



## **DOCUMENTATION 1.4.0**

A 360 TOUR TOOL & EXAMPLE PROJECT

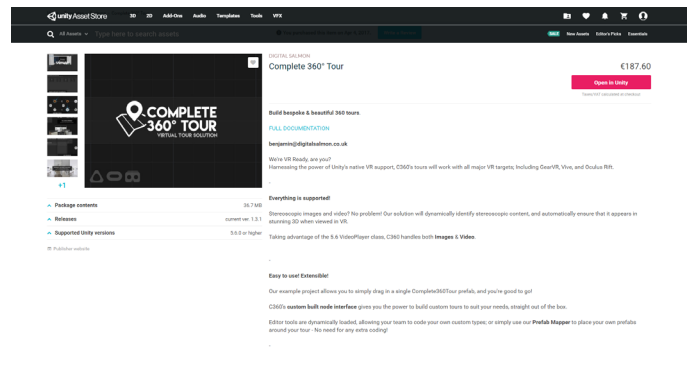
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# GETTING STARTED

## SETTING UP A PROJECT

### 1. IMPORTING THE PACKAGE

1. Create a new **Unity Project**, or open an existing one.
2. Open the Asset Store (Window | **Asset Store**).
3. Locate 'Complete 360 Tour' using the search box. Select 'Add To Cart', or 'Download', then 'Import'.
4. Import C360 into your project.
5. All C360 files will be placed into a new folder called '**Complete 360 Tour**'. You can move the folder to wherever you like within the Unity project.



### 2. SETTING UP THE PROJECT & IMPORTING MEDIA

Images, Videos, and Prefabs which are handled by C360 must all be imported into your project settings under a '**Resources**' directory. Subfolders will work fine too.

Any texture files must have **mipmapping switched off**.

- 1) The 360 images will be viewed from a fixed distance, and thus mipmapping serves no purpose.
- 2) Mipmapping will cause shading errors (Specifically a vertical line through part of your sphere).

### VR PROJECT SETTINGS

Navigate to Edit | Project Settings | Player | *Other Settings*, and select '**Virtual Reality Supported**'.

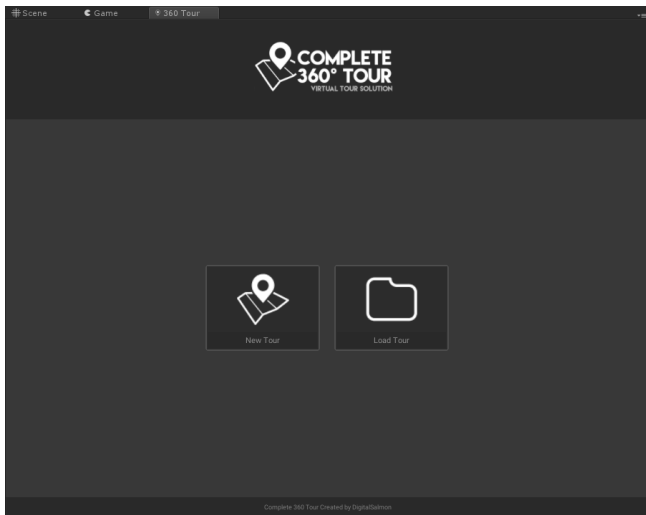
Select your **VR SDK**.

You may wish to remove the **MouseLook** and **SwipeLook** components from the camera in the example scene.

# BUILDING TOURS USING THE NODE GRAPH

## 1. THE COMPLETE 360 TOUR WINDOW

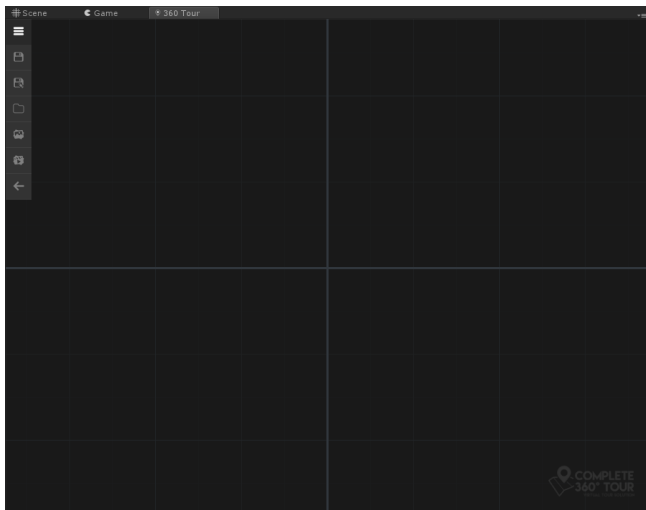
To begin, navigate to Window | **Complete 360 Tour**.



To create your first tour, select '**New Tour**'. A panel will open, prompting you to select a location to save your tour to.

Note: It is recommended that you place your tour somewhere inside your Assets folder, or a subfolder. Tours saved outside of your project will not be registered as a **TextAsset** by Unity, and will require you to implement your own tour loading system.

Once you have selected a location, you will see an empty node graph. This is where you will bring in your media and set up your tour.

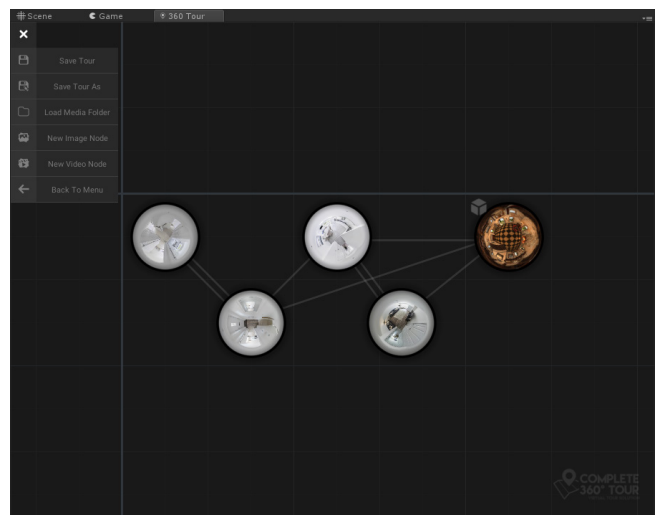


**Quick Tip:** You can load the last tour you opened quickly by **right clicking** the '**Load Tour**' button.

A simple menu can be toggled by clicking the **Menu** icon in the top left of the graph.

Don't forget to save your tour when you're ready.

Click '**Load Media Folder**' to bring in a whole folder of media, or use the '**New Image Node**' or '**New Video Node**' buttons to bring your media in one file at a time.



## 2. BUILDING TOURS

C360 has been designed to be very easy to use. It uses a simple gesture system to access tools, allowing you to build your tours with super speed.

### NAVIGATING THE GRAPH

To move your view around the graph, simple hold the **Middle Mouse Button** or **Right Mouse Button** and drag around.

**Quick Tip:** If you get lost, press the 'F' key to re-center your view on your graph or selected nodes.

You can click and drag with your **Left Mouse Button** to select multiple nodes.

You can move selected nodes by clicking on a selected node and dragging in any direction.

Nodes will snap to the grid when you release your mouse.

### GESTURE TOOLS

Gestures allow you to quickly and easily access graph tools. From version 1.4.0 there are 4 main tools.

In order to perform a gesture, press and hold your **Right Mouse Button** on a node, and drag your cursor away from the node. An arrow will extend from the node, and a highlight will indicate which tool you have selected. Simply release your mouse to activate the selected tool.



#### MAPPING PANEL TOOL

The mapping panel tool will open up a mapping view, where you can rearrange any mapped elements on your selected node, including **Hotspots** and **Prefabs**.



#### MAP PREFAB TOOL

A window will open, prompting you to select a **Prefab** from your project. Note the prefabs loaded by C360 must be placed in a **Resources** folder or subfolder.

The mapping panel will open, and you can place your prefab just like a hotspot.



#### CREATE HOTSPOT TOOL

Activating this tool will attach a wire from your node to your mouse cursor. Clicking on another node will create a **Hotspot**; The mapping panel will open and you can click wherever you would like your hotspot to be placed. The mapping panel will automatically close to speed up the process.

Once a hotspot has been placed it can be moved or deleted using the *Mapping Panel*.



#### SETTINGS TOOL

From 1.4.0, the Setting tool will open a new panel for changing node settings. Override the stereoscopic detection system, and set custom hotspot icon overrides from this panel.

If you attach a component to your prefab which implements **IMappedPrefab**, you will receive two calls from C360 when your prefab is shown in your tour, including a reference to the **NodeData** which is currently being viewed.

Using this interface, you can cast the referenced **NodeData** and use any relevant fields and properties to modify the prefab in your scene.

# VIEWING YOUR TOUR

## THE 'FRONT END'



### 1. SETTING THE SCENE

Once you have your nodes set, your hotspots mapped, and your tour saved, you're ready to play your tour!

The fastest way to get up and running is to open up the Example Tour scene, and change the Tour Data file in the Complete360Tour component. Just open up the scene and re-save it with your own scene name.

Take a look at the various components in the example scene, some of them have settings you can play with to customise your tour experience.

### THE TOUR OBJECT

The **Complete360Tour.cs** script requires a Tour Data file (The one you saved from the editor window), and that's it! You can also set up your **'Entry ID'** (The name of your first piece of media, which can be seen from the settings tool), and whether you wish to **Auto Begin Tour**.

If you are not playing your tour automatically, you can start your tour by calling **BeginTour()**.

### 2. CUSTOM HOTSPOTS

You're welcome to use the included Hotspot or to create your own. To create your own follow below;

Create your own class which inherits from **Hotspot**.

You can override the **IsActive** and **IsHovered** properties to update your visuals however you please (Or add sound etc).

If you would like to trigger your hotspot on a key press or some other input, simply call **HotspotActivated()**.

By default, hotspots are hovered over using the **'GazeInputRaycaster'** component on your camera. This uses the Physics.Raycast system to inform a hotspot of it being hovered or unhovered. For this reason, a collider (Trigger) component must exist on the same object as your Hotspot component.

The example comes with a simple **ExampleHotspot**, which you are welcome to use, modify, or replace however you like.

### 3. CAMERA COMPONENTS

The only vital component on your camera (or a forward facing child of it) is the **GazeInputRaycaster**. This script is modified from the VR Examples, and it simply informs anything implementing IPointerHandler of it being hovered over. This is the component that makes the Hotspots work.

A **SimpleMouseLook** and **SimpleSwipeLook** are included to help with basic input functionality.

The **ScreenTint** component is used when using a screen dip transition style in the Complete360Tour object.

**EntryYaw** can be used to set the yaw of the camera when entering new media.

**Absolute** - The transform will face forwards.

**Dynamic** - The transform will rotate so that the camera faces forward.

# FAQ

## FREQUENTLY ASKED QUESTIONS



### **DOES C360 WORK WITH 'X' VR HEADSET?**

There is no reason to think C360 would not function with any headset that Unity supports. We can't guarantee it'll work straight out of the box, but we'll certainly help anyone having issues.

### **CAN I BUILD FOR 'Y' BUILD TARGET?**

Any target which Unity builds to should work just fine. We primarily test on PC and Android/GearVR.

### **WHY DOES IT FEEL SO WEIRD USING POSITIONAL TRACKING?**

Even the most advanced stereoscopic 360 tours are still just spherical mappings - If you think about it, viewing the media from anything other than the centre of the sphere is a bad idea!

Turn off positional tracking, or keep the MediaView in centred to the players head position.

### **COULD YOU ADD 'X' FEATURE?**

Absolutely! Contact support, it's great to hear people's ideas! Don't forget you can map prefabs to your nodes, so there's already lots of room for you to extend the solution!

### **COULD YOU MAKE MY APP FOR ME?**

We get asked this suprisingly often! In theory, C360 can do most of the heavy lifting already, but lots of you guys come from non-Unity backgrounds. The best thing to do is email us, and we'll see how intensive the request is. We would rather be working on cool new features for C360 though, so we're not cheap!

### **MY MEDIA ISN'T STEREOSCOPIC! (AND IT SHOULD BE.. OR IT SHOULDN'T BE)**

Whoops! Stereoscopic detection is pretty good, but it's not perfect. You can override the 'IsStereoscopic' flag using the Settings panel in the node graph.

### **WHY ARE MY IMAGES BLURRY?**

We recommend a minimum resolution of 4096 \* 2048, a VR RenderScale of atleast 1.3 , no motion blur, **no mipmaps**, appropriate compression and filtering.

### **HOW DO I GET IN CONTACT?**

This isn't really a frequently asked question, since you couldn't ask unless you were in contact, however;

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