

iOS 11 beta 4 Release Notes

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About iOS 11 beta 4

The iOS 11 SDK provides support for developing iOS apps for iPhone, iPad, or iPod Touch devices running iOS 11. The SDK comes bundled with Xcode 9.0 beta available from <https://developer.apple.com/download/>.

For information on the new APIs in iOS 11, see [What's New in iOS](#).

For information on the compatibility requirements for Xcode 9.0, see the [Release Notes](#).

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 "11.0 (15Axxxxx)." You can find the full version number in Settings > General > About > Version.

Technical Support and Learning Resources

Apple provides the following web resources to support your development:

- [Apple Developer Forums](#). Participate in discussions about developing for Apple platforms and using developer tools.
- [iOS 11 Developer Forums](#). Participate in discussions about developing for iOS 11 and issues with the SDK.
- [iCloud Developer Page](#). Find information about developing for iCloud.
- For help with using Xcode, choose Help > Xcode Help.

Autosubmission of Diagnostic and Usage Data

By default, iOS 11 beta automatically sends anonymous diagnostic and usage data back to Apple. This includes information about crashes, freezes, and kernel panics; and information about how you use Apple and third-party software, hardware, and services. This information is used to help Apple improve the quality and performance of its products and services. You can stop the autosubmission of diagnostics and usage data by going to Settings > Privacy > Diagnostics and Usage > Don't Send.

Notes and Known Issues

General

New Features

- Added `AVRoutePickerView` to the `AVKit` framework and `AVRouteDetector` to the `AVFoundation` framework for enabling users to choose the route for playing content when multiple routes are available. Use `AVRouteDetector` to determine if multiple routes are available when route detection is enabled. If multiple routes are available, use `AVRoutePickerView` to present an interface for the user to choose the routes.

Known Issues

- To revert an earlier iOS, follow the instructions shown on the apple support site: <https://support.apple.com/kb/HT203282>.

32-bit Apps

Resolved Issues

- Selecting Learn More from the prompt after tapping an already installed 32-bit app now opens the Settings App. (32340711)
- Syncing 32-bit apps via iTunes now behaves as expected. (32356790)

Known Issues

- iOS apps may target iOS 10 or earlier to continue including a 32-bit slice. (31597913)

Deprecations

- 32-bit apps will not run on future betas of iOS 11. (26402174)

3D Touch

Resolved Issues

- Using 3D Touch with data detectors (phone numbers, addresses, and so on) now works correctly. (30504832)

3rd Party Apps

Resolved Issues

- Airplay now works as expected in third-party apps. (32819077)
- KakaoTalk no longer crashes on launch or after typing. (32320793)
- SlingTV now plays back audio and video as expected. (32649488)
- Kindle books now sync as expected. (30878446)
- Facebook Messenger now launches when the Facebook app is not installed.
- The video playback controls in Amazon Video should now work correctly. (32056010)
- Navigation bars should now look correct. (32076094)
- Tencent Video should no longer crash on launch. (32343324)

- Third-party keyboards should now work if not allowed full access. (32494032)
- The audio should no longer drop during Skype calls. (32434672)
- VSCO no longer displays an error when importing photos that have been recently taken. (32582234)
- Citi Mobile no longer crashes on launch. (31336493)
- Users can now log in to Pinterest using their email address. (31866166)

Known Issues

- DirectTV may crash on launch. (29533442)
- MobileIron Mobile@Work may crash on launch. (31929650)
- Tweetbot may not be able to post tweets containing photos that have been recently taken. (32569113)
- Square Cash may crash on or shortly after launch. (30926902)

AirPlay

New Issues

- Tapping the AirPlay button in videos that are not full screen causes some apps to crash. The affected apps include iBooks, Safari, Voice Memos, and some 3rd party apps. (33331364)

Workaround: View the video fullscreen, and then tap on the AirPlay button. Android Migration

Resolved Issues

- Migrating from your Android phone now works correctly. (31816854)

App Analytics

Resolved Issues

- Non product page view impressions are now captured correctly. (31561060)

App Icons

Resolved Issues

- After restoring a device from an iTunes backup, app icons on the Home screen no longer appear white. (32303701)
- The prompt that appears while changing an icon now displays the alternative app icon image instead of a placeholder. (32165847)

App Store

Resolved Issues

- After restoring from an iTunes backup, previously offloaded apps now appear on the Home screen. (31968368)
- Promoted in-app purchases now use the developer-specified sort order. (30877083)

- Attempting to run TestFlight without an active AppStore Apple ID no longer results in a login failure. (32230818)
- Apps over 100 MB should no longer download over Cellular connection after acknowledging the warning prompt. (32235051)

Known Issues

- Restoring from an iTunes backup containing an offloaded app which is also present in the iTunes library installs the offloaded app and then re-installs it from the App Store. This can result in the restored backup taking more space on your device than the size of the backup. (31461664)

Workaround: After the restore completes, offload the app.

- Launching the App Store stops other audio. (32043325)

Apple ID

Resolved Issues

- Accounts using a phone number as the Apple ID are now able to create an Apple ID for a child family member. (32130392)

Known Issues

- Some accounts using a phone number as the Apple ID may be unable to add certain payment types. (31677442)

Apple Pay

Resolved Issues

- `ApplePaySession.canMakePaymentsWithActiveCard` no longer returns false when the merchant identifier is valid and appropriate payment methods are available. (32613797)

ARKit

Known Issues

- Continuing from a breakpoint while debugging an `ARSession` may result in VIO breaking. Any visual objects placed in the world/anchor are not visible. (31561202)

AVFoundation

Resolved Issues

- The values of the `lensDistortionLookupTable` and `inverseLensDistortionLookupTable` properties of `AVCameraCalibrationData` are now centered properly. The 0 value represents no elongation or shrinkage. (32339695)
- The `CGImageRepresentation` and `previewCGImageRepresentation` methods of `AVCapturePhoto` now return the correct values. For more information, see the [documentation](#). (31392054)

- `AVCapturePhoto` now returns the correct result when accessing the `fileDataRepresentation` property of an uncompressed buffer (420f/420v/BGRA), instead of a TIFF file format representation. (31902960)

Known Issues

- The `cameraCalibrationData` property of `AVCapturePhoto` returns `nil` when `cameraCalibrationDataDeliveryEnabled` is set to `true`, unless you also set `depthDataDeliveryEnabled` to `true`. In a future beta, you'll be able to request dual photo capture and camera calibration data capture and receive wide and telephoto buffers plus the camera calibration data for both (without being zoomed to 2x and delivering depth data to the photo). (32209427)
- Still capture requests fail and the video stream stops producing a buffer when using the 720p30 video format with the `depthDataDeliveryEnabled` property of `AVCapturePhotoSettings` set to `true`. (32060882)
- Depth values in the non default 160x120 and 160x90 depth data formats are half of the expected values, and disparity values are twice the expected value. (32363942)

Bluetooth

Resolved Issues

- Connection issues for Bluetooth accessories using Wireless iAP protocol are now more reliable. (31439542)
- Beta 2 adds full functionality for the LE L2CAP channel feature. (32493297)

Calendar

Resolved Issues

- Buttons for Day, Week, Month, and Year now trigger on the first tap. (31883496)

Known Issues

- Dragging an item into Calendar may cause the application to crash. (33039833)

CarPlay

Resolved Issues

- Users should no longer get an error message when selecting Don't Reply after reading a message in CarPlay. (32099700)

CloudKit

Known Issues

- CloudKit does not support `unsigned long long` values with the high-order bit set. (30567424)

- Applications that use `CKModifyRecordsOperation` should specify an appropriate value for `CKModifyRecordsOperation.isAtomic`. If your client is compiled against watchOS 4, operations enqueued against the default `CKRecordZone` have new behavior because `atomic` is `true` by default. If the operation hits a "preflight" failure (most commonly, a network issue uploading a `CKAsset`, or a malformed `CKRecord`), the entire operation is canceled. (30838858)

Connectivity

Resolved Issues

- Connecting to a cellular network after restarting or powering on a device now works correctly. (32727321)
- Activating a Sprint Cellular data plan on iPad now works correctly. (32600925)
- Reader mode utilizing NFC now works correctly on supported devices. (32721033)

Known Issues

- iPad prepaid data plan purchases made on the device may fail on a cellular connection.

Workaround: Purchase the data plan while connected to Wi-Fi.

Control Center

New Features

- Tapping the Wi-Fi button in Control Center now disconnects from the current network and temporarily disables Wi-Fi networking. (32299242)

Resolved Issues

- The expanded Wi-Fi UI in Control Center now updates the network name when transitioning between networks. (32280116)
- The Bluetooth button behavior in Control Center now mirrors that of the Wi-Fi control. (32300000)

Core Spotlight

Resolved Issues

- Indexer file dragging no longer fails for both package file types or for files whose URL doesn't have a matching `absoluteString` and `path`. (32354867)

Do Not Disturb

Resolved Issues

- Do Not Disturb While Driving is enabled starting with beta 2. (32232545)

EventKit

Known Issues

- Storing data to a non default event store in EventKit may not work. (31335830)

FaceTime

New Issues

- FaceTime Live Photos is disabled by default on most devices. (33322822)
Workaround: In the Settings app, navigate to FaceTime > FaceTime Live Photos and enable the feature manually.

Family Sharing

Known Issues

- If payment verification is required, Family setup may not launch after the purchase of an Apple Music family membership. (32056496)
Workaround: Invite family members from Family Sharing settings.
- Pending invitations may not show in Family Sharing settings. Family members will appear once they accept their invitations. (32602074)
- After sharing iCloud storage with family members, the confirmation screen may not close. (32458127)
- Sharing your location with family members may not turn on location sharing. (32746961)
Workaround: Share your location from Family Sharing settings.
- When creating an Apple ID for a child, the Terms & Conditions acceptance screen may freeze even though the Apple ID has been created. To use Settings, force quit and then open the app. (32365952)

Files App

Resolved Issues

- The Files app can now display a QuickLook for an iWork document. (32353448)
- Quicklook thumbnails provided by QuickLook thumbnail extensions for custom UTI types now show the appropriate thumbnail. (32354934)
- VoiceOver now interacts correctly with Done, List, and Share buttons when VoiceOver is enabled and a user opens any document in the Recents tab. (32362561)

Foundation

Resolved Issues

- Reads and writes on a secure connection that uses the new authenticating HTTPS proxy feature of `URLSessionStreamTask` now work correctly. (31916868)
- The `fractionCompleted` property of the `Progress` object returned by `NSItemProvider` now advances in proportion to the data provider's progress. (32385051)

Known Issues

- To preserve backwards compatibility, iOS 11 beta 3 removed the `NSURLSession` empty string behavior for suppressing the sending of HTTP headers that was introduced in beta 2. (32959604)
- In iOS 11 beta 2 and later, `NSURLSession` and `NSURLConnection` may not load URLs if the system is configured with certain PAC files. PAC files are JavaScript files that specify the HTTP proxies used for accessing the Internet, and are configured in Settings > Wi-Fi. (32883776)

Workaround: Set “HTTP Proxy: Configure Proxy” to “Off” for Wi-Fi network.

- The `suggestedName` property of `NSItemProvider` is not used when an `NSData` representation is requested as an open-in-place file. Instead, a temporary file name is used. (32342544)
- The `visibility` parameter in `NSItemProvider` is not enforced. All representations are visible to all processes. (32233127)
- Support for using the `String` and `URL` types with `NSItemProvider` is absent in this beta. (32138540)

Workaround: Substitute `String` and `URL` with a different type.

- `preferredPresentationSize` is not available in this beta. (32501502)

Haptics

Resolved Issues

- Performing a forced refresh on iPhone 7 and iPhone 7 Plus no longer results in an unexpected pop or sound. (32635793)

HealthKit

Resolved Issues

- Attempting to finish a workout route when no location data is inserted no longer throws an exception. (32307523)

HomeKit

Resolved Issues

- Siri now recognizes a HomeKit setup in devices upgraded to iOS 11 beta. (32338077)
- When multiple home hubs are configured, reading from or writing to Bluetooth accessories now works correctly. (32578105)

iBooks

Resolved Issues

- Dropping PDFs and books into iBooks now works correctly. (32328715)
- Audiobooks now appear in the library after purchasing or after downloading again. (32150156)

- After deleting a book purchased from the store, subsequent download attempts now work as expected. (32775084)
- iBooks will no longer freeze when adding or removing a bookmark in a PDF document. (32625432)

iCloud

Resolved Issues

- After restoring from an iTunes backup, users are now able to authenticate iCloud credentials during setup. (32721872)
- When restoring from iCloud Backup in Setup Assistant, you should now see the correct list of backups. (31739878)
- Some services should now sync correctly on initial iCloud login. (32407057)
- Device Enrollment Program iPads now support iCloud backups. (32027587)

iTunes

Resolved Issues

- When installing the beta, users with separate iTunes and iCloud accounts are no longer logged out from their iTunes account. (32228993)

Known Issues

- In some cases when restoring from an iTunes backup, app icons and names may be missing until app sync and installation is complete. (32543667)

Keyboards

New Features

- Added a new Arabic keyboard for the Najdi dialect. (29187663)

Resolved Issues

- Changes to the keyboard state such as changing the keyboard type from one-handed to emoji, now persist. (33092873)

Managed Devices

Resolved Issues

- Apps installed by MDM are no longer stuck in waiting after restoring from a backup. (32267165)
- Unenrolled Managed Devices no longer reinstall MDM apps upon restore. (32387929)

Maps

Resolved Issues

- Siri is now able to get directions with Maps when Do Not Disturb While Driving is active. (32273986)

Media

Resolved Issues

- When a user revokes an application's access to Media & Apple Music in Settings > Privacy > Media & Apple Music, the Music User Token now behaves correctly. (31932361)
- Elapsed time is now updated when touching play or pause, or when seeking during video content playback. (32065281)
- Song metadata now syncs correctly with iTunes. This includes play counts, skip counts, and associated timestamps. Smart Playlists that use these criteria, such as Recently Played, do not update. This does not affect Star Ratings or Love/Dislike. (31488141)
- In Podcasts, selecting a station with multiple episodes may navigate to a blank screen. (32320460)

Known Issues

- Setting the `nowPlayerItem` property of `MPMusicPlayerController` does not work. (32258814)

Deprecations

- `requestPersonalizationTokenForClientToken` is deprecated in iOS 11. Use `getUserTokenFromDeveloperToken` instead. In the current build, `requestPersonalizationTokenForClientToken` returns an error. In a future build, it will return valid music user tokens without requiring a change to your app. (32065560)

Messages

Resolved Issues

- When testing the new Message Filter app extension feature, if the first incoming message from an unknown recipient is marked as spam by the extension, they are now delivered to the user. (31986503)
- Messages on iCloud should now be available after a device has been offline. (32224851)

Known Issues

- Attempting to insert an `MSMessage` using `MFMessageComposeViewController` results in a compose window with a blank staging area. (32087732)
- The `localParticipantIdentifier` and `selectedMessage` properties are `nil` for an `MSMessage` of style `MSMessageLiveLayout` when inserted into the transcript. (31374415)

Metal

New Features

- Added the BGR10A2 pixel format to Metal in beta 2.

Music app

Resolved Issues

- Notifications should now function as expected. (32463538)

Known Issues

- Turning off “Show in my Profile” for a playlist may still show the playlist name and artwork in your profile. (32560995)

Networking

New Features

- Added the Multipath Networking switch to Developer Settings to enable testing of `multipathServiceType`. Enabling Multipath Networking disables reducing cellular data usage for Wi-Fi Assist and allows experimenting with the multipath aggregation mode. (32927263)

Known Issues

- Wi-Fi password sharing and Personal Hotspot sharing on beta 2 and later don't work with devices that are running beta 1. (32500217)

Notes

Known Issues

- If a user restores from a backup in which the Notes app is deleted, the app may not work properly after being re installed. (32499971)
- Under some circumstances, rotating an iOS device may cause Apple Pencil to become unusable. (32020094)

On Demand Resources

Resolved Issues

- When debugging On Demand Resources, if the target is configured to use asset packs embedded in the Product Bundle, the assets are now found. (32437929)

Phone

New Issues

- The call history list in the Recents tab does not update immediately, which can result in the second number in the list being dialed when the the first number in the list is selected. Saved contacts are not affected by this issue. (33094744)

Resolved Issues

- Phone app should no longer crash when a voicemail message is deleted. (32394726)
- For certain carriers in certain geographies, some services, such as Voicemail, Messaging, Call Wait, Call Forwarding, and so on, on Wi-Fi calling-enabled devices now work correctly. (32433588)
- An SOS notification is no longer be sent when canceled. (32413903)

Photos

Resolved Issues

- Portrait images no longer change when entering Edit mode. (31889782)
- Editing a photo in Simulator now works correctly. (32298353)
- Thumbnails in the Photos import view and Image Capture app should now appear correctly. (32318758)
- RAW+JPG photos imported using the camera connection kit are now imported in the correct format. (32260701)
- Creating a new Photos or Kaleidoscope Watch Face from the Create Watch face share option in Photos no longer exits unexpectedly. (32011772)
- AirDrop sharing of Live Photos no longer results in an error when importing to Photos. (31971874)
- Photos captured on iOS 11 now show the correct orientation on versions of macOS earlier than 10.13. (32311412)

Known Issues

- Some third-party apps may not fully support HEVC and HEIF. (30292869)

Popover

Resolved Issues

- Immediately pressing Home from a popover-enabled app should no longer cause touch to become unresponsive. (32435759)
- Launching a popover-enabled app from the Dock no longer flashes the popover or the Dock during the launch animation. (32429615)

Quick Look

Resolved Issues

- Quick Look thumbnail extensions can now access the `fileURL` parameter of `QLFileThumbnailRequest` inside the `provideThumbnailForFileRequest:completionHandler` method of the `QLThumbnailProvider` protocol. (32354934)

Safari

New Features

- iOS 11 adds a new sync system for your Safari Bookmarks and Reading List to provide better syncing and security. Migration to the new sync system occurs silently after all the devices signed in to your iCloud account are running iOS 11. (22936727)

Resolved Issues

- In beta 2 and earlier, Safari Content Blockers may not have blocked content as expected.

Workaround: If a Content Blocker is not working as expected, in Settings > Safari, toggle the state of the Content Blocker.

- Routing audio to the speakerphone using WebRTC it is now works correctly. (32059254)
- Opening a link in Safari no longer results in a loop where Safari and another app repeatedly open each other. (32518579)
- `SafariViewController` no longer goes blank when opening multiple tabs. (32337105)
- The temporary increase in the amount of memory used to load Safari Content Blocker in beta 3 is removed in beta 4. (32330531)

SafariServices

New Features

- `SFSafariViewController` adds improved UI for 3D Touch previews by collapsing the toolbars to show just the domain and by adding default preview actions. (27222648)
- Added `SFAuthenticationSession`, a new API used to authenticate a user with a web service. Use the `url` parameter of the `init` method to specify a URL for an authentication webpage. `SFAuthenticationSession` then authenticates the user and calls the provided completion handler with either a callback URL containing an authentication token, or with an error. (32433374)
- Custom `UIActivity` items added to `SFSafariViewController` are now shown near the front of the `UIActivityViewController` by default. A user can still change the order of the activities to fit their preference. (32661540)

Security

New Issues

- Starting in iOS 11, macOS 10.13, tvOS 11, and watchOS 4, TLS 1.2 ciphersuites defined in RFC 5246 will only be allowed with TLS version 1.2. RFC 5246 ciphersuites are disallowed in prior versions of TLS. For example, the `TLS_RSA_WITH_AES_256_CBC_SHA256` ciphersuite is not allowed when negotiating TLS 1.0. (33140907)

Settings

New Issues

- Cellular data for music downloads may be included in Wi-Fi Services instead of in iTunes Accounts in the Cellular > System Services panel of the Settings app. (32353045)

Resolved Issues

- The Settings app no longer crashes when adding or deleting keyboards. (32716997)
- The Settings app no longer crashes when deleting Podcasts from device storage. (32408313)
- First-time installation of profiles now works as expected. (32249534)
- The Offload App feature now works for apps that are shipped with the OS. (32283120)

- Personal hotspot data usage is now included in the cellular data usage UI when the device acts as the host on T-Mobile US devices. (32262043)
- Storage graph and size information in Settings now updates correctly. (32295963)

Known Issues

- Social accounts have been removed from Settings in iOS 11. Third-party apps no longer have access to those signed-in accounts. (31687059)

Setup Assistant

Known Issues

- Sync on Reset and Guide User to Backup show a progress bar that appears to stop at 90% even though the data sync has complete successfully. (32715751)

Siri

New Features

- Added new voices for both genders of Brazilian Portuguese, Canadian French, Dutch, and Swedish. Added new female voices for English and Mexican Spanish, and upgraded the voice for both genders of Japanese and Chinese. (32221950)
- Added support for translation requests from English US to Chinese, Spanish, German, French, and Italian. (32221937)

New Issues

- On Chinese networks, Siri does not disambiguate between the three available emergency numbers before dialing. (31805684)
- General Knowledge and Wikipedia queries in languages other than English (United States) may result in a variety of UI and layout issues. (33404897)

Resolved Issues

- Siri UI now dismisses automatically from the screen while using Messages with CarPlay. (32428580)
- Siri results for Weather, Stocks, and Movies queries are now legible. (32327773)
- Switching Siri's voice from the Settings screen no longer plays a different voice from the default voice. (32332081)
- The Lists & Notes domain implementation for non-English languages should now work in the same way as US English. (30457023)
- Siri no longer hangs or times-out if the Home button is held for the duration of the spoken request. (33086511)
- While sending messages with Siri in CarPlay, pressing the "Send" button on the screen no longer results in the error, "Uh oh, there was a problem." (33160022)

Known Issues

- SiriKit commands for Notebook that are in Finnish do not work correctly if the commands are broken into more than one utterance. (32272318)

- Siri may use information from previous requests when completing the current request, even if Siri was closed between the requests. (33148434)

Workaround: To begin a new request use the “Start over” Siri command.

- Using Siri to correct the spelling of a transcribed request may result in an error.

Workaround: Tap the misspelled word and correct it using the on-screen keyboard.

- Weather snippets currently show a sash icon from the iOS Weather app. The snippet should show the icon for The Weather Channel. It is also missing an attribution that opens The Weather Channel app. (31429437)
- Users may encounter disambiguation issues while using Siri for Phone and Messages. (32477407)
- Using Siri to disambiguate between multiple phone numbers for a contact sometimes does not work. (32591639)

Workaround: Tap a selection in the UI.

SiriKit

Resolved Issues

- Siri no longer loops when using SiriKit Notes queries to mark a reminder. (32398834)
- When a user verbally tries to disambiguate between two or more SiriKit apps in a disambiguation list, Siri now prompts for more details before opening an app. (32188589)
- SiriKit testing now works in Simulator. (32721342)
- If the user does not mention the app name in the initial utterance, tapping the app in the disambiguation no longer launches the app instead of other possible Siri actions. (32361047)
- `UIImage` objects constructed with URLs or image names now display correctly in the Siri UI. (31585381)

Touch ID

New Issues

- Touch ID does not work correctly with `LocalAuthentication.framework` in the iOS 11 Simulator Runtime. (33355624)

Workaround: Test Touch ID functionality on-device or with an older runtime.

UIKit

Resolved Issues

- Setting the `delaysContentTouches` property of `UITableView` to `false` now works correctly and results in cells highlighting immediately on a touchdown event. (27102830)
- Importing a document using `UIDocumentPickerViewController` now returns a copy of the document. (32358695)

- In drag and drop, move operations are supported only when the drag and the drop both happen within the same app. Starting in beta 2, the value of `UIDropSession.allowsMoveOperation` is set to `false`. (32416557)
- The `view` argument of the `locationInView:` method of `UIDragSession` and `UIDropSession` is no longer nullable. The declaration of the method has changed to `location(in view: UIView)`. (31714683)

Known Issues

- `UIDocumentBrowserViewController` does not show `UIDocumentPickerExtensionViewController` app extensions in the list of sources. While these will be re enabled in a future beta, consider using an `NSFileProviderExtension` instead, as they are integrated in `UIDocumentBrowserViewController` instead of being presented in a separate sheet. (31975976)
- Setting the `textContentType` to `username` or `password` for `UITextField` in the `previewProvider` property of `UIDragItem` is not fully implemented. During the drag session, each change to the `previewProvider` causes an immediate update, regardless of which app changed it. In addition, clearing the `previewProvider` does not cause the preview to go back to its non-overridden state. (30385458)
- Setting the `previewProvider` property of `UIDragItem` immediately after the drag item is created has no effect. (32284908)

Workarounds:

Implement `dragInteraction:previewForLiftingItem:session:` in your drag interaction's delegate to change the lift preview. The preview carries over to the drag session.

Change the preview during the drag session by setting `previewProvider` after the delegate's `sessionWillBegin` is called. If you are using `UITableView` or `UICollectionView`, there is no direct equivalent of that method, so you may use a delay instead.

- The `canLoadObjectsOfClasses:` method of `UIDragDropSession` will be removed in a later seed. Use `canLoadObjectOfClass:` instead. (32242367)
- When dragging more than five items, the drop/cancel animation uses a default animation. The system calls the dropping/canceling preview calls for the first five of these items, even though they are not used. In a later beta, the system will not make these calls, and instead provides an additional API for animating alongside items for which a custom animation cannot be applied. (32299785)
- Do not use the class `UIURLDragPreviewView` because will be removed in a later beta. To make drag previews of URLs, use `UIDragPreview` and `UITargetedDragPreview`. (32306613)
- Table views in Interface Builder documents compiled with Xcode 9.0 may have fixed heights for rows, section headers, and section footers, and may not self-size by default. (32188814)

Workaround: Set the table view `rowHeight`, `sectionHeaderHeight`, or `sectionFooterHeight` to `UITableViewAutomaticDimension` after the table view has been instantiated.

- `UITableView` has a new system gesture for quickly selecting rows. A two-finger tap on table views that support multiple selection sets the table view to editing, if it is not already, and selects the tapped row. Unlike a single-finger tap, which toggles selection, the two-finger tap always selects the tapped row and has no effect if the row is already selected. This new gesture is enabled only in apps built for iOS 11. (29127664)
- `UITableView` has a new property, `separatorInsetReference`, that changes how a custom value set in the `separatorInset` property is interpreted. By default, the value is `.fromCellEdges`, which means that custom `separatorInset` values are always interpreted as an inset from the edges of the cell, even in cases where table view would normally use larger automatic insets for the separator, such as a very wide table view when the `cellLayoutMarginsFollowReadableWidth` property is `true`.

Set the `separatorInsetReference` to `.fromAutomaticInsets` to use the `separatorInset` as a fixed distance from the automatic inset that a table view would normally use.

Note that you can always use `UITableViewAutomaticDimension` for any edge of the `separatorInset` that you set, to receive the automatic inset on that edge. (31000402)

- Table views now use estimated heights by default, which also means that cells and section header/footer views now self-size by default. The default value of the `estimatedRowHeight`, `estimatedSectionHeaderHeight`, and `estimatedSectionFooterHeight` properties is now `UITableViewAutomaticDimension`, which means the table view selects an estimated height to use. You should still provide a more accurate estimate for each property if possible, which is your best guess of the average value of the actual heights. If you have existing table view code that behaves differently when you build your app with the iOS 11 SDK, and you don't want to adopt self-sizing, you can restore the previous behavior by disabling estimated heights by setting a value of zero for each estimated height property. (30197915)
- Adding custom subviews directly to `UITableView` is not supported and might break in a future iOS release. (29094519)
- The behavior of the delete swipe action has been changed.

When implementing `commitEditingStyle:` to delete a swiped row, delete the row in the data source and call `deleteRowsAtIndexPaths:` on the table view to show the swipe delete animation. Not calling `deleteRowsAtIndexPaths` inside of this method results in the swiped row resetting to its resting position. Do not display a confirmation dialog in the implementation of this method, and support undo to allow canceling a deletion. To show a confirmation dialog, use a `UIContextualAction` instead (described next).

When implementing a destructive `UIContextualAction`, delete the row in the data source and call the completion handler with `true`. Do not call `deleteRowsAtIndexPaths:` in this case. If the deletion fails, call the completion handler with `false` to cancel the deletion. Although it should generally be avoided, you can show a confirmation dialog to confirm the deletion, and then call the completion handler with `true` if the user confirms (after deleting the row from its data source), or with `false` if the user cancels. It is also advised to disable `performsFirstActionWithFullSwipe` on the `UISwipeActionsConfiguration` in this case. Note that the completion handler must be called in all cases. (31588888)

- When the user selects one of the Accessibility Larger Text content sizes as their preferred content size, `UITableViewCell` uses a new default layout that is optimized for the larger sizes. The `numberOfLines` property of `UITableViewCell` labels (both `textLabel` and `detailTextLabel`) changes to 0 (unlimited) by default when the Accessibility content sizes are in use. You may override this by explicitly setting the `numberOfLines` property. The standard image view and accessory views are aligned with the first line of text in the cell, and cell text wraps around the image in order to maximize the amount of text displayed per line. For the Value1, Value2, and Subtitle styles, the `detailTextLabel` is arranged underneath the standard `textLabel`. For `UISwitch` accessory views, the switch is located below the labels and aligned with the leading edge of the text. Because of these changes, which increase the height of the cell content at Accessibility content sizes, it's important to use self-sizing cells to ensure that the row height increases as necessary, and to avoid using a fixed row height for all content sizes. (28102750)
- The `imageNamed:inBundle:compatibleWithTraitCollection:` class method of `UIImage` now properly infers the `UIDisplayGamut` trait if it is not explicitly provided. If you are deploying to earlier versions of iOS, to provide the `UIDisplayGamut` trait in the trait collection, you pass to `imageNamed:inBundle:compatibleWithTraitCollection:`. You can obtain the correct value of this trait from the window or view that will display the image. Failing to provide the value can result in images failing to load on devices with P3 displays if the sRGB renditions of those images had been thinned out of the asset catalog. (29915518)
- `UINavigationController.searchController` appears only for view controllers that use a `UIScrollView`. (32511772)
Workaround: Set `UINavigationController.hidesSearchBarWhenScrolling` to `false`.
- By default, UIKit logging occurs only when unsatisfiable constraints are detected. Use the `UIConstraintBasedLayoutThrowExceptionOnUnsatisfiableConstraints` launch argument to add an assertion for early detection of the problem. The launch argument works in iOS 11 and later. (28123998)
- A `UIView` that makes visual changes both by overriding `drawRect:` and by setting the layer contents may result in visual artifacts or other errors in iOS 11. Apps should use only one of the methods to make visual changes to a view. (31350188)

Vision

Resolved Issues

- Vision now supports other Core ML feature vectors in addition to classifiers. iOS 11 beta 2 and earlier worked only with classifier models. (32944774)
- The `RectangleTracker` API should no longer stop responding unexpectedly. (32332200)
- The Vision API is now available from the macOS 10.13 and iOS 11 SDKs even if `DEPLOYMENT_TARGET` is set to a version earlier than the current OS.

Known Issues

- Facial landmarks identified by the Vision framework may flicker in temporal use cases such as video. (32406440)

Deprecations

- The type of the orientation parameter in Vision framework calls has changed from an `Int32` to an `CGImagePropertyOrientation` enum found in the ImageIO framework.

Important: Update your code with the new type to avoid compilation warnings or errors related to the change.

watchOS

Resolved Issues

- In the Watch app, changes to Mail > Include Mail are now saved. (32553544)
- On an Apple Watch running a version of watchOS earlier than 4, location activity now correctly sets the location arrow in the status bar or in Settings. (31496053)
- watchOS email alerts now use the configured settings. (32332614)

Known Issues

- Pairing an iPhone running a beta of iOS 11 and an Apple Watch running a version of watchOS earlier than 4 may fail. (32587160)

Workaround: Attempt to pair the Apple Watch again.