

Documentation

[App Store Server Notific...](#) / notificationType

Type

notificationType

The type that describes the In-App Purchase or external purchase event for which the App Store sends the version 2 notification.

App Store Server Notifications 2.0+

```
string notificationType
```

Possible Values

CONSUMPTION_REQUEST

A notification type that indicates that the customer initiated a refund request for a consumable In-App Purchase or auto-renewable subscription, and the App Store is requesting that you provide consumption data. For more information, see [Send Consumption Information](#).

DID_CHANGE_RENEWAL_PREF

A notification type that, along with its [subtype](#), indicates that the customer made a change to their subscription plan. If the subtype is UPGRADE, the customer upgraded their subscription. The upgrade goes into effect immediately, starting a new billing period, and the customer receives a prorated refund for the unused portion of the previous period. If the subtype is DOWNGRADE, the customer downgraded their subscription. Downgrades take effect at the next renewal date and don't affect the currently active plan.

If the subtype is empty, the customer changed their renewal preference back to the current subscription, effectively canceling a downgrade.

For more information on subscription levels, see [Ranking subscriptions within the group](#).

DID_CHANGE_RENEWAL_STATUS

A notification type that, along with its subtype, indicates that the customer made a change to the subscription renewal status. If the subtype is AUTO_RENEW_ENABLED, the customer reenabled subscription auto-renewal. If the subtype is AUTO_RENEW_DISABLED, the customer turned off subscription auto-renewal, or the App Store turned off subscription auto-renewal after the customer requested a refund.

DID_FAIL_TO_RENEW

A notification type that, along with its subtype, indicates that the subscription failed to renew due to a billing issue. The subscription enters the billing retry period. If the subtype is GRACE_PERIOD, continue to provide service through the grace period. If the subtype is empty, the subscription isn't in a grace period and you can stop providing the subscription service.

Inform the customer that there may be an issue with their billing information. The App Store continues to retry billing for 60 days, or until the customer resolves their billing issue or cancels their subscription, whichever comes first. For more information, see [Reducing Involuntary Subscriber Churn](#).

DID_RENEW

A notification type that, along with its subtype, indicates that the subscription successfully renewed. If the subtype is BILLING_RECOVERY, the expired subscription that previously failed to renew has successfully renewed. If the subtype is empty, the active subscription has successfully auto-renewed for a new transaction period. Provide the customer with access to the subscription's content or service.

EXPIRED

A notification type that, along with its subtype, indicates that a subscription expired. If the subtype is VOLUNTARY, the subscription expired after the customer turned off subscription renewal. If the subtype is BILLING_RETRY, the subscription expired because the billing retry period ended without a successful billing transaction. If the subtype is PRICE_INCREASE, the subscription expired because the customer didn't consent to a price increase that requires customer consent. If the subtype is PRODUCT_NOT_FOR_SALE, the subscription expired because the product wasn't available for purchase at the time the subscription attempted to renew.

A notification without a subtype indicates that the subscription expired for some other reason.

EXTERNAL_PURCHASE_TOKEN

A notification type that applies only to apps that use the [External Purchase](#) API to provide alternative payment options. This notification can have a subtype of CREATED, ACTIVE_TOKEN_Reminder, or UNREPORTED, and includes the external purchase token information, `externalPurchaseToken`.

GRACE_PERIOD_EXPIRED

A notification type that indicates that the billing grace period has ended without renewing the subscription, so you can turn off access to the service or content. Inform the customer that there may be an issue with their billing information. The App Store continues to retry billing for 60 days, or until the customer resolves their billing issue or cancels their subscription, whichever comes first. For more information, see [Reducing Involuntary Subscriber Churn](#).

METADATA_UPDATE

A notification type that indicates you used the [Change Subscription Metadata](#) endpoint to change the metadata for a subscription. This notification only applies to apps that use the [Advanced Commerce API](#).

MIGRATION

A notification type that indicates you used the [Migrate a Subscription to Advanced Commerce API](#) endpoint. This notification only applies to apps that use the [Advanced Commerce API](#).

OFFER_REDEEMED

A notification type that, along with its [subtype](#), indicates that a customer with an active subscription redeemed a subscription offer.

If the subtype is UPGRADE, the customer redeemed an offer to upgrade their active subscription, which goes into effect immediately. If the subtype is DOWNGRADE, the customer redeemed an offer to downgrade their active subscription, which goes into effect at the next renewal date. If the customer redeemed an offer for their active subscription, you receive an OFFER_REDEEMED notification type without a subtype.

When customers redeem an offer code for a consumable, non-consumable, or non-renewing subscription, the notification type is ONE_TIME_CHARGE.

For more information about offer codes, see [Supporting subscription offer codes in your app](#). For more information about promotional offers, see [Implementing promotional offers in your app](#).

ONE_TIME_CHARGE

A notification type that indicates the customer purchased a consumable, non-consumable, or non-renewing subscription. The App Store also sends this notification when the customer receives access to a non-consumable product through Family Sharing. To determine whether the customer redeemed an offer, check the [offerType](#) in the decoded payload, [JWSTransactionDecodedPayload](#).

For notifications about auto-renewable subscription purchases, see the SUBSCRIBED notification type.

PRICE_CHANGE

A notification type that indicates that you called the [Change Subscription Price](#) endpoint. This notification only applies to apps that use the [Advanced Commerce API](#).

PRICE_INCREASE

A notification type that, along with its [subtype](#), indicates that the system has informed the customer of an auto-renewable subscription price increase.

If the price increase requires customer consent, the subtype is PENDING if the customer hasn't responded to the price increase, or ACCEPTED if the customer has consented to the price increase.

If the price increase doesn't require customer consent, the subtype is ACCEPTED.

For information about how the system calls your app before it displays the price consent sheet for subscription price increases that require customer consent, see [paymentQueueShouldShowPriceConsent\(\)](#). For information about managing subscription prices, see [Managing Price Increases for Auto-Renewable Subscriptions](#) and [Managing Prices](#).

REFUND

A notification type that indicates that the App Store successfully refunded a transaction for a consumable In-App Purchase, a non-consumable In-App Purchase, an auto-renewable subscription, or a non-renewing subscription.

The [revocationDate](#) contains the timestamp of the refunded transaction. The [originalTransactionId](#) and [productId](#) identify the original transaction and product. The [revocationReason](#) contains the reason.

To request a list of all refunded transactions for a customer, see [Get Refund History](#) in the [App Store Server API](#).

REFUND_DECLINED

A notification type that indicates the App Store declined a refund request.

REFUND_REVERSED

A notification type that indicates the App Store reversed a previously granted refund due to a dispute that the customer raised. If your app revoked content or services as a result of the related refund, it needs to reinstate them.

This notification type can apply to any In-App Purchase type: consumable, non-consumable, non-renewing subscription, and auto-renewable subscription. For auto-renewable subscriptions, the renewal date remains unchanged when the App Store reverses a refund.

RENEWAL_EXTENDED

A notification type that indicates the App Store extended the subscription renewal date for a specific subscription. You request subscription-renewal-date extensions by calling Extend a

Subscription Renewal Date or Extend Subscription Renewal Dates for All Active Subscribers in the App Store Server API.

RENEWAL_EXTENSION

A notification type that, along with its subtype, indicates that the App Store is attempting to extend the subscription renewal date that you request by calling Extend Subscription Renewal Dates for All Active Subscribers.

If the subtype is SUMMARY, the App Store completed extending the renewal date for all eligible subscribers. See the [summary](#) in the [responseBodyV2DecodedPayload](#) for details. If the subtype is FAILURE, the renewal date extension didn't succeed for a specific subscription. See the data in the [responseBodyV2DecodedPayload](#) for details.

RESCIND_CONSENT

A notification type that indicates the parent or guardian has withdrawn consent for a child's app usage.

REVOKE

A notification type that indicates that an In-App Purchase the customer was entitled to through Family Sharing is no longer available through sharing. The App Store sends this notification when a purchaser disables Family Sharing for their purchase, the purchaser (or family member) leaves the family group, or the purchaser receives a refund. Your app also receives a `paymentQueue(_:didRevokeEntitlementsForProductIdentifiers:)` call. Family Sharing applies to non-consumable In-App Purchases and auto-renewable subscriptions. For more information about Family Sharing, see Supporting Family Sharing in your app.

SUBSCRIBED

A notification type that, along with its subtype, indicates that the customer subscribed to an auto-renewable subscription. If the subtype is RESUBSCRIBE, the customer resubscribed or received access through Family Sharing to the same subscription or to another subscription within the same subscription group. If the subtype is INITIAL_BUY, the customer either purchased or received access through Family Sharing to the subscription for the first time. To determine whether the customer redeemed an offer, check the [offerType](#) in the decoded payload, [JWSTransactionDecodedPayload](#).

For notifications about other product type purchases, see the ONE_TIME_CHARGE notification type.

TEST

A notification type that the App Store server sends when you request it by calling the [Request a Test Notification](#) endpoint. Call that endpoint to test whether your server

is receiving notifications. You receive this notification only at your request. For troubleshooting information, see the [Get Test Notification Status](#) endpoint.

Mentioned in

- 📄 App Store Server Notifications changelog
- 📄 Enabling App Store Server Notifications

Discussion

The `notificationType` appears in the notification payload, [`responseBodyV2DecodedPayload`](#). It describes the event that leads to the notification. Some notifications also have a `subtype` that further describes the event. See the [`responseBodyV2DecodedPayload`](#) for more information about the notification in the `data`, `summary`, or `externalPurchaseToken` object.

Handle use cases for In-App Purchase life-cycle events

When events occur that affect the customer's In-App Purchase and subscription life cycle, the App Store server sends you notifications. The following tables list the notifications by life-cycle events.

Event	Notification type	Notification subtype
Customer purchases a consumable, non-consumable, or non-renewing subscription.	ONE_TIME_CHARGE	
Customer redeems an offer code for a consumable, non-consumable, or non-renewing subscription.	ONE_TIME_CHARGE	
Customer receives access to a non-consumable In-App Purchase through Family Sharing.	ONE_TIME_CHARGE	

Events that enable service for subscriptions, including initial subscriptions, resubscribing, and successful auto-renewals, result in the following notifications:

Event	Notification type	Notification subtype
Customer subscribes for the first time to any subscription within a subscription group.	SUBSCRIBED	INITIAL_BUY
Customer resubscribes to any subscription from the same subscription group as their expired subscription.	SUBSCRIBED	RESUBSCRIBE
The subscription successfully auto-renews.	DID_RENEW	
A family member gains access to the subscription through Family Sharing after the purchaser subscribes for the first time.	SUBSCRIBED	INITIAL_BUY
A family member gains access to the subscription through Family Sharing after the purchaser resubscribes.	SUBSCRIBED	RESUBSCRIBE

Customers changing their subscription options, including upgrading, downgrading, or canceling, result in the following notifications:

Event	Notification type	Notification subtype
Customer downgrades a subscription within the same subscription group.	DID_CHANGE_RENEWAL_PREF	DOWNGRADE
Customer reverts to the previous subscription, effectively canceling their downgrade.	DID_CHANGE_RENEWAL_PREF	
Customer upgrades a subscription within the same subscription group.	DID_CHANGE_RENEWAL_PREF	UPGRADE
Customer cancels the subscription from the App Store Subscriptions settings page.	DID_CHANGE_RENEWAL_STATUS	AUTO_RENEW_DISABLED
Customer subscribes again after canceling a subscription, which reenables auto-renew.	DID_CHANGE_RENEWAL_STATUS	AUTO_RENEW_ENABLED
The system turned off auto-renew because the customer initiated a refund through your app using	DID_CHANGE_RENEWAL	AUTO_RENEW_DISABLED

Event	Notification type	Notification subtype
the refund request API.	_STATUS	

Customers redeeming offers, such as promotional offers, win-back offers, or offer codes result in the following notifications:

Event	Notification type	Notification subtype
Customer redeems a promotional offer or offer code for an active subscription.	OFFER _REDEEMED	
Customer redeems an offer code to subscribe for the first time.	SUBSCRIBED	INITIAL_BUY
Customer redeems a promotional offer, offer code, or win-back offer after their subscription expired.	SUBSCRIBED	RESUBSCRIBE
Customer redeems a promotional offer or offer code to upgrade their subscription.	OFFER _REDEEMED	UPGRADE
Customer redeems a promotional offer and downgrades their subscription.	OFFER _REDEEMED	DOWNGRADE
Customer redeems an offer code for a consumable, non-consumable, or non-recurring subscription.	ONE_TIME _CHARGE	

Billing events, including billing retries, entering and exiting the billing grace period, and expiring subscriptions, result in the following notifications:

Event	Notification type	Notification subtype
The subscription expires because the customer chose to cancel it.	EXPIRED	VOLUNTARY
The subscription expires because the developer removed the subscription from sale and the renewal fails.	EXPIRED	PRODUCT_NOT_FOR_SALE

Event	Notification type	Notification subtype
The subscription expires because the billing retry period ends without recovering the subscription.	EXPIRED	BILLING_RETRY
The subscription fails to renew and enters the billing retry period.	DID_FAIL_TO_RENEW	
The subscription fails to renew and enters the billing retry period with Billing Grace Period enabled.	DID_FAIL_TO_RENEW	GRACE_PERIOD
The billing retry successfully recovers the subscription.	DID_RENEW	BILLING_RECOVERY
The subscription exits the billing grace period (and continues in billing retry).	GRACE_PERIOD_EXPIRED	

Events or notifications that occur when you increase the price of an auto-renewable subscription include:

Event	Notification type	Notification subtype
The system informs the customer of the auto-renewable subscription price increase that requires customer consent, and the customer doesn't respond.	PRICE_INCREASE	PENDING
The auto-renewable subscription expires because the customer didn't consent to the price increase that requires consent.	EXPIRED	PRICE_INCREASE
Customer consents to an auto-renewable subscription price increase that requires consent.	PRICE_INCREASE	ACCEPTED
The system notifies the customer of the auto-renewable subscription price increase that doesn't require customer consent.	PRICE_INCREASE	ACCEPTED
Customer canceled the subscription after receiving a price increase notice or a request to consent to a price increase.	DID_CHANGE_RENEWAL_STATUS	

Customers requesting refunds or canceling Family Sharing result in the following notifications:

Event	Notification type	Notification subtype
Apple refunds the transaction for a consumable or non-consumable In-App Purchase, a non-renewing subscription, or an auto-renewable subscription.	REFUND	
Apple reverses a previously granted refund due to a dispute that the customer raised.	REFUND _REVERSED	
Apple declines a refund that the customer initiated in the app, using the request refund API.	REFUND _DECLINED	
Apple requests consumption information for a refund request that a customer initiates.	CONSUMPTION _REQUEST	
A family member loses access to the subscription through Family Sharing.	REVOKE	

Developers requesting subscription-renewal-date extensions result in the following notifications:

Event	Notification type	Notification subtype
The App Store successfully extends a subscription renewal date for a specific subscription.	RENEWAL _EXTENDED	
The App Store successfully completes extending the subscription renewal date for all eligible subscribers.	RENEWAL _EXTENSION	SUMMARY
The App Store failed to extend the subscription renewal date for a specific subscriber.	RENEWAL _EXTENSION	FAILURE

See Also

Server notifications version 2

Specify your secure server's URL in App Store Connect to receive version 2 notifications.

object responseBodyV2

The response body the App Store sends in a version 2 server notification.

object responseBodyV2DecodedPayload

A decoded payload that contains the version 2 notification data.

type subtype

A string that provides details about select notification types in version 2.