

[ARKit](#) / SceneReconstructionProvider

## Class

# SceneReconstructionProvider

A source of live data about the shape of a person's surroundings.

visionOS 1.0+

```
final class SceneReconstructionProvider
```

## Topics

### Creating a scene reconstruction provider

```
init(modes: [SceneReconstructionProvider.Mode])
```

Creates a provider that reconstructs a person's surroundings.

```
let modes: [SceneReconstructionProvider.Mode]
```

The modes of scene reconstruction a provider supplies.

```
enum Mode
```

The additional kinds of information you can request about a person's surroundings.

```
static var isSupported: Bool
```

A Boolean value that indicates whether the current runtime environment supports scene reconstruction providers.

### Observing scene reconstruction

```
var anchorUpdates: AnchorUpdateSequence<MeshAnchor>
```

An asynchronous sequence of updates to scene meshes that the scene reconstruction provider detects.

```
var state: DataProviderState
```

A value that indicates whether the scene reconstruction provider is currently supplying anchor updates.

## Inspecting a scene reconstruction provider

```
var description: String
```

A textual representation of this scene reconstruction provider.

```
var allAnchors: [MeshAnchor]
```

An array that contains the mesh anchors the scene reconstruction provider is tracking.

```
static var requiredAuthorizations: [ARKitSession.AuthorizationType]
```

The types of authorizations necessary for running scene reconstruction.

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## Relationships

### Conforms To

CustomStringConvertible  
DataProvider  
Sendable  
SendableMetatype

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## See Also

### Scene reconstruction

- `{ }` Incorporating real-world surroundings in an immersive experience  
Create an immersive experience by making your app’s content respond to the local shape of the world.

```
struct MeshAnchor
```

A volume of space that contains a mesh of a person's surroundings.