DOCUMENTATION 1.15.0

A 360 TOUR TOOL & EXAMPLE PROJECT

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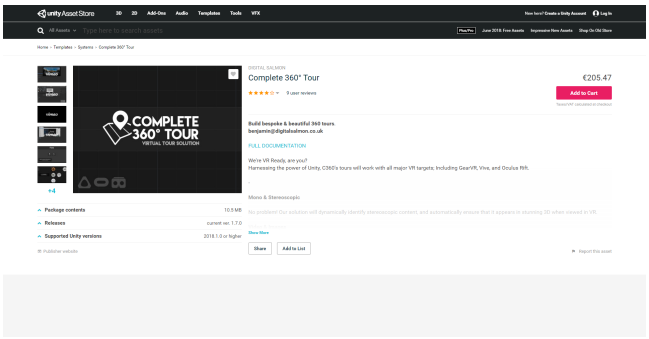
GETTING STARTED
SETTING UP A PROJECT

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

Create a Tour asset with Right Click | Create | Complete 360 Tour | Tour in the Project window, or locate the Example Tour asset.

Open the tour by double clicking it. It will open in a new window, which can be docked.

Drag media into the tour from the project window, or Right Click in the node graph to create new nodes.

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).

Selecting a Tour, Node, or Node Element (Hotspots or Prefabs) will select them in the project view, and update the Unity Inspector to serve relevant settings.

With a Node selected, you can add media sources using the Texture Load Datas and Url Load Datas.

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.

3. 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 Ctrl-Left Mouse Button** and drag around. Zoom using your mouse scroll wheel.

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.

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**.

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*.

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.

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 **Node** which is currently being viewed.

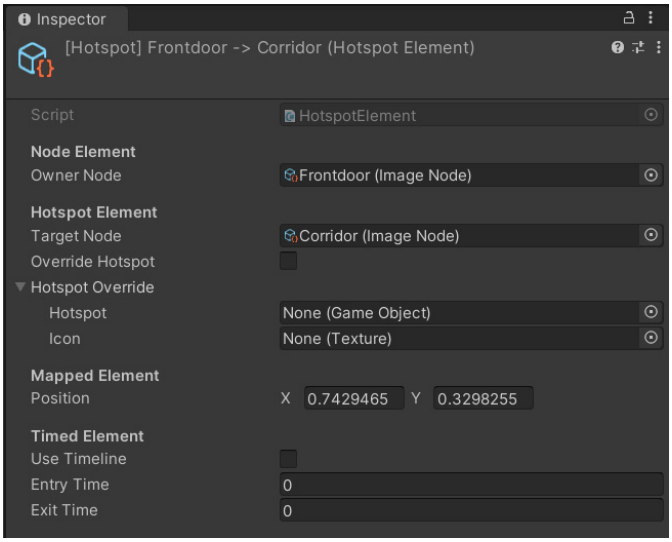
Using this interface, you can cast the referenced *Node* and use any relevant fields and properties to modify the prefab in your scene.

3. MAPPING PANEL

HOTSPOTS

Click and drag your Hotspots to move them.

To customise how your hotspots look, create *Prefab Variants* of your base hotspot, and add them to your tour file. Give them an icon, then select as a **Hotspot Override** in either a Node or Hotspot Element.



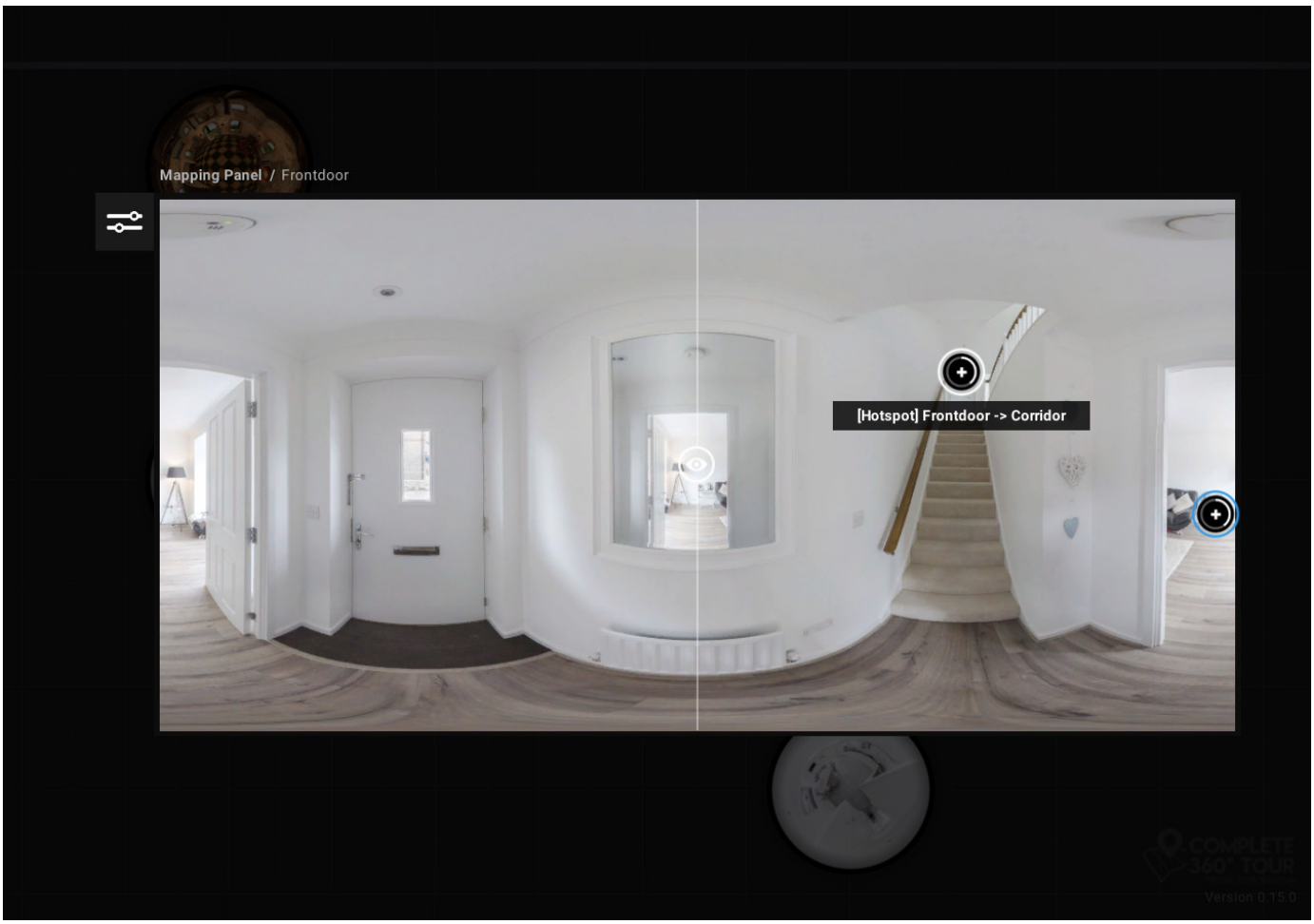
Quick Tip: Hold 'Shift' when you release your mouse when dragging a Hotspot to snap it to the grid.

PREFABS

Prefabs can be moved the same way as Hotspots.

DELETING ELEMENTS

To delete a mapped element, press the **Backspace** or **Delete** key on your keyboard whilst you have that element selected.



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 object. 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 setting you can play with to customise your tour experience.

THE TOUR OBJECT

The **Complete360Tour.cs** script requires you to select an '**Entry Node**' and whether you wish to **Auto Begin Tour**.

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

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 **OnSubmitted()**.
By default, hotspots are hovered over using the '**GazeInputRaycaster**' or '**MouseInputRaycaster**' components on your camera. Both components use the UI Graphic Raycaster system to inform a hotspot or prefab of it being hovered or unhovered.

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

3. CAMERA COMPONENTS

A **MouseLook**, **SwipeLook, and GyroLook** are included to help with rotating the camera in play mode. If you're using a VR SDK, you may want to skip or disable these components.

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

CameraBase is accesed by the **EntryYawReactor** component on your MediaView to rotate the camera to an appropriate yaw. This functionality may not work if your VR SDK does not support transform inheritance. In that case, you'll need to write your own code to manage entry yaw.

Absolute - Entry Yaw lines will all face north.
Dynamic - Entering a node will rotate the camera so that it is facing the Entry Yaw line.

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. Build your project without C360, then add C360 and you should be fine.

CAN I BUILD FOR 'Y' BUILD TARGET?

Any target which Unity builds to should work just fine. We primarily test on PC, but your build target/ supported features are limited only by Unity.

WHY DOES IT FEEL SO WEIRD USING POSITIONAL TRACKING?

Even the most advanced steroscopic 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)

There is a 'IsStereoscopic' option in the inspector when you select your node.

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. In our tests, good render settings put Unitys renderer on par with native ones.

CAN I SEE AN EXAMPLE BEFORE I BUY?

The best way to check out some example content is to jump on the Discord and see if anyone can share. In our experience, most users are creating commercial tours and can't share what they've made.

COULD I GET A TRIAL COPY?

We don't currently have a 'trial' version available. This might change in future, but for now we're afraid not.

COULD I HAVE COMPLETE 360 TOUR FOR FREE?

This asset supports it's own development, as well as the development of our studio. For now, we're not looking to sponser any charity/partnerships.

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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HELLO@DIGITALSALMON.CO.UK