

Accessibility on Apple Watch

Session 204

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iOS Accessibility

Accessibility







Accessibility on Apple Watch

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WatchKit Accessibility API

Accessibility on Apple Watch

WatchKit Accessibility API

WatchKit Demo

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WatchKit Accessibility API

WatchKit Demo

Tips and Tricks

Apple Watch Accessibility Features

VoiceOver



Zoom



X-Large Watch Face



Text Size



Text Size



Grayscale



Reduce Transparency



Reduce Transparency



Reduce Motion



Reduce Motion



Hearing Accommodations



Demo

Apple Watch accessibility

App Accessibility

WatchKit Accessibility

WKInterfaceObject


```
extension WKInterfaceObject {  
    func setIsAccessibilityElement(isAccessibilityElement: Bool)  
    func setAccessibilityLabel(accessibilityLabel: String?)  
}
```

Existence



Existence

```
messageCellGroup.setIsAccessibilityElement(true)
```



Label



Label

```
iconView.setAccessibilityLabel("Mail")
```



```
extension WKInterfaceObject {  
    func setIsAccessibilityElement(isAccessibilityElement: Bool)  
    func setAccessibilityLabel(accessibilityLabel: String?)  
}
```



```
extension WKInterfaceObject {  
    func setIsAccessibilityElement(isAccessibilityElement: Bool)  
    func setAccessibilityLabel(accessibilityLabel: String?)  
    func setAccessibilityHint(accessibilityHint: String?)  
    func setAccessibilityValue(accessibilityValue: String?)  
    func setAccessibilityTraits(accessibilityTraits: UIAccessibilityTraits)  
}
```

Traits



Traits

```
messageCellGroup.setAccessibilityTraits  
(UIAccessibilityTraitButton)
```

"Button"



Hint

“Double tap to change tracking options”



Hint

```
var hint = "Double tap to change tracking options"  
trackingButton.setAccessibilityHint(hint)
```

"Double tap to change tracking options"



Value



Value

```
minutePicker.setAccessibilityValue(minutesString)
```

"Fifteen minutes"



```
extension WKInterfaceObject {  
    func setIsAccessibilityElement(isAccessibilityElement: Bool)  
    func setAccessibilityLabel(accessibilityLabel: String?)  
    func setAccessibilityHint(accessibilityHint: String?)  
    func setAccessibilityValue(accessibilityValue: String?)  
    func setAccessibilityTraits(accessibilityTraits: UIAccessibilityTraits)  
}
```

```
extension WKInterfaceObject {  
    func setIsAccessibilityElement(isAccessibilityElement: Bool)  
    func setAccessibilityLabel(accessibilityLabel: String?)  
    func setAccessibilityHint(accessibilityHint: String?)  
    func setAccessibilityValue(accessibilityValue: String?)  
    func setAccessibilityTraits(accessibilityTraits: UIAccessibilityTraits)  
    func setAccessibilityImageRegions(accessibilityImageRegions:  
        [WKAccessibilityImageRegion])  
}
```


Image Regions



Image Regions











72°



"12 AM, Partly Cloudy"



"11 PM, Clear"

"1 AM, Partly Cloudy"



"10 PM, Clear"



"3 PM, Partly Cloudy"



"9 PM, Clear"

72°

"72 degrees"



"4 PM, Partly Cloudy"



"8 PM, Sunny"



"5 PM, Sunny"



"7 PM, Sunny"



"6 PM, Sunny"

Image Regions

```
class WKAccessibilityImageRegion : NSObject {  
    var frame: CGRect  
    var label: String  
}
```



Image Regions

```
hourlyDial.setAccessibilityImageRegions(imageRegions)
```



Is VoiceOver Running



Is VoiceOver Running

NEW

`WKAccessibilityIsVoiceOverRunning()`



Demo

Complications



Complications

NEW

CLKImageProvider

CLKSimpleTextProvider

"Sunset, 4:49PM"



Complications

NEW

```
var accessibilityLabel: String
```

"Sunset, 4:49PM"



Tips and Tricks

Tips and Tricks

Make images accessible

Tips and Tricks

Make images accessible

Group accessibility elements

Tips and Tricks

Make images accessible

Group accessibility elements

Avoid tiny interface items

Tips and Tricks

Make images accessible

Group accessibility elements

Avoid tiny interface items

Try accessibility

Summary

Summary

Apple Watch is accessible

Summary

Apple Watch is accessible

Accessible apps

Summary

Apple Watch is accessible

Accessible apps

It's easy

Summary

Apple Watch is accessible

Accessible apps

It's easy

Empower all users

More Information

Documentation and Videos

Apple Watch Programming Guide

<http://developer.apple.com/watchkit/>

Technical Support

Apple Developer Forums

<http://developer.apple.com/forums>

General Inquiries

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Related Sessions

iOS Accessibility

Pacific Heights

Tuesday 9:00AM

Labs

Accessibility and Speech Lab

Frameworks Lab D

Tuesday 2:30PM

