

[RealityKit](#) / [...](#) / [ImagePresentationComponent.Spatial3DImage](#) / `generate()`

## Instance Method

# generate()

Creates a 3D representation of the image if one does not already exist.

visionOS 26.0+

```
func generate() async throws
```

## Discussion

This method checks for cancellation of an enclosing Task during generation, and cancels its own async generation early (by throwing an error) if task cancellation is detected.

### Throws

Throws an error if the underlying monoscopic image does not contain valid data to generate a spatial 3D representation; or if a spatial 3D representation has already been generated.

Also throws an error if the image size does not meet the following requirements:

- At least 320 pixels on its shortest side
- At most 16,384 pixels on its largest side
- Aspect ratio between 1:3 and 3:1