

ReactiveCocoa Developers Conference (RACDC)

@jsphrsummers

ReactiveCocoa
“Statelessness”
of the Union

What is
ReactiveCocoa?

Not just KVO

Not just bindings

Not just futures

signals

unify all of these patterns

(and more)

Problems with ReactiveCocoa 2



WHAT'S IN THE BOX?!?!

Katy Perry

HOT N COLD

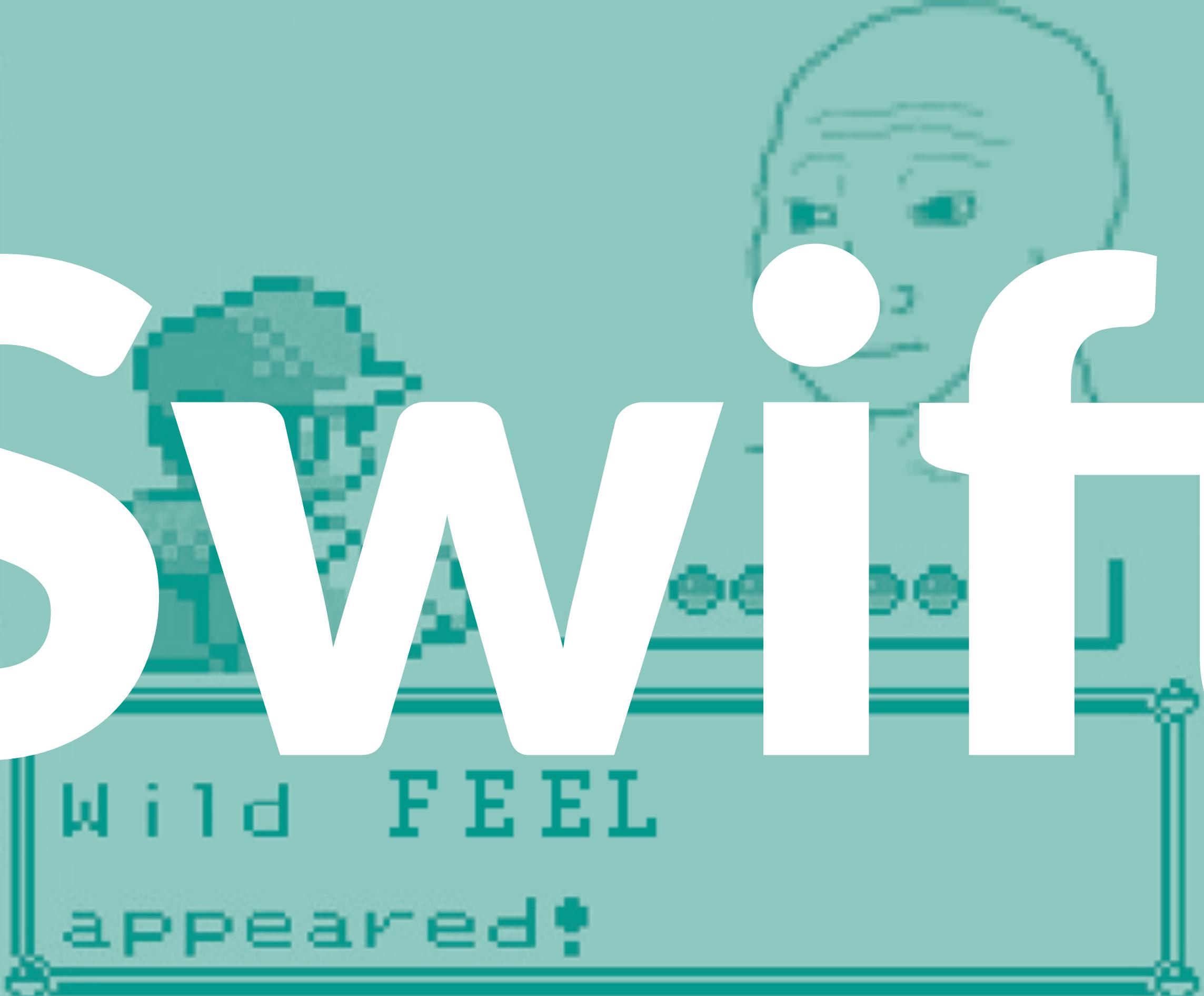


Subjects
Multicasting
Replaying

RAC Command

ReactiveCocoa has too much magic!

– *the internet*



SWAY

Wild FEEL

appeared!

Parameterized types (generics)

No macros

Less dynamic programming



ReactiveCocoa 3

Signal<T, E>
(parameterized values *and* errors)

Signal<String, CarthageError>

Signal<Int, NoError>

signals

and

Signal Producers

Signals and Signal Producers

```
let producer = timer(1, onScheduler: QueueScheduler())  
  
let disposable = producer.start(next: { date in  
    print("First timer fired at \(date)")  
})  
  
producer.startWithSignal { signal, signalDisposable in  
    signal.observe(next: { date in  
        print("Second timer fired at \(date)")  
    })  
}  
}
```

Signals and Signal Producers

```
let producer = timer(1, onScheduler: QueueScheduler())  
  
producer.startWithSignal { signal, signalDisposable in  
    signal.observe(next: { date in  
        print("Timer fired at \(date)")  
    })  
  
    signal.observe(anotherObserver)  
}
```

Action

(instead of RACCommand)

Actions

```
let searchAction = Action(enabledIf: hasText) { text in
    let resultsProducer = APIClient.searchText(text)
    return resultsProducer
}

searchAction.values.observe(next: { result in
    print("Search result: \(result)")
})

let searchCatsProducer = searchAction.apply("cats")
searchCatsProducer.start()
```

PropertyType

PropertyType

```
let text = MutableProperty("0")

text.producer.start(next: { string in
    print("Property value is now: \(string)")
})

text <~ timer(1, onScheduler: QueueScheduler())
    |> scan(0) { counter, _ in counter + 1 }
    |> map { counter in String(counter) }
```

The theme is

simplicity

EASY¹
familiar
approachable

¹ See Rich Hickey's talk, "Simple Made Easy"



SIMPLE¹

separate concerns
less complex

¹ See Rich Hickey's talk, "Simple Made Easy"



ReactiveCocoa 2 is neither

easy

nor

simple

ReactiveCocoa 3 is

simple

(hopefully)

Dr. Changelog, MD

– *@joshaber*

Remaining work for 3.0

- **Long-form documentation**

Contributors

- **Dave Lee** (@kastiglione)
- **Andy Matuschak** (@andymatuschak)
- **Nacho Soto** (@NachoSoto)
- **Javi Soto** (@Javi)
- **Syo Ikeda** (@ikesyo)
- **Neil Pankey** (@npankey)
- ... many more!

Interested in contributing?

Join Slack by emailing justin@jspahrsummers.com