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Macro

# Transient()

Tells SwiftData not to persist the annotated property when managing the owning class.

iOS 17.0+ | iPadOS 17.0+ | Mac Catalyst 17.0+ | macOS 14.0+ | tvOS 17.0+ | visionOS 1.0+ | watchOS 10.0+ | Swift 5.9+

```
@attached(peer)  
macro Transient()
```

## Mentioned in

 Preserving your app's model data across launches

## Overview

If your model class has one or more stored properties that you want to omit from writes to the persistent storage, annotate each of those properties with the `@Transient` macro.

### Note

By default, SwiftData considers any computed properties to be transient. You don't need to explicitly annotate those properties.

```
@Model  
class RemoteImage {  
    var sourceURL: URL  
    var data: Data
```

```
@Transient
var isDownloading = false

init(sourceURL: URL, data: Data = Data(), isDownloading: Bool) {
    self.sourceURL = sourceURL
    self.data = data
    self.isDownloading = isDownloading
}
}
```

Unless the type of the annotated property is an optional, the `@Transient` macro requires you to provide a default value. This constraint enables SwiftData to successfully materialize instances of the enclosing model class when running fetches.

## See Also

### Model definition

`macro Model()`

Converts a Swift class into a stored model that's managed by SwiftData.

`macro Attribute(Schema.Attribute.Option..., originalName: String?, hashModifier: String?)`

Specifies the custom behavior that SwiftData applies to the annotated property when managing the owning class.

`macro Unique<T>([PartialKeyPath<T>]...)`

Specifies the key-paths that SwiftData uses to enforce the uniqueness of model instances.

`macro Index<T>([PartialKeyPath<T>]...)`

Specifies the key-paths that SwiftData uses to create one or more binary indices for the associated model.

`macro Index<T>(Schema.Index<T>.Types<T>...)`

Specifies the key-paths that SwiftData uses to create one or more indicies for the associated model, where each index is either binary or R-tree.

- { } Defining data relationships with enumerations and model classes  
Create relationships for static and dynamic data stored in your app.

```
macro Relationship(Schema.Relationship.Option..., deleteRule: Schema.Relationship.DeleteRule, minimumModelCount: Int?, maximumModelCount: Int?, originalName: String?, inverse: AnyKeyPath?, hashModifier: String?)
```

Specifies the options that SwiftData needs to manage the annotated property as a relationship between two models.