v.1.6

Thank you for installing SuperPosition!

First thing to know is how to contact us if anything is wrong:

Email is preferred at:

shrinkrayentertainment@gmail.com

Join our Discord at:

https://discord.gg/kCWvkTax37


If you are enjoying this amazing asset, please leave a review!

GETTING STARTED

Please check out the Demo Scene for several interactive Tutorials which will get you familiarized with the workflow really quickly. Be patient, I'm confident you will get the hang of how this all works very quickly, but experiment in the demo scene first before you move on to your actual scenes.

1. Install the package, and add by going to Windows > ShrinkRay Entertainment > SuperPosition > Add SuperPosition to Scene
2. Do not delete this object, it contains all the states you save and references to any helper objects needed.
3. Any objects generated are "EditorOnly" and will not be included in builds
4. However, SuperPosition get's it's magic by using it's own ID system to keep track of objects, this requires it to add a tiny "SuperPositionID" component onto any object that is being tracked.
5. It's not a big deal, it literally contains two variables an int called "InstanceID" and a long called "ID". Please don't delete this component, you might break the space-time continuum.
6. You're ready to go! Click any GameObject and the SuperPosition window should detect it.
7. Tip: I recommend nesting the window either above the Inspetor window or the Scene window, but you can place it wherever you like.
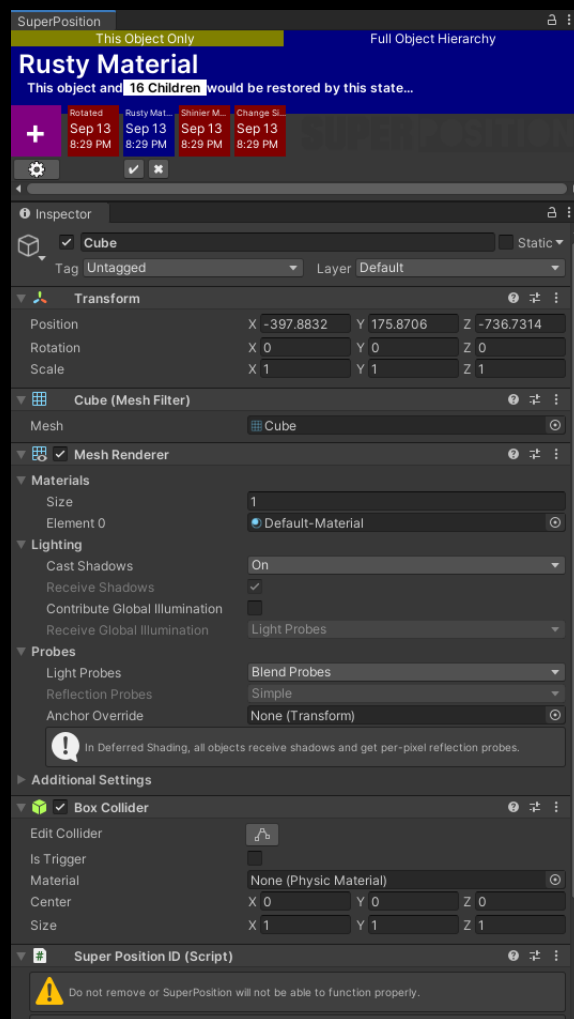
WHAT DOES SUPERPOSITION DO?

Simply put, SuperPosition will take a snapshot of the current state of a GameObject and, optionally, all of it's children so that it can be easily restored whenever you wish.

This Object Only
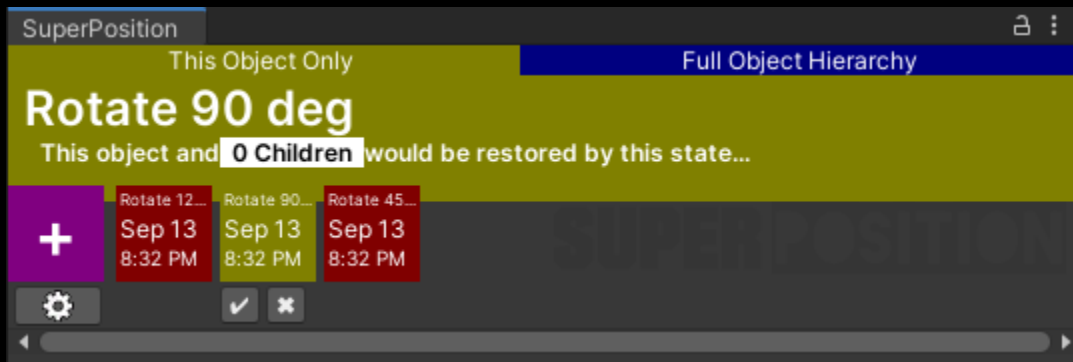
With this mode selected, only the state of the currently selected Object is Saved, the children will not be affected if this state is restored. In other words, it is "child safe".

FULL OBJECT HIERARCHY
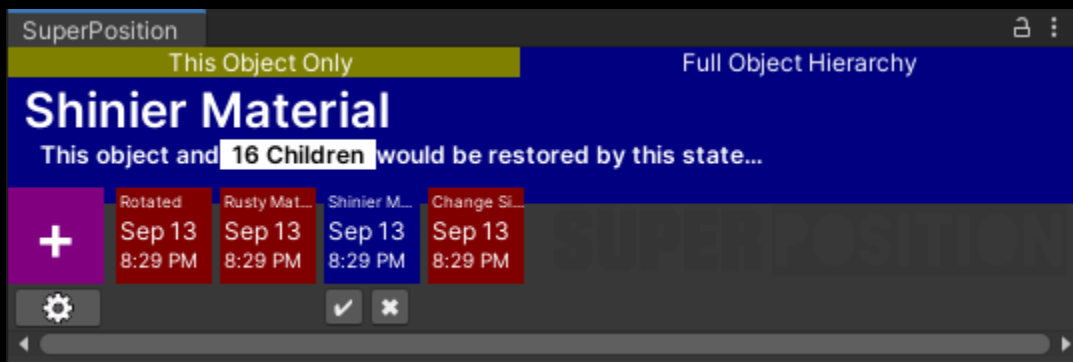
In this mode, a full capture of the entire object hierarchy is recorded. Restoring this state will affect all the children.

LOCKABLE

When configuring the arrangement of a number of children, it might be more convenient to keep the parent's SuperPosition locked. Easy! Just hit the lock button and it'll stay focused on it, move whatever children you want around, then hit the big purple Plus to save the state(s). Don't forget to unlock it when done!
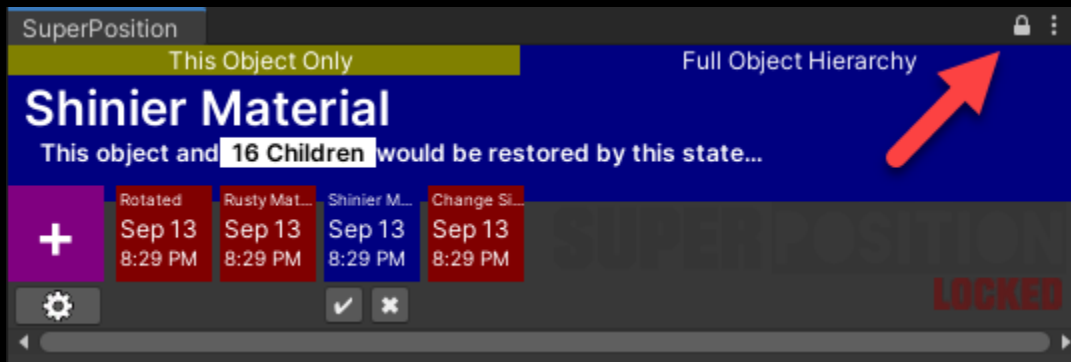
ADDING / DELETING CHILDREN

It is important to note that GameObjects are frequently connected together by dropping their reference into a public variable on another GameObject. SuperPosition is very careful about preserving this relationship however you should know not everything is possible.

Let's say you have a Tavern and you saved a state where there are no tables on the floor. Then you add the tables and save the state. What happens if you revert to the first state? While you might think the best approach is to simply "Delete" the objects, you might be surprised to see the tables you added are simply set to "Inactive" and disappear from the SceneView. This is because, what if you made one of the tables, then linked that new table to another GameObject for some reason? By simply setting it as "Inactive" it'll keep that relationship no matter what state you restore.

However! What if you delete an object that was within a SuperPosition? Take special care deleting objects, their references will NOT be restored. On the one hand, it may seem like flipping back and forth revives the object, but in reality the Unity Engine actually created a brand new GameObject that simply looks exactly like the old one – you will have to restore any reference links yourself.

To help you remember, we added "(Restored)" in brackets to any object that needs to be rebuilt. Feel free to remove that text from the title after you're sure there's no missing references to it.

This is not a bug, it is something you just need to be aware of and you'll be fine! If nothing else, at least you got 99% of the object you removed back. Honestly, it's really cool seeing a myriad of complex arrangements flash into existence at the click of a button!

EDIT THE TITLE
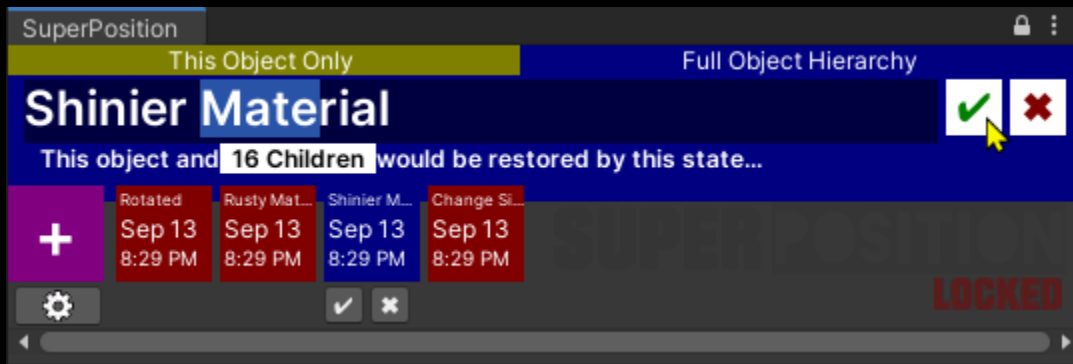
As of right now, there's no way to preview what you plan to restore (I'm experimenting with options for this in a future update), so the next best thing is to describe the State you plan to keep. Simply click on the Title and press Enter or the Green Check.

Note that I'm experimenting with a preview mode and, if it works as I hope, will be availble for free in an update in the very near future.

DELETE A STATE

Overtime it might get overwhelmed with many states. Practice good data hygine by removing states you never want to use again. Just press the X below it and confirm.

DUPLICATING AN OBJECT

Please know that duplicating an object creates a BRAND NEW object in the Editor, the states do not transfer to a duplicate. Best practice is to use the original object, cycle through whatever states you'd like to duplicate and do so. The new copies will be then also available to hold their own states.

UI EDITING

This works well! But as a tip, some Canvas components inherit from others. For best results, use the Blue Full Hierarchy mode and lock it at the top most canvas item that other UI elements will inherit from.

FAQ

DOES IT WORK ON PREFABS?

Yes, however it will not save the prefab itself. You'll have to still choose to "Override" the prefabs settings. Prefab support will be enhanced in future updates.

DOES IT WORK WITH OTHER ASSETS?

(Note: I'm working on a help document that will list my deep dives into as many 3rd Party Assets as I can, and let you know all the in's and out's of what SuperPosition will be able to do with it)

Many hours were spent testing SuperPosition with other assets, and this is an ongoing initiative to get as perfect as possible. Most addons are "simple" in their configuration and will work as you expect but some additional options are available if you encounter any strangeness when restoring state.

One interesting issue is that some scripts need to be initialized when restored. This doesn't get triggered automatically, as you might assume. It needs to be forcefully invoked when the component is being replaced. You can tell SuperPosition to invoke Awake(), OnEnable(), and/or Start() when restoring. During testing, we found it's generally safe to enable these but you can set them yourself if you know best.

Another funny thing about components is it's possible for a component to be removed but the script within it was loaded into memory and will still run. Next thing you know your console is flooded with Null References as the script can't find any references within the component that used to contain it. This isn't very common, but SuperPosition has a solution for this too, just set the Force Full Recompile option and everytime the state updates it will recompile all the scripts. Of course, if your project is very large this might not be very convenient as this could take awhile. So we recommend only using this as a last resort, and with objects that require such action, save states only if really necessary. Then again, it's not like you'll restore states every other second, so the delay may be perfectly acceptable considering the advantage SuperPosition gives you on saving your cool ideas.

Toggle options mode by hitting the gear below the Plus sign:
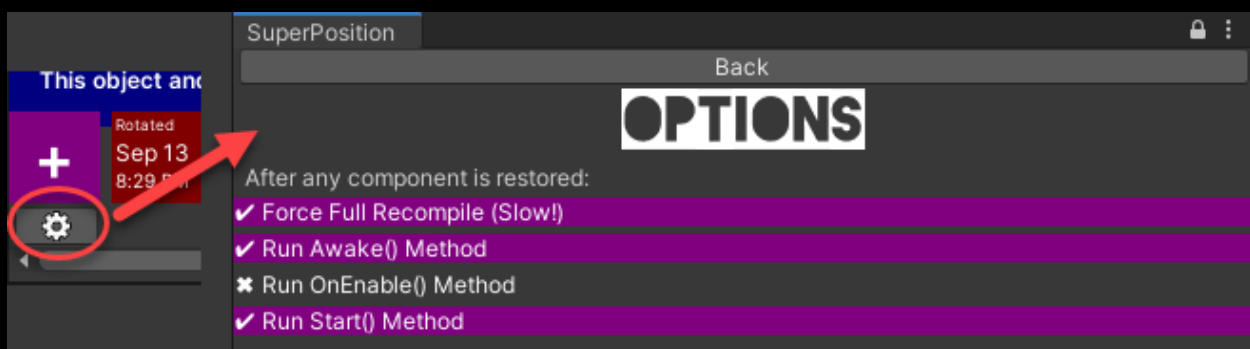
Another thing to note is that many sophisticated assets use SO's to store data. Think of a vegatation or weather system. Let's say you have an option in the weather system to "Choose Weather Presets", and there seems to be a file there you can select. This preset selection *WILL* be preserved by SuperPosition, however what about when you're actually editing the preset to change how the clouds look? SuperPosition will *NOT* work on ScriptableObjects as they're not actually scene files, they exist in the Project not the Heirarchy and as such fall outside the scope of this tool.

A work around for this is that many of these tools let you save versions of the ScriptableObject, anyway, so you can saveas "Thin Clouds" and "Fluffy Clouds" then save a SuperPosition for each profile being selected in the GameObject.

Also, some errors may be fired whenever saving the state of a 3rd Party asset. This is fine, the background process results in some sophisticated destroying/copying/restoring of components and running scripts sometimes get thrown off by this. Typically these are "Null References", but rest assured whatever it was referencing get's saved and restored. If it ends up in a null reference loop, you likely just need to utilize the "Recompilation" feature above so the script can rebuild it's references.

DOES IT WORK WITH ASSETS LIKE BOLT?

Yes! But only if your Flow Graph is set to "embed" on the Object (that way it saves it's date to the GameObject itself). If you are set up as a "Macro" then that means Bolt is using a external file (aka Scriptable Object) and in this situation SuperPosition will still work, *but will only be useful in saving which macro is selected*. This could be useful in many situations too. Note that Bolt also allows you to convert an Embedded flow into a Macro later so unless your graph needs to be modular, do most of the prototyping as Embed first then convert it after that way you can take more advantage of SuperPosition.

WILL IT PRESERVE STATES IN PLAY MODE?

Not yet! A future version *will* have this, but for now this is an Edit-Mode asset.

IS THERE AN API, CAN I USE THIS FOR MY GAME ITSELF?

No, that is not the point of this asset and in fact every helper object that SuperPosition uses will not be included in Builds. This is a productivity tool designed to let you explore possibilities when designing your games and building out your levels. However, if you did want to utilize two states you like within a game (say a set up of a Tavern at night vs daytime), then once you're ready just duplicate the object after restoring the day and night states.

WHAT DID I MISS?

We have a lot of ideas to add to this amazing workflow tool, but maybe you do too! Of course, if something isn't working right, let us know asap so we can fix it, but if you have a great idea that would make SuperPosition even better, let me know and there's a good chance you'll see it in a future update!

Customer Service is everything, so we promise to respond as soon as possible to any inquiries.

Thank you!

TASK ATLAS

Is a revolutionary way to keep track of your development in your scene. Put notes anywhere inside your scene. See where you are at all times thanks to on screen labels. Hit the Atlas button and see your entire world from above, like magic! If you're keeping notes or even using an external task manager right now, doesn't it make more sense to write them directly where you're working?

Find it at the Asset Store

EDITOR PORTALS

Is a fun and unique way of getting around your scene in a way you never thought possible. Just point into the distance, and fly there! A convenient preview window will show your final destination. That's not all! You can actually adjust the rotation and position and land exactly where you want, how you want!

Find it at the Asset Store

PERFECT F

Replaces and enhances the vanilla "F" key and 'fixes' it so that it actually works like you always expected it to. Never again will you zoom OUT when you almost certainly meant to zoom in. Beyond that, you'll love the ability to rotate left and right or tilt up and down around the Game Object. My favorite feature is Canvas mode where it will perfectly line up a Worldspace Canvas to your view so you can just get to work moving your UI around. Camera mode will put you exactly in the same vantage point as the camera you selected. And Terrain mode will hover slightly over and slightly above your terrain. It's perfect!

Find it at the Asset Store