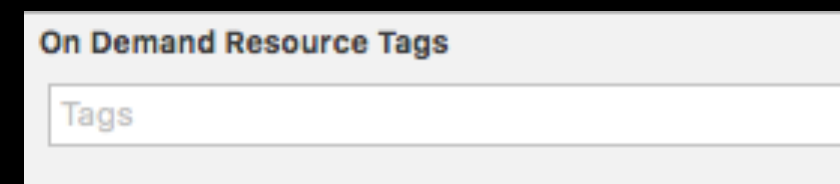


# On-Demand Resources



A screenshot of a dialog box titled "On Demand Resource Tags". The dialog box has a title bar with the text "On Demand Resource Tags" and a single text input field containing the word "Tags".

ODR\_Preload | Sven's iPhone X | Waiting for Device

ODR\_Preload > ODR\_Preload > Apple\_logo\_black.png | No Selection

**Identity and Type**

Name: Apple\_logo\_black.png  
Type: Default - PNG Image  
Location: Relative to Group  
Apple\_logo\_black.png  
Full Path: /Users/sven/developer/Xcode/Cocoapods/ODR\_Preload/ODR\_Preload/Apple\_logo\_black.png

**On Demand Resource Tags**

Tags

**Image Properties**

Dimensions: 2000 x 2000 pixels  
Resolution  
Color Space: RGB  
Alpha Channel: Yes

**Localization**

Localize...

**Target Membership**

- ODR\_Preload
- ODR\_PreloadTests
- ODR\_PreloadUITests

**View Controller** - A controller that manages a view.

**Storyboard Reference** - Provides a placeholder for a view controller in an external storyboard.

**Navigation Controller** - A controller that manages navigation through a hierarchy of views.

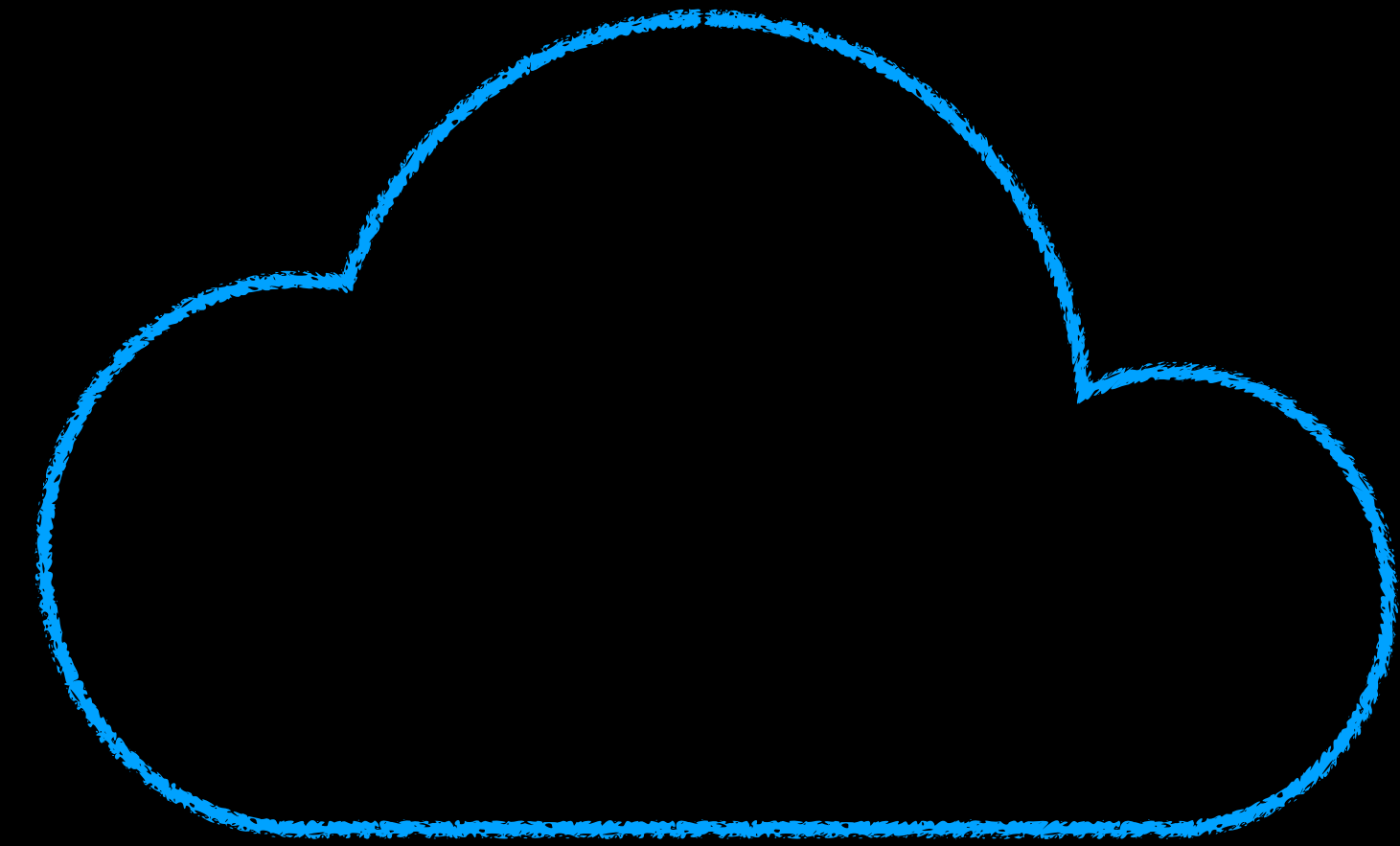
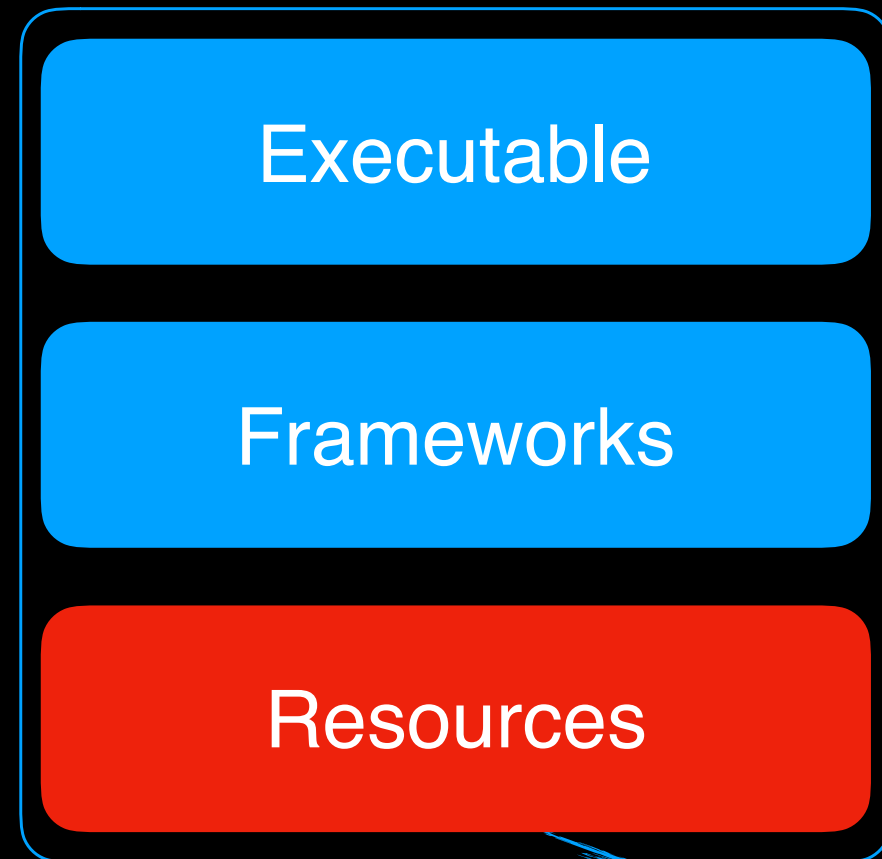
# App Bundle

Executable

Frameworks

Resources

# App Bundle



# App Bundle



# Questions

- Are On-Demand resources useful for my app?
- What do I need to do for setup?
- What are the advantages/disadvantages over hosting resources on my own server?

# What are On-Demand Resources?

- Store resources on the App Store (custom URL for enterprise apps)
- Store anything except executable code
- Load using e.g. `UIImage(named: "image")` or literal
- Enabled by default
- Can only be changed with an app update

# Integrating On-Demand resources

- Add tags to your resources
  - Tags are strings, but autocompletion works here 🎉
- Optionally: Add tags to your Prefetch/Initial Install list
  - Prefetch: The resources start downloading after the app is installed.
  - Initial Install: The resources are downloaded at the same time as the app.
- Use `NSBundleResourceRequest(tags:).beginAccessingResources(completionHandler:)`



# Integrating On-Demand resources



Demo

# Purging

- Resources that are not retained can be purged at any time.
- **Only** purged when the system is running out of disk space (NSBundleResourceRequestLowDiskSpace).
- “Registration for the notification is usually done by the app delegate or master view.” (<http://apple.co/2ALT6t4>) 🤔
- Prevent overpurging by using smaller tags.

```
Bundle.main.setPreservationPriority(priority:, forTags:)
```

# Are On-Demand resources useful for my app?

Yes, if ...

- ... you have resources you rarely use.
- ... you have a lot of resources.
- ... you have resources you only need once.
  - Like initial data for your database. On-Demand resources can be purged after import.
- ... you can predict which resources are needed next.

# What do I need to do for setup?

- Add tags to your resources.
- No setup on iTunes Connect.
- Begin accessing resources.

# What are the advantages/disadvantages over hosting resources on my own server?



- Initial install tags
- Free
- Reliable
- Downloading, caching, purging handled by iOS
- Resources do not count towards app size



- You can not update resources separately
  - Except for enterprise apps
- Resources are not downloaded to a permanent location
- On 16GB iPhones you're resources are probably gone after every restart 😬



