

Amazon Sumerian

VR Asset Pack

Tutorial

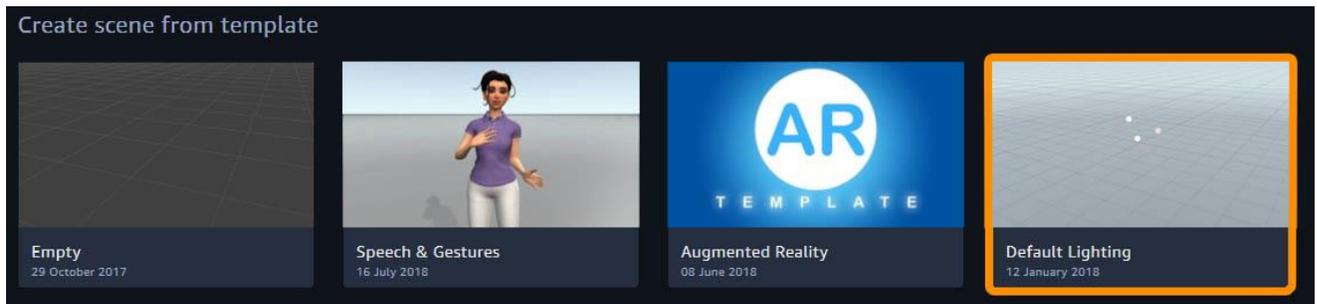
The new VR Asset Pack is a suite of experimental scripts and UI elements that make it easier to author cross-platform interactive scenes using Amazon Sumerian. The pack automatically detects supported controllers, and allows developers to customize button input colors and animation. It also provides an easy way to add functionality such as teleporting and emitting custom messages that trigger state-machine behaviors.

This tutorial includes the following topics:

- Importing the VR Asset Pack into a scene
- Adding VR teleport functionality to entities
- Adding functionality to entities in VR that trigger state machine behaviors.

Part 1: Getting Started

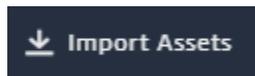
- 1) In the dashboard select the template named “Default Lighting”. When prompted, name the scene *VR Tutorial*



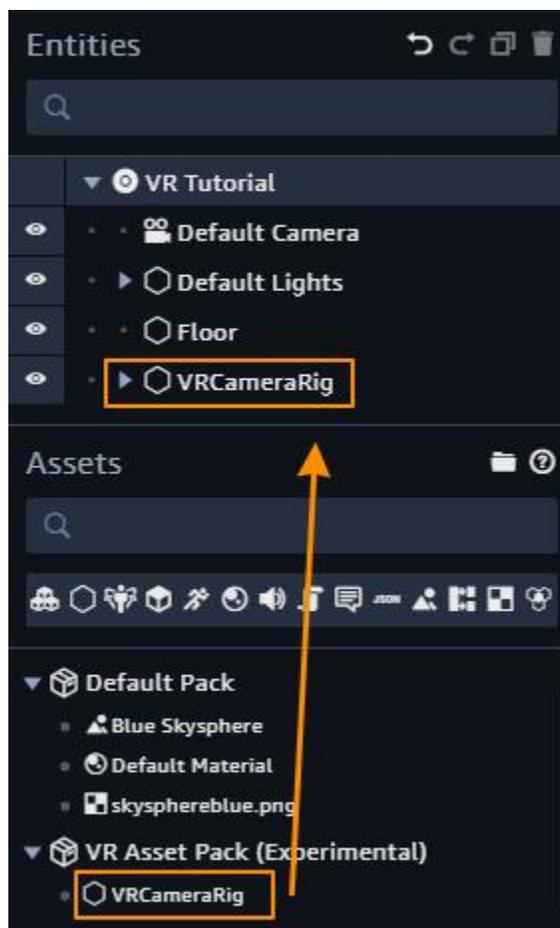
Import the VR Asset Pack

The VR Asset Pack may be imported into your scene by taking the following steps:

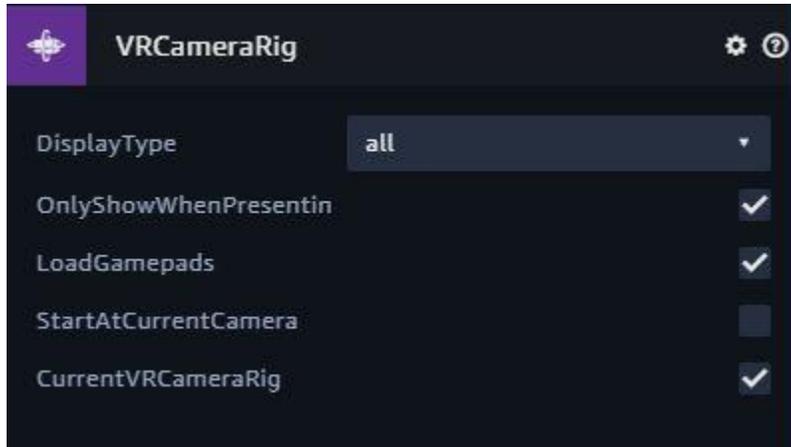
- 1) At the top of the editor, click on Import Assets and then selecting VR Asset Pack.



- 2) Once the asset pack's content has been loaded into the Assets window, drag the entity labeled VRCameraRig into the Entities window.

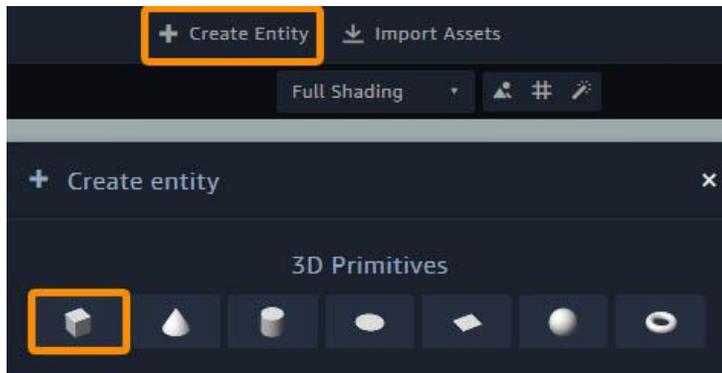


- 3) With *VRCameraRig* selected in the *Entities* window, expand the *VRCameraRig* component, and make sure that *LoadGamePads* and *CurrentVRCamera rig* are both checked.

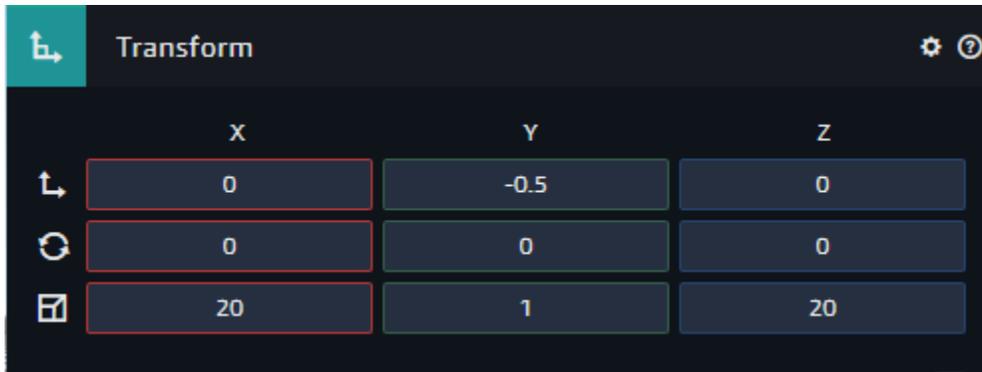


Create a floor

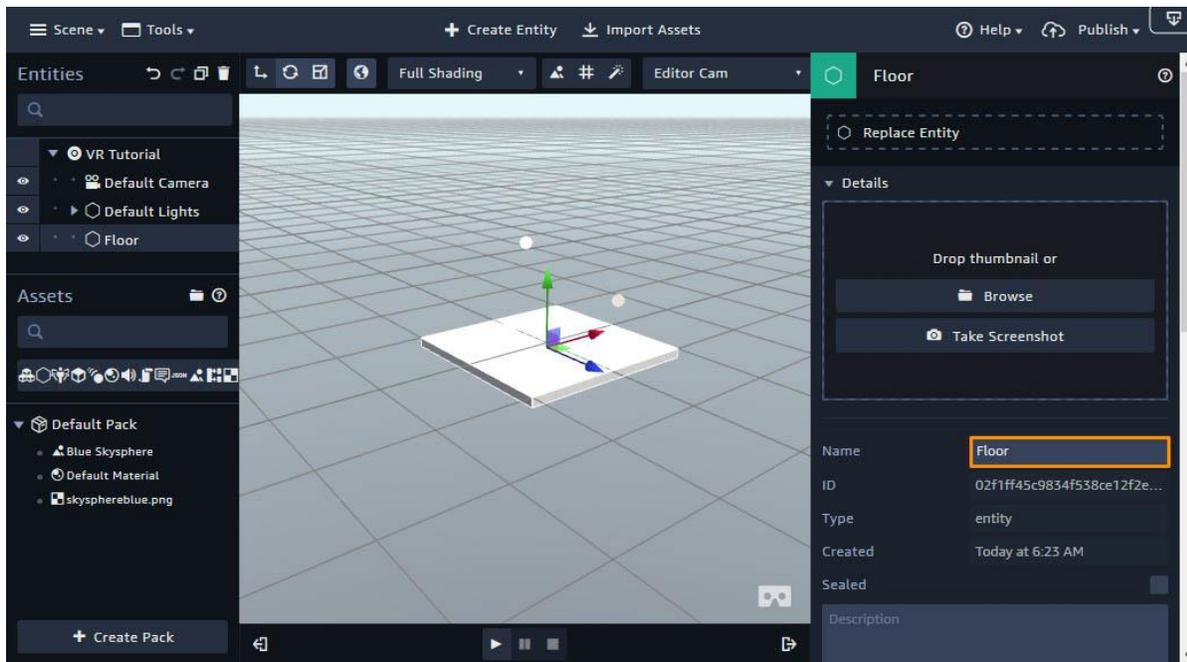
- 1) With the new scene loaded go to *Create Entity* and select *Add Box*



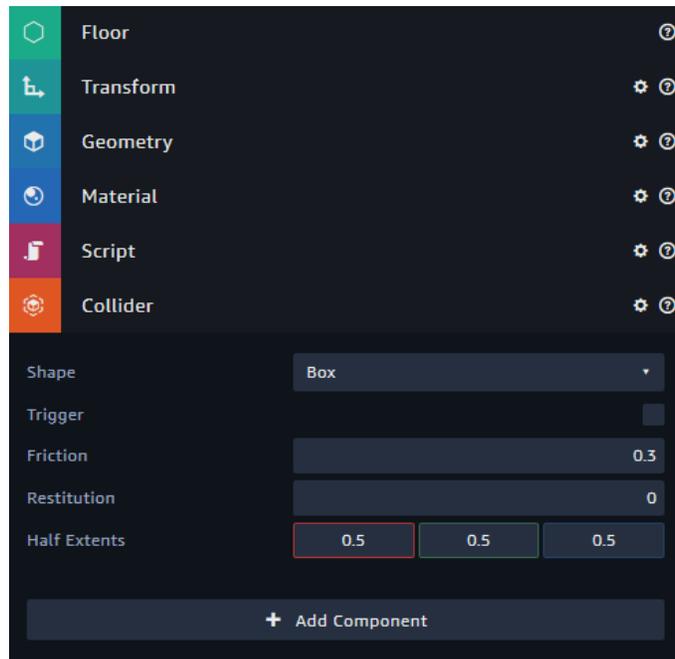
- 2) In the Box's transform component, set the Box *Translation* to 0, -0.5, 0 and the *Scale* to 20, 1, 20.



- 3) Click on the top icon in the components labeled *Box* and expand the section labeled *Details*. Rename the entity to *Floor*.

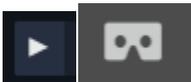


- 4) In the components window go click on *+ Add Component* and select *Collider*.



Part 2: Using the 'Teleport' action

- 1) Select the *Floor* entity.
- 2) In the component window, click *Add Component* and select *Script*.
- 3) Drag the script labeled *vr_action_object_teleport* to the *Drop Script* field on the script component.
- 4) If you are using a device that is connected to a PC, you may preview VR functionality in the editor by clicking the *play* button and then the *Start VR* button to start scene.



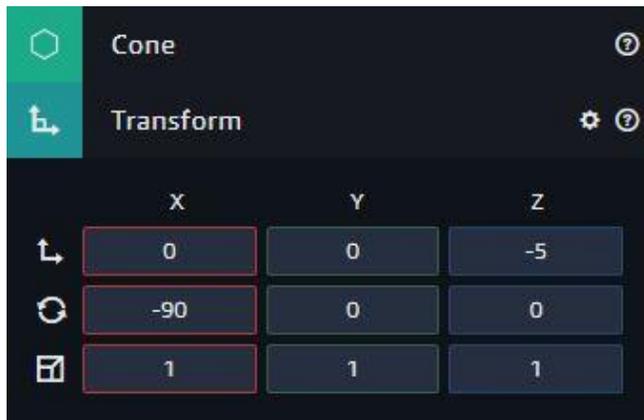
Otherwise you will need to [publish](#) your scene and visit the URL in your target device.

When the scene starts, aim the pointer at the floor. It will change into a teleport icon. Clicking the action button will transport you to the position of the teleport icon.

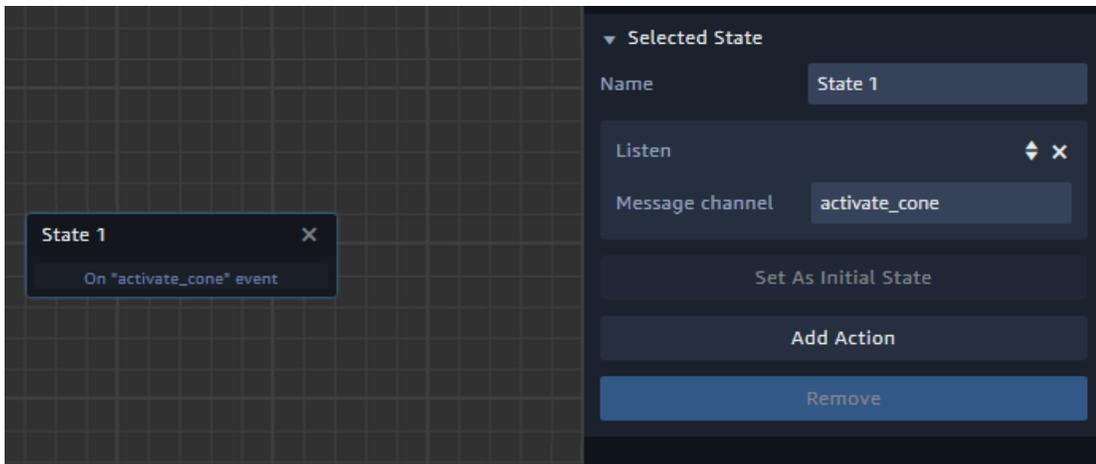
Note: If you are previewing on a PC you will need to exit *VR Mode* and click the *stop* button before continuing.

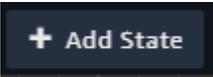
Part 3: Using the 'Activate' action

- 1) Click on *Create Entity* and select *Add Cone*.
- 2) Set the cone's translation to $0, 0, -5$. and rotation to $-90, 0, 0$.



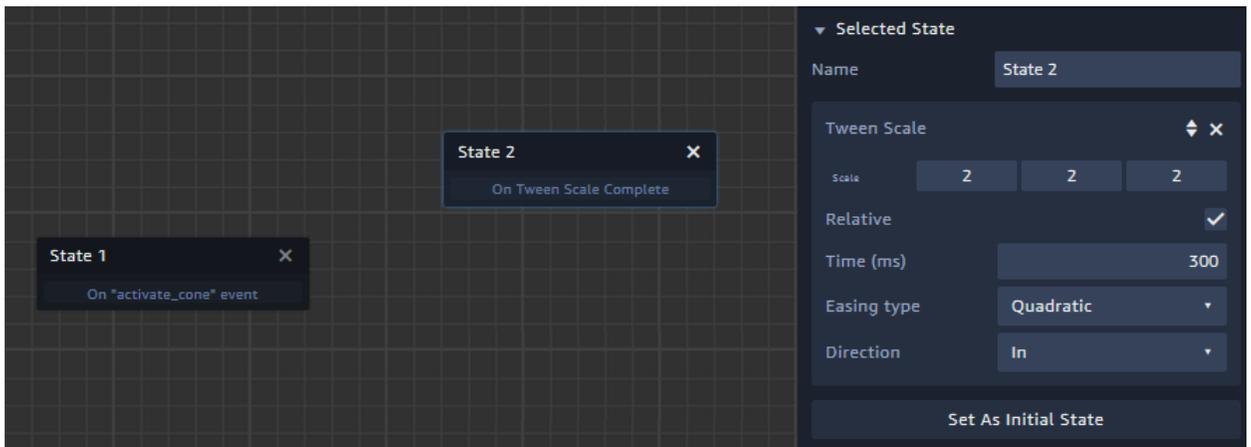
- 3) In the component window click *Add Component* and select *Script*.
- 4) Drag the script labeled *vr_action_object_activate* to the Drop Script field on the script component.
- 5) Set the *Input Message* setting to *OnActionButtonDown*.
- 6) In the *Emit Message* field, type *activate_cone*.
- 7) Click on *Add component* and select *State machine*.
- 8) In the state machine component press the button labeled **+**. This will launch the State Machine interface.
- 9) With State 1 Selected, click on *Add Action*. Use the search field to find the action named *Listen* and select it.
- 10) In the field labeled Message channel, type *activate_cone*.



11) Click the *Add State*  button to add a new state

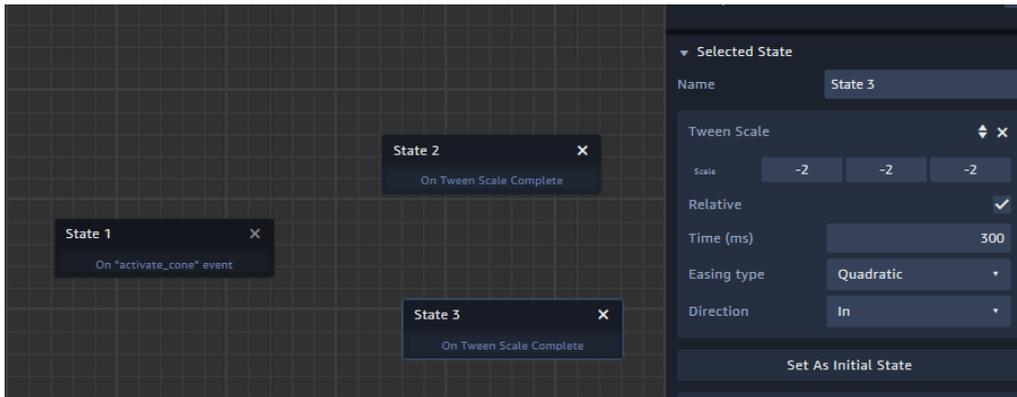
12) With State 2 selected, click on the *Action* button and select *Tween Scale*.

13) Change the scale to 2,2,2 the time to 300(ms), and the Easing type to Quadratic.



14) Duplicate State 2 and rename it to State 3.

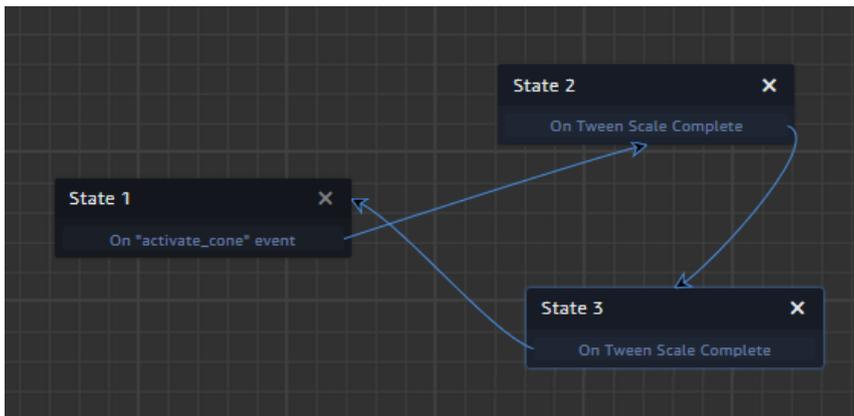
15) Change the *Tween scale* setting to -2, -2, -2.



16) Click and drag on the *On "activate_cone"* event on *State 1* to *State 2*. This will add a transition represented by a blue line.

17) On *State 2* click and drag *On Tween Scale Complete* to *State 3*.

18) On *State 3* click and drag *On Tween Scale Complete* to *State 1*.



5) If you are using a device that is connected to a PC, you may preview VR functionality in the editor by clicking the *play* button and then the *Start VR* button to start scene. Otherwise you will need to [publish](#) your scene and visit the URL in your target device.

Use the pointer to aim at the cone and click the action button. The cone will scale up and back down again.