

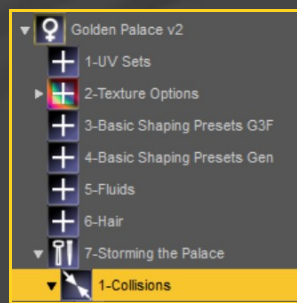
# STORMING THE PALACE... COLLISIONS!

~~Mini-tutorial~~

**General hint:** for complex collisions (penetrations,...) you need first to roughly setup the morphs for a shape close to the result, then to call the collision script and at last to fine-tune the morphs. For simple collisions (the touch of a finger...) the collision script can be enough.

## In order to set up the collision between Golden Palace and another object:

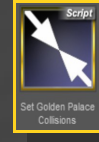
– Set up your scene. If the colliding object is one of G3F's own hands, load on G3F the matching invisible glove, or the double gloves if both hands are colliding with the gen.



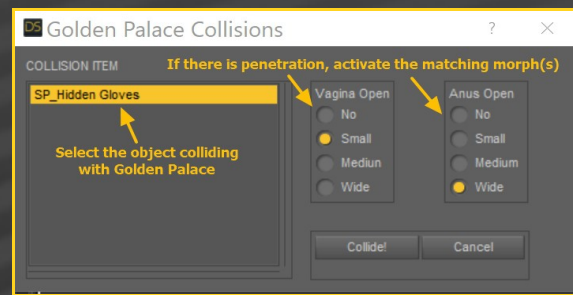
The gloves include morphs to thicken the

fingers in order to avoid clippings.

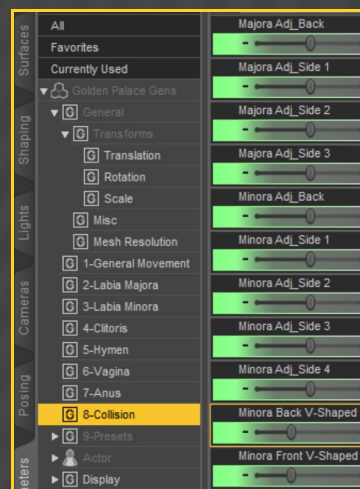
– Select G3F or any of its nodes and load the 'Set Collisions' Script:



– Select a colliding object (invisible glove, male genitalia,...), and the gaping morph that more closely matches the penetration. Select 'Collide'.



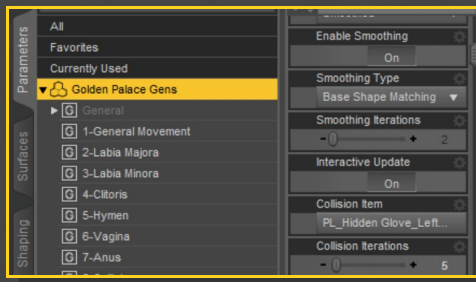
– Refine the result setting morphs on Golden Palace. Special morphs for improving a vaginal penetration are to be found in the Parameters tab under '8-Collisions'.



## Collisions Options

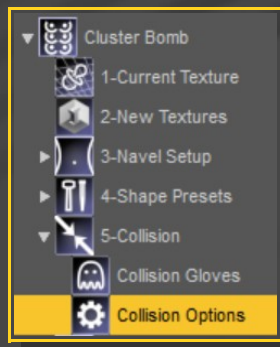
Collisions use DAZ Studio's smoothing modifier.

You can access to its options in the Parameters tab, with Golden Palace selected in the scene:



You can activate/deactivate the smoothing, choose the collision Item and number of iterations.

You can quickly set up collision options with the presets included in the **People/Genesis 3 Female/Anatomy/Cluster Bomb/Collision/Collision Options** folder:



Keep iteration number low if you have a slow computer.

**Collisions Limitations (courtesy hints by Thunder3D)**

Collision detection and smoothing are very powerful tools, but they have limits. Below are some things you will want to be aware of when using collidable objects.

1.) A smoothed object (such as Golden Palace) can only have ONE object set as its collision object. This is why we have included invisible single and double glove options as well as a combined double glove.

2.) G3Fs hands cannot collide with her own genitalia because it's all one object. Also, a figure cannot be set to collide with its' own geograft, or the geograft mesh will separate from the parent figure. Simply applying a pair of invisible gloves causes the hands inside them to be "sucked" outward to the inside of the glove, giving G3F sausage fingers. :(

The answer to this problem was to create something completely new! The invisible gloves allow the character to easily collide with her own genitalia so she can penetrate it more naturally!

3.) For Golden Palace collision with any other surface like a 2nd figure, simply set that object as the collision object in the provided script.

4.) Golden Palace to Golden Palace collision works but only one instance of Golden Palace at a time will deform. You cannot have 2 collidable objects smoothing into each other!

This also includes the parent figure attached to the collision object!

Additionally, the same rules above apply for any collidable geografts, both having a smoothing modifier and collision enabled against each other or the parent figure.

5.) Collision will only morph an object as deeply as the object being pushed against it.

This basically means, if you Push a finger into Golden Palace, then GP will deform until the finger has fully entered the original shape of the graft, then the finger will pass through the mesh.

Therefore you can get a small depression from fingers but very deep depressions from an object. Any large object will "smoosh" Cluster Bomb deeper, but the deeper you smoosh, the sharper the depression displacement and less realistic the effect. Don't try to over-do collision ;)

#### ***Multi-graft collision example scenarios:***

A single figure (G3F) with 2 collision enabled grafts (Breastacular & Golden Palace) have no trouble colliding with G3M and Dicktator. You can have multiple collidables on the same figure work as long as the collision objects (G3M and Dicktator) don't have collision enabled on G3F Parent Object.

Examples:

Golden Palace set to collide with Dicktator, and Cluster Bomb set to collide with G3M works.

Golden Palace set to collide with Dicktator, and Cluster Bomb set to collide with G3F Invisible Stockings or Gloves works.

Golden Palace set to collide with Dicktator, and Dicktator set to collide with G3F does NOT work.

(Breaks because G3F is the parent object for GP. Technically it works but the result is horrific!)

Golden Palace set to collide with Dicktator, and Dicktator set to collide with G3F Invisible

Gloves works (works because gloves are a wearable, not a graft)

You will need to experiment to find the best combinations for what you are rendering, but all the necessary tools have been provided. :)

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Setting collision with large shapes may create an indentation. Change smoothing type or lower the collision weight to solve the problem.