

The conveyor works by moving objects that have just collided with it. It is intended to work on game objects that fall on top of the belt. For my test scenes I start the objects to be moved along the belt a little bit above the conveyor and let them drop onto the surface. Starting objects on/ (a little bit inside) the belt seems to work also but I have not tested this scenario as extensively.



For a gameobject to interact with the conveyor belt it must have the following components:

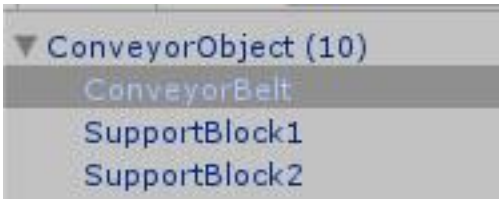
- A collider.
- A rigidbody. Note that the rigidbody's mass and drag parameters can affect how the belt interacts with the gameobject. If the gameobject is too heavy, the belt may struggle to shift it.



Updated: 10/10/2016

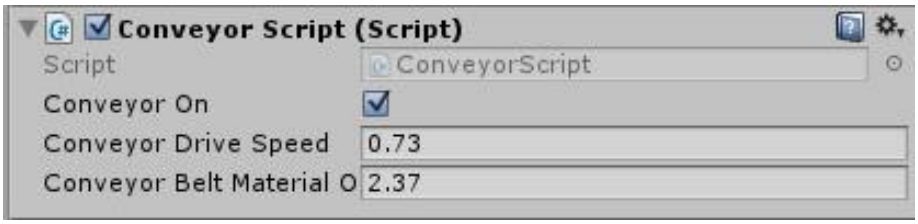
Controlling the Conveyor

The main control of the conveyor is all connected to the ConveyorBelt object (which is a child of the main prefab ConveyorObject).



By selecting the ConveyorBelt object in the scene, the important parameters can be controlled in the inspector.

In the inspector pane, there should be a component named Conveyor Script as shown below.



The following parameters can be controlled by the script:

- Conveyor On: toggling this Boolean value turns the conveyor on and off.
- Conveyor Drive Speed: a float that controls the speed of the conveyor belt which effects the speed of whatever that falls on the conveyor and also the speed of the moving belt texture. A negative value will make the belt drive backwards.
- Conveyor Belt Material Offset Constant: This number acts as a ratio (of actual belt speed to belt texture display) for controlling the scrolling speed of the belt texture. Increasing this value means that the belt texture will scroll more relative to the conveyor drive speed. This is useful for adjusting the belt texture scrolling speed so it matches the speed of objects moving along the top of the conveyor for a more realistic looking animation. While playing the scene, with an object on top of the conveyor, this ratio can be adjusted to find the optimal number that results in the animated belt speed matching the speed of the objects travelling on it. Note that as the conveyor is modified in its scale that this number may vary.