watchOS 5 beta Release Notes

About watchOS 5 beta

The watchOS 5 SDK provides support for developing watchOS apps for Apple Watch devices running watchOS 5. The SDK comes bundled with Xcode 10 available from the Apple Developer Program download page.

For information on the compatibility requirements for Xcode 10, see the Release Notes on the Xcode download page.

Bug Reporting

For issues not mentioned in Notes and Known Issues, file bugs through the Apple Developer website https://developer.apple.com/bug-reporting/.

When filing a bug, please include the full version number in the bug title and in the description. This looks like "5 (*16Rxxxxx*)." You can find the full version number on the Apple Watch in Settings > General > About > Version, or in the Watch App in My Watch > General > About > Version.

Technical Support and Learning Resources

Apple provides the following resources to support your development:

- Developer documentation is available both on https://developer.apple.com/documentation and from Xcode by choosing Help > Developer Documentation.

- Apple Developer Forums. Participate in discussions about developing for Apple platforms and using developer tools.

- watchOS 5 Developer Forum. Participate in discussions about developing for watchOS 5 and issues with the SDK.

- iCloud for Developers. Find information about developing for iCloud.

- watchOS homepage. Get high-level information about the latest release of watchOS. Download current and beta watchOS releases.

- For help with using Xcode, Simulator, or Instruments, choose Help > *app name* Help.

New in watchOS 5

With interactive notifications, access to the Siri watch face, a new background mode, audio controls, and more, your apps can deliver even better user experiences.

More information on what's new in watchOS 5 is available at www.apple.com/watchos-preview/.

Interactive Notifications

Make your app notifications more interactive with customized controls that let users take relevant actions directly within the notification. For example, users can tip and rate a driver from within a ride-sharing app notification, or update time and party size for a restaurant reservation, all right from within the notification.

Access to the Siri Watch Face

Show users timely content and Shortcuts from your apps at a glance. The Siri watch face uses machine learning and relevance algorithms to take inputs, past behavior, and routines associated with your app's users to suggest common actions at relevant times. Users can simply raise their wrist and tap the Siri watch face to take action – or, using customized commands, use their voice.

New Background Mode

Audio apps can now run in the background. Users can play locally-synced playlists or podcasts while on the go, download playlists and episodes to Apple Watch, transfer files from iPhone to Apple Watch, control playback using Apple Watch, and choose which Bluetooth audio device to play to.

Audio Controls

Add audio controls within your app to let users easily adjust the volume and skip, pause, or resume play.

Enhanced Workout Session APIs

A new workout API simplifies workout app development, ensures improved data accuracy, and enables more robust app performance.

Parkinson's Disease Research

A new API gives researchers access to custom algorithms based on accelerometer and gyroscope data that can be used to create tools to help doctors better understand patients' tremor and dyskinesia symptoms in response to treatment for Parkinson's Disease. This API requires an entitlement. See documentation for more details.

Notes and Known Issues

General

Notes

- Walkie-Talkie isn't part of this seed of watchOS 5 beta. (40658096)

Accessibility

New Issues

- Dictation incorrectly recognizes speech output from VoiceOver. (40136604)
- Status bar elements (such as unread notifications, Do Not Disturb, etc.) are not accessible for VoiceOver users. (40349105)

Activity

New Issues

- Users might observe reduced credit for Exercise Minutes ring when not in a workout. (40504995)
- During a workout, Activity rings on the clock face might not update immediately. (39567337)

Apple Pay

New Issues

- When an Apple Pay payment sheet is presented in Safari on a Mac without Touch ID, you can't confirm the payment if your iPhone or Apple Watch display is off. (40384791)

  Workaround: Wake your iPhone or Apple Watch display before attempting the transaction.

Audio

New Issues

- In Swift, the error passed to the `AVAudioSession activate(options:completionHandler:)` completion handler is always non-nil. (40382507)

Messages

New Issues

- Apple Pay Cash transactions cannot be initiated from within Messages. (40264519)

  Workaround: Use Siri to initiate a transaction.

Motion

New Issues

- Initialization of `CMMovementDisorderManager` without the movement disorder entitlement causes the client watchOS app to crash. (40197418)

Workaround: Add the following entitlement:

```
<key>com.apple.developer.health-movement-disorder</key>

<true/>
```

- Motion & Fitness privacy authorization might fail to prompt for `CMMovementDisorderManager` functions. (40239522)
- `CMMovementDisorderManager`'s `monitorKinesiasForDuration` fails for Series 1 devices. (40269037)
- `CMMovementDisorderManager`'s `monitorKinesiasForDuration` function continues monitoring beyond the specified duration. (38343160)
- The online form to apply for distribution of apps using the `com.apple.developer.health-movement-disorder` entitlement is currently unavailable. (40631596)

Music

New Issues

- When adjusting the volume with the Digital Crown, the volume level might appear to move up and down unexpectedly. (40277789)

Networking

New Features

- The `NSURLSession` HTTP/2 implementation has been updated to support HTTP/2 connection re-use per RFC 7540 Section 9.1.1. This requires an HTTP/2 server to present a certificate which covers more than one server hostname. The certificate may use the Subject Alternative Name extension or wild-carded domain names. In addition, `NSURLSession` requires name resolution to resolve the different hostnames to the same IP address. `NSURLSession` might re-use HTTP/2 connections across different domain names when these conditions are satisfied. (37507838)

Deprecations

- FTP and File URL schemes for Proxy Automatic Configuration (PAC) are deprecated. HTTP and HTTPS are the only supported URL schemes for PAC. This affects all PAC configurations including, but not limited to, configurations set via Settings, System Preferences, profiles, and `URLSession` APIs such as `URLSessionConfiguration.connectionProxyDictionary`, and `CFNetworkExecuteProxyAutoConfigurationURL()`. (37811761)

Phone & FaceTime

New Issues

- Apple Watch Series 3 with cellular customers using the Sprint network in the United States might experience incoming call failures when out of proximity with the paired iPhone. (40672197)
- The Calls on Other Devices using your carrier account feature is unavailable. (40180205)

- Recent calls aren't be listed. (39334015)

- When transferring a FaceTime Audio call from Apple Watch to the paired iPhone, the remote caller might stop receiving audio from the microphone. (38511978)

- Tapping on a notification to join an incoming Group FaceTime call doesn't succeed. (39601077)

    Workaround: Use the Ring Again feature to join the call.

Podcasts

New Issues

- Attempting to play another episode from the same show might resume the current episode instead of playing back the next episode. (40272684)

- Some podcast episodes might take longer to start streaming when Apple Watch is using the paired iPhone's network connection. (40242260)

Radio

New Issues

- The "Add to Library" option is missing from the Radio app. (38928426)

Remote

New Issues

- The Menu and Play/Pause buttons in the Remote app might disappear when tapped. (39997622)

Settings

New Issues

- Changing Sounds & Haptics settings in the Watch app on iOS might fail. (37960953)

    Workaround: Use the Settings app on your Apple Watch to modify these settings.

Siri

New Issues

- Siri is unable to display Visual Code images from SiriKit apps. (39714411)

- Find My Device commands will not work when multiple devices match the request. (40177923)

- Shortcuts API cannot be tested on iPhone or Apple Watch simulator. (40144812)

    Workaround: Use physical devices.

- An `INPlayMediaIntent` provided via the Relevant Shortcuts API initiates playback on iPhone rather than Apple Watch. (38091109)

- Custom responses to `INIntent` execution do not appear in the completion UI on Siri watch face. (40223416)

- Confirmation buttons shown before executing a background shortcut associated with an `INRelevantShortcut` display "Confirm" rather than their category-specific verb. (40396246)

- Adding a custom intent to a WatchKit app which supports `INNotebookDomain` intents might cause Siri to fail to complete `INNotebookDomain` requests. (40544422)

  Workaround: Only support `INNotebook` or custom intents.

- An `INRelevantShortcut` doesn't show on the Siri watch face if it's represented as a built-in SiriKit intent and is provided by an app that's on iPhone but not on the paired Apple Watch. (40541508)

  Workaround: Build a corresponding watchOS app that implements that intent.

- Shortcuts donated with images created using the `+[INImage imageNamed:]` or `+[INImage imageWithURL:]` APIs will not display an image on Apple Watch. (40506118, 40623457)

  Workaround: Use `+[INImage imageWithImageData:]`.

Wallet

New Issues

- When switching between multiple paired Apple Watch devices, passes and payment cards might be deleted from the device which is becoming active. (40495197)

  Workaround: Re-provision passes and cards to Apple Watch manually.

WatchKit

New Issues

- `handleWorkoutConfiguration` and `handleRemoteNowPlaying` will not get called if the screen is not on. (39601265)

- The new volume control always controls Apple Watch volume in watchOS 5 beta. (40381821)

- Setting notificationActions is only permitted from within the initial `didRecieveNotification:` callback for your `WKUserNotificationInterfaceController` subclass. In a future release, this will be permitted any time after the beginning of the initial `didRecieveNotification:` callback. (40472159)

- Static notifications might appear incorrectly offset to the left and clipped at the bottom. (40203768)

- If you embed a Now Playing View within a horizontally-paged WatchKit app, swiping from page to page might not work reliably. (36547208)

  Workaround: Swipe from the edge of the screen.

Deprecations

- `— (void)updateUserActivity:(NSString *)type userInfo:(nullable NSDictionary *)userInfo webpageURL:(nullable NSURL *)webpageURL WK_DEPRECATED_WATCHOS(3.0, 5.0, "use updateUserActivity:");` does not properly register activities. (39840960)
  `Use — (void)updateUserActivity:(NSUserActivity *)userActivity WK_AVAILABLE_WATCHOS_ONLY(5.0);` instead.

- `— (void)didReceiveNotification:(UNNotification *)notification withCompletion:(void(^)(WKUserNotificationInterfaceType interface)) completionHandler WK_DEPRECATED_WATCHOS(3.0, 5.0, "use didReceiveNotification:");` will result in not receiving grouped updates for threaded notifications.
  `Use — (void)didReceiveNotification:(UNNotification *)notification WK_AVAILABLE_WATCHOS_ONLY(5.0);` instead.

Workout

New Issues

- The route map for a workout might be unavailable for viewing in the Activity app on iOS. (40008565)
- The route map shown for workouts in the Activity app on iOS might not appear as smooth paths. (40115583)
- During workouts, metrics such as calories and distance might stop updating. (40631858)
- During Swimming workouts, swimming-related metrics might not accumulate. (40617438)

World Clock

New Issues

- The app will crash when attempting to use Scribble in an unsupported language. (40598308)