Siri and SiriKit: an *Intents* topic

Alexsander Akers · @a2

Swift Alps

29 · 11 · 2018

Who am I?

— Alex
— @a2
— Microsoft To-Do
— Berlin

Overview

— **Introduction to Siri and SiriKit**
15 minutes

— **Implementing SiriKit**
1 hour, 30 minutes

— **Wrap-up and Questions**
15 minutes

What does SiriKit allow people to do?

— Send a message *in your app*

— Book a ride *in your app*

— Start a workout *in your app*

— Perform an action *in your app*

What's inside SiriKit?

Frameworks

— Intents
— IntentsUI

App Extensions

— Intents app extension
— Intents UI app extension

How does SiriKit work?

1. Users make requests to Siri

2. SiriKit launches your app extension in the background and asks you to resolve and handle the user's intent

3. You perform the relevant, context-specific actions

4. Siri displays result data to the user (optionally with a custom UI)

Supported Request Domains

— System-defined
— Custom (since iOS 12)

Supported Request Domains

— Messaging

— Lists and Notes

— Workouts

— Payments

— VoIP Calling
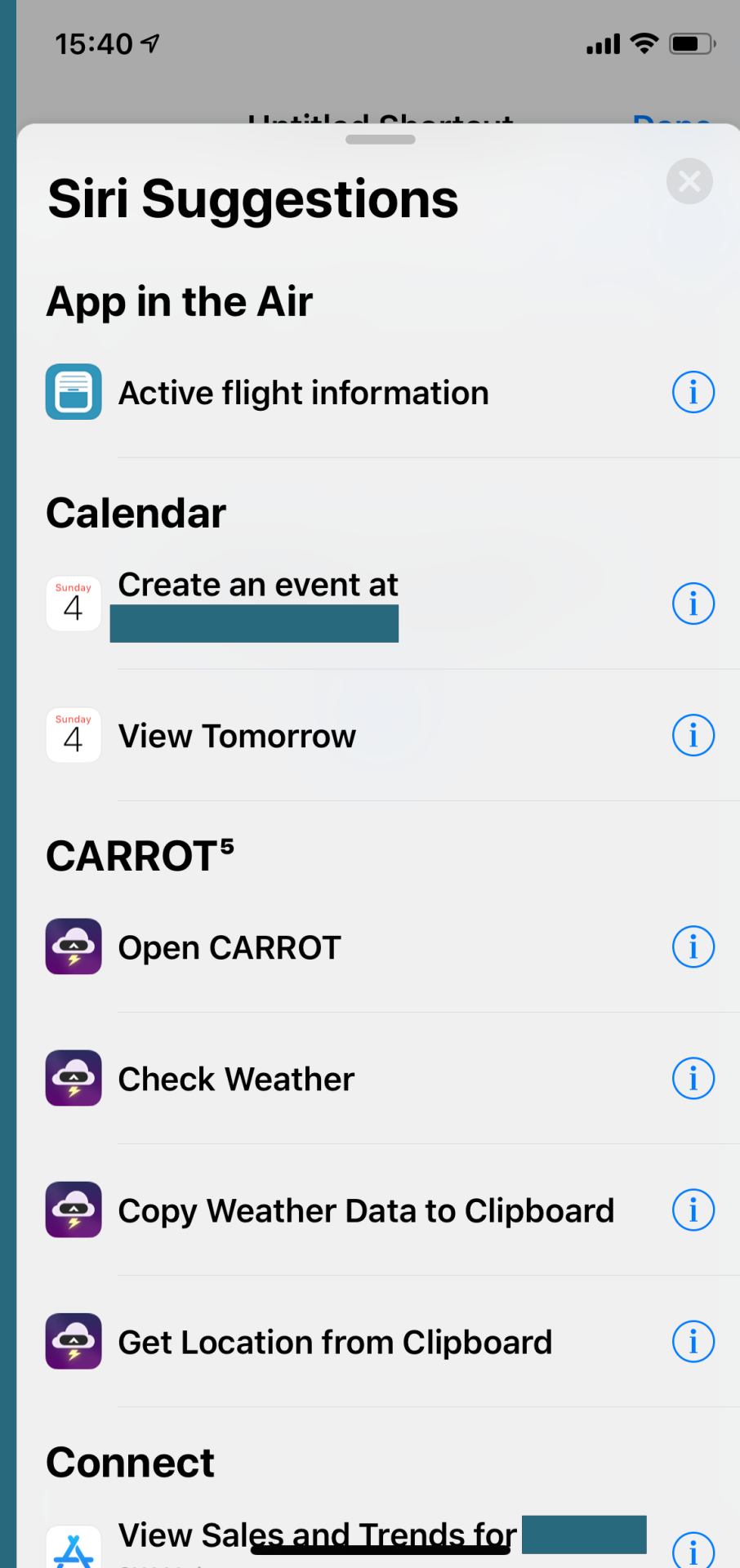
— Visual Codes

Supported Request Domains

— Photos

— Ride Booking

— Car Commands

— CarPlay

— Restaurant Reservations

Custom Intent Domains

— Defined in Xcode in an *Intents.intentdefinition* file.

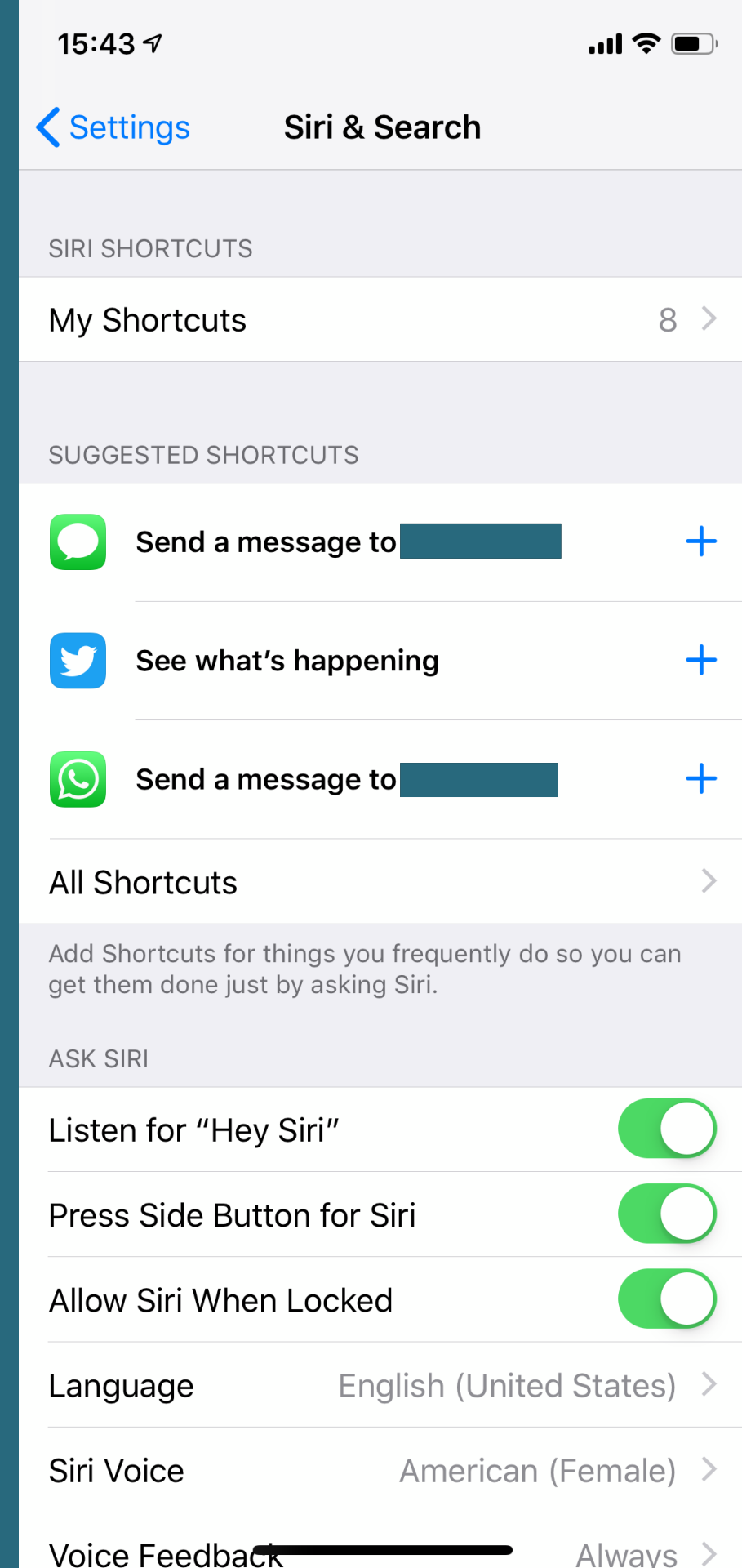— Exposed by Siri in the Shortcuts app, Settings app, and in your app.

Shortcuts App

— Allows you to coordinate actions to create workflows

— Extremely limited input/output

  — Clipboard as "scratch pad"

Untitled Shortcut   Done

Siri Suggestions

App in the Air

🟦   Active flight information   ⓘ

Calendar

📅 Sunday 4   Create an event at   ⓘ

📅 Sunday 4   View Tomorrow   ⓘ

CARROT⁵

⛈️   Open CARROT   ⓘ

⛈️   Check Weather   ⓘ

⛈️   Copy Weather Data to Clipboard   ⓘ

⛈️   Get Location from Clipboard   ⓘ

Connect

  View Sales and Trends for   ⓘ

Settings App

— Settings > Siri & Search > Suggested Shortcuts

— Allows you to create Siri shortcuts from recently or frequently performed actions

Settings **Siri & Search**

SIRI SHORTCUTS

My Shortcuts   8 >

SUGGESTED SHORTCUTS

Send a message to ▓▓▓▓▓▓▓   +

See what's happening   +

Send a message to ▓▓▓▓▓▓▓   +

All Shortcuts   >

Add Shortcuts for things you frequently do so you can get them done just by asking Siri.

ASK SIRI

Listen for "Hey Siri"

Press Side Button for Siri

Allow Siri When Locked

Language   English (United States) >

Siri Voice   American (Female) >

Voice Feedback   Always >

In Your App

— `INVoiceShortcutCenter`

   — Manages user-created Siri shortcuts and app-suggested shortcut suggestions

— `INUIAddVoiceShortcutButton`

   — A `UIButton` subclass that displays "Add to Siri" with a consistent style across apps that support Siri shortcuts

---

Siri Shortcuts

Current Weather
🎤 Add shortcut to Siri

Extended Forecast
🎤 Add shortcut to Siri

Ask Siri for today's weather report or check the forecast for the week ahead.

Rain Report
🎤 Add shortcut to Siri

Other Data Points

Get details on specific weather data points.

Interact
🎤 Add shortcut to Siri

Use Siri to interact with CARROT directly.

Frequently Asked Questions

In Your App

— `INUIAddVoiceShortcut-ViewController`

  — Guides the user through the steps for adding a shortcut to Siri
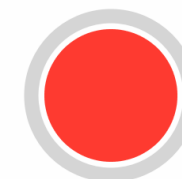
Add to Siri

Check Weather

CARROT⁵

You can say something like...

"Weather report"

After you record your personalized phrase, Siri can use it to tell CARROT⁵ to run this shortcut.

Supporting an Intents or IntentsUI extension

— Private shared framework for common code

    — Link your app and app extensions against this

    — Minimizes the size of executables

    — Easier testing because all executables use the same code path

Supporting an Intents or IntentsUI extension (pt. 2)

— Use a shared container to store important resources
  — Passwords and access tokens in a shared keychain group
  — Databases and user records in a shared app group container

System-defined vs Custom Intents

System Domain

— You: Send a message

— *Siri: To whom should I send your message?*

— You: Alex

— *Siri: Which of the following people named Alex?*

— You: Alex Akers

— *Siri: What do you want the message to say?*

— ...

System-defined vs Custom Intents

Custom Domains

Apple Sample Code: *Soup Chef*

— Allows people to order soup

— An *Intent* with three parameters

    — `soup`: type of soup

    — `quantity`: number of bowls

    — `options`: optional toppings

System-defined vs Custom Intents

Custom Domains

Wouldn't it be nice...

— You: Order me a soup
— *Siri: What soup would you like?*
— You: Tomato
— *Siri: Great, how many tomato soups do you want?*
— You: 2

System-defined vs Custom Intents

Custom Domains

This is what we get... (no dialogs)

— You: Order my regular soup
— *Siri: Ordering you 2 tomato soups with croutons*

What will we be doing?

— Add SiriKit to an app of your choice

— Could be a work or personal project

— System or custom domain

— Implement SiriKit in a sample project
github.com/davedelong/MVCTodo