Oracle Responsys

Mobile App Platform Cloud Service Configuration Guide

Responsys 19D

This document is for new Responsys Customers who have purchased and enabled Oracle Responsys Mobile App Platform Cloud Service. (This product was previously known as Oracle Push Cloud Service – Integrated with Responsys, or "Integrated Push".)

It is also for existing customers who enabled Integrated Push prior to September 2016 and whose accounts have been migrated to the Responsys v2 Integrated Push architecture available for Responsys Release 6.29 and later. (The v2 Integrated Push architecture was formerly known as the "6.29 Integrated Push architecture." For more information, see the FAQ topic "What is the difference between v1 and v2 Integrated Push architecture" on page 74.)

The Responsys 19D functionality in this guide requires the Mobile App Platform Push SDK 6.43.0 or later. Other functionality requires 6.33 or later OR an existing Responsys Integrated mobile app that was migrated to the v2 architecture.

September 2019

Documentation for Oracle Responsys customers who integrate Responsys with a mobile app using the current Oracle Responsys Mobile App Platform Cloud Service SDK. It is also for those whose accounts were migrated to the v2 Integrated Push architecture

Oracle Responsys Mobile App Platform Cloud Service Configuration Guide

Responsys 19D document revision 01

You can always find the latest version of this document from the following Topliners page: https://community.oracle.com/docs/DOC-1017159

Documentation for Oracle Responsys customers who integrate Responsys with a mobile app using the current Oracle Responsys Mobile App Platform Cloud Service SDK. It is also for those whose accounts were migrated to the v2 Integrated Push architecture.

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Overview

This document is for Responsys users who configure Responsys to interact with their organization's mobile apps. This document assumes that user to be the customer's Responsys Account Admin or a user with similar permissions. "Mobile App Platform" enables marketers to send interactions to mobile apps. Responsys can send these as Push Notifications (including Rich Push), In-App Messages, and Message Center messages. The Mobile App channel is different from the other Responsys channels like Email and SMS, because it requires managing two lists for campaign setup and execution: the Contact Profile List and the App Channel List.

Mobile App Channel Setup Checklist

Set up Responsys accounts for one or more Mobile App Developer, as described in "Adding Mobile App Developer users to Responsys" on page 15. Mobile App Developers use the Mobile App Developer Console to add their mobile apps to Responsys.
Set up the App Channel List , as described in " <u>Setting up the App Channel List</u> " on page 17. This is required before you can set up and launch Mobile App Channel campaigns.
OPTIONAL - Set up the App Channel List Preferences PET , as described in "Setting up an App Channel Preferences PET (Optional)" on page 26. This is required only if the mobile app will be sending a user's notification preferences information to Responsys.
OPTIONAL - Set up the Connect job for importing an App Channel List PET, as described in "Using an App Channel List PET for mobile app behavioral targeting (Optional)" on page 32. This is required only if the marketer users plan to import additional device data from an external third-party source, such as device/audience segmentation data for performing mobile app behavioral targeting.
OPTIONAL - Configure custom trigger names , as described in " <u>Setting up custom triggers for In-App messages (Optional)</u> " on page 38. This is required if the mobile app supports custom triggers for In-App messaging.
OPTIONAL – Enhance your Push notifications with actionable buttons, as described in " <u>Using Interactive Notifications (Optional)</u> " on page 45. This optional feature provides a set of standard buttons that work for mobile apps built with the 18A or later SDK. Marketers can also work with Mobile App Developers to implement custom buttons.
OPTIONAL - Add a Mobile App Message Center to your app, as described in " <u>Defining your Mobile App Message Center (Optional)</u> " on page 49. This is an optional enhancement for mobile apps, which enables Push message recipients to view previously received Push messages.

Provide users with access to Interactive Dashboards for mobile app campaign reporting, as described in "Enabling mobile app reporting for mobile app campaigns" on page 58. This is required
to use the interactive dashboards.

What's new for the Mobile App Channel?

Refer to the <u>Oracle Responsys Release Center</u> page on Topliners to view upcoming release dates, feature availability, release training videos with details about new features, and the "What's New" (aka Release Notes) documents.

Changes and enhancements for 19D

Xcode 11 Support

Before you build your iOS app with Xcode (or with iOS 13.x libraries), you are required to integrate your iOS mobile app with Responsys SDK version 6.42.1 or later.

Why is this upgrade required?

If you build your app with Xcode 11 or iOS 13.x libraries, and do not integrate your iOS app with Responsys SDK version 6.42.1 or later, your iOS mobile app users will not receive Push Notifications from Responsys. Xcode 11 and iOS 13.x libraries break the method used by Push Notification SDKs like the Responsys Push SDK to obtain a Push Notification token for apps.

By when do I need to upgrade my mobile app?

We recommend that you immediately upgrade your iOS app to use Responsys SDK version 6.42.1 or later. In doing so, you can ensure your app will have the prerequisites required to build your app with Xcode 11 or iOS 13.x libraries, and will avoid issues when upgrading to the latest Xcode versions.

iOS SDK and Change Log Links:

- iOS SDK Releases
- iOS SDK Change Log

As always, we recommend you use the latest version of our Push SDKs when managing your mobile solution. For questions, contact Oracle Support.

Segmentation of Logged in Mobile App Users

We've added the ability for marketers to create segments to filter on logged in app users and logged out app users. The **USER_IDENTIFIER** filter is available in the <u>Filter Designer</u> under **App Channel**. To implement this feature, iOS apps must integrate with the 19D Responsys Push iOS SDK 6.43.0 or later.

Provisional Authorization Support

Added support for iOS Provisional Authorization. After an app has implemented the 19D/6.43.0 SDK, marketers can make decisions based on whether or not certain users are Provisionally Authorized by using the new **PUSH_PERM_AUTH_STATUS_** column in the App Channel List. This enhancement enables marketers to create segments of users that are opted-in to Provisional Authorization. For more information on how to use the new column in an App Channel List, see the <u>Responsys Help Center</u>.

Using Provisional Authorization iOS apps, starting in iOS 12, upon install you can give users a "trial run" or preview of notifications from your app. These notifications include a built-in prompt that asks users if they want to continue receiving notifications from your app.

Segmentation of Mobile App Users based on App Icon Badging and Location Services

Oracle Responsys now tracks individual opt-in statuses for various mobile features so that marketers can target only relevant devices with their campaigns. Marketers can use these permission fields as attributes in a filter, and then target the filter with a campaign. To implement this feature, apps must integrate with the 19D Responsys Push SDK 6.43.0 or later for Android or iOS.

The new permission fields are:

- APP_LOCATION_PERMISSION_: Segments users who have granted app access to App Location Services for iOS and Android on their device.
- PUSH_PERM_BADGES_: Segments users who have opted in to iOS App Icon Badging.

See the Oracle Responsys Help Center for more information on the <u>new fields and possible values</u>, as well as how to <u>create a filter</u>.

Changes and enhancements for 19C

Android App Links

Added support for Android App Links. Android App Links enables Email Marketers to deep link their Android end users in a standard, seamless and secure manner into their Android Apps. Similar to the existing support for Oracle Responsys iOS Universal Links, some of the highlights of this feature include:

Link from a Responsys email campaign directly into an Android mobile app (if installed)

Achieve email-to-app deep linking on Android devices, while preserving click tracking and selective app deep linking

See the Android App Links guide for more information.

Support for Multiple Push SDKs in one app

Integrate and use the Responsys Push SDK on your app even if your app already uses multiple other Push SDKs. Release 19C onwards, we provide a solution that apps can implement to enable co-existence of the Responsys Push SDK with multiple Push SDKs within the same app. For more information, see the platform specific topics for <u>Android</u> and <u>iOS</u>.

Changes and enhancements for 19B

Authentication Key Support for iOS Apps

Responsys now supports Authentication Key Credentials for iOS apps. The key advantage of using Authentication Key Credentials over .PEM files, is that unlike .PEM files, Authentication Keys do not expire. Learn more

App Icon Badges for Message Center

App Icon Badges are supported through Message Center messaging Campaigns. Marketers can display a Badge Count on the App Icon on an end user's device to indicate to the app user the number of new Message Center message available. Marketers can Increment the Badge Count for every message sent to user's device. App Icon Badging with Message Center Messages can drive increases app user engagement rates. For more information, see the platform specific topics for <u>Android</u> and <u>iOS</u>.

Same App for Multiple Accounts

You can now use one Responsys app across multiple Responsys accounts. Previously, Responsys apps were restricted to a single Responsys account.

Responsys accounts may use a single app across multiple Brands or Geographic regions. If you have multiple accounts in Responsys (each corresponding to a separate brand, organization, or geographic region) but have a single app that is used for each of these brands, organizations, or regions, you will now be able to configure and use the same app in each of your Responsys accounts.

At any given time an app user will be associated with only one of your Responsys accounts. When an app user switches the brand, organization, or region on the app, they will be disassociated from the current Responsys account and associated with another of your Responsys accounts.

Note: This feature is available under our Controlled Availability program. To request access to this feature, please contact your Customer Success manager or log in to My Oracle Support and create a service request. For more information, see the platform specific topics for Android and iOS.

Support for AndroidX Libraries

The Responsys Android SDK (Release 19B / Version 6.41.0 onwards) supports AndroidX libraries. Apps using AndroidX libraries instead of Android Support libraries, can use the PushIO SDK with Jetifier enabled in the *gradle.properties* file.

Changes and enhancements for 19A

Geofence and Beacon Events API

Responsys now supports geofence and beacon events. The Responsys Push SDK has added a set of open APIs that enable app developers to raise entry and exit events for geofences and beacons. You can integrate with a geofence/beacon solution of your choice, or integrate with a native geofence/beacon solution.

Once implemented, marketers will be able to use geofence and beacon events in their program orchestrations in Responsys. These location-based events will be triggered when a mobile device user enters or exits a geofence or beacon zone.

Learn more:

• For configuration and usage details, see the <u>Geofence and Beacon Event Variables</u> topic in the *Oracle Responsys Help Center*.

• For implementation details, see the <u>Oracle Responsys Mobile App Platform Cloud Service SDK</u>
<u>Developer's Guide.</u>

mParticle Kit for Responsys SDK

The Oracle Responsys Push SDK now supports an integration with mParticle through iOS and Android mParticle Kits, which serve as an integration layer between the Responsys and mParticle SDKs. If you use mParticle as a Customer Data Platform (CDP), this integration will enable you to forward events to mParticle for further analysis and processing.

Learn more: See the Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide.

Support for titles in Push notifications

In the 19A update, we have made an enhancement that allows marketers to design and launch push notification campaigns with titles. Marketers can use the title to compose more contextual push notifications. Such notifications catch the mobile app user's attention more effectively and can lead to better campaign performance.

Marketers can access the Title field by opening the Settings dialog located on the Responsys Push Message Designer page. The Title field supports personalization and emojis.

Learn more:

- For usage details, see the <u>Push Designing a Campaign</u> topic in the *Oracle Responsys Help Center*.
- For implementation details, see the <u>Oracle Responsys Mobile App Platform Cloud Service SDK</u> Developer's Guide.

Support for custom conversion window for Push conversions from mobile apps

Responsys already supports a Push Conversion event, which attributes conversions inside the app to the push campaign that led the app user into the mobile app. In 19A, this has been enhanced to allow mobile app developers and marketers to define the conversion window for push conversion events that occur from within the mobile app.

Marketers and mobile app developers will be able to define the concept of a conversion window that is applicable for their business. For example, they could define the conversion window to log a conversion only if the mobile app user makes the conversion within a certain number of days of opening the push notification. They could also define the conversion window such that a conversion is logged only once for every push notification opened.

Learn more: See the Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide.

Changes and enhancements for 18D

New Push Recency Filter Attribute

A new Push Recency filter attribute, "Last Push Button click date", has been added to Filter Designer. These interactions occur when a mobile app user clicks an Interactive Notification button in a Push notification.

Learn more: See the <u>filter attributes topic</u> in the *Oracle Responsys Help Center*.

Redesigned In-app Backend feature

Oracle Responsys and the SDK have changed how in-app campaign messaging works for mobile apps built with the 6.39.0 and later SDK. For mobile apps built with the 6.39.0 SDK, and for accounts enabled to use the feature, the platform uses pull-based technology to fetch the messages, rather than "silent push" technology. Mobile apps built with earlier versions still use the "silent push" and will be subject to the restrictions of it.

Customers enabled for to use this feature can realize the following benefits:

- Size of the Rich HTML creative content used in In-app campaigns is no longer limited to 3.5 KB.
- In-app messages will be delivered to mobile apps on iOS devices, even if the mobile app has been "force quit" by the mobile app user. The SDK will fetch messages from Responsys every 5 minutes, store them on the device, and display them when triggered.

Implementation guidelines: If your organization has not yet integrated In-app Messaging and plans to implement a new In-app Messaging integration in its mobile app **OR** if your organization has already integrated In-app Messaging and are updating to SDK version 6.39.0 or later, you must use the "Redesigned In-app Backend" feature.

- You must enable must enable the "Redesigned In-app Backend" feature for your Responsys account. Contact your CSM to have your account enabled.
 - Note for customers updating their mobile apps: If you update your mobile app to SDK version 6.39.0 or later but do not enable the "Redesigned In-app Backend" feature in your app, then this will impact the ability to target all mobile app users immediately once you finally enable the "Redesigned In-app Backend" feature. Mobile app users will have to update their app to the app version that implements "Redesigned In-app Backend" feature before In-app Messages can be delivered to them.
- You must build your mobile app with the Mobile App SDK version 6.39.0 or later.
- You must enable the feature in your mobile app code, as described in the <u>Oracle Responsys</u>
 <u>Mobile App Platform Cloud Service SDK Developer's Guide</u>. See the platform-specific sections for In-app Messaging for more details.

Learn more: For usage details, see the <u>In-App – Designing a Campaign</u> topic in the *Oracle Responsys Help Center*.

TIP: Marketers can tell if the redesigned In-app Message feature is enabled for their account by looking in the In-app Message Designer page in Responsys. When the feature is enabled, they will see the

following text at the bottom of the page:



Message Center campaigns

Mobile App Marketers will now have access to a new Mobile App Campaigns format, Message Center. The Message Center Campaign Designer will enable Marketers to send messages directly to their mobile app users' in-app Message Centers, without requiring an accompanying Push notification. This enables Marketers to launch Message Center campaigns to mobile app users, even if users have opted-out of receiving Push notifications. Currently, mobile apps fetch Message Center messages at 2-hour intervals, so Marketers will find it best suited for communications that are not time-sensitive.

Implementation guidelines: For best results and performance of Message Center, we strongly recommend upgrading to the 6.39 SDK. You will also need to make a code change to your mobile app to enable Message Center.

Learn more:

- For usage details, see the Message Center Campaigns topic in the Oracle Responsys Help Center.
- For implementation details, see the <u>Oracle Responsys Mobile App Platform Cloud Service SDK</u> Developer's Guide.

Link tracking generation and external link tracking in In-app campaigns and for Push campaigns containing rich content (HTML)

Link Tracking for Mobile App Campaigns (Push, In-app) has been enhanced to bring it on par with that for Email Campaigns:

- Fully Functional Link Tracking UI on par with Email
- External Tracking and Additional Tracking for Mobile App Channel Campaigns (Push, In-app)

You can now also add External Tracking and Additional Tracking parameters to link tracked links in your Rich Push / In-app messages.

Learn more: See the <u>Push - Designing a Campaign</u> topic and the <u>In-App – Designing a Campaign</u> topic in the *Oracle Responsys Help Center*.

Mobile App Platform Push SDK captures Android Channel Permission Status

The SDK now captures Push Notification Permission Status for mobile app users on Android devices and communicates it to Responsys. This ensures that for each app installation on an Android device, the

latest Push Notification Permission Status is reflected in the CHANNEL_PERMISSION_STATUS_ column of the App Channel List.

Whenever a device registration is sent from SDK to Responsys, the latest Push Notification Status is captured in the App Channel List for the device record.

Learn more: See the Channel Permission Status FAQ item on page 78.

Changes and enhancements for 18C

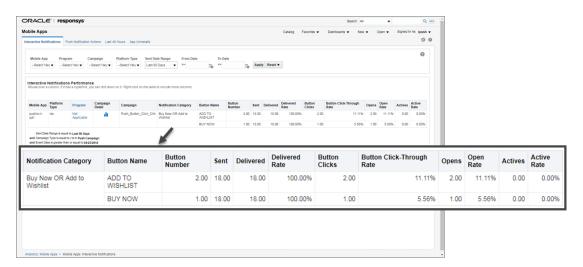
The Responsys 18C functionality in this guide requires the Mobile App Platform Push SDK 6.38 or later.

Interactive Notification Enhancements

New Standard Interactive Notifications available: Marketers now have access to 17 new Standard Interactive Notifications when they create Push campaigns. For the interaction buttons to be present in a Push notification, the mobile app associated with the campaign must be built with the Mobile App SDK version 6.38.0 greater. For more details, see "<u>Using Interactive Notifications (Optional)</u>" on page 45.

CED feeds now support Push "Button Clicked" events: When Marketers launch Push Campaigns that use Interactive Notification buttons, Responsys captures the responses of their mobile app users as "Push Button Clicked" Events. Marketers can now choose to export "Contact Interaction Events for PUSH" of type "Button Clicked" using the "Export Feed Data" Connect Job Type. Once Marketers have exported this Event data, they can import the data into their systems and conduct detailed, custom analysis on app user responses to Interactive Notification buttons. Your account must have the Interactive Notifications feature enabled to access this feature.

Campaign performance reports for Interactive Notifications: A new dashboard for Interactive Notifications allows you to evaluate the engagement on Push Campaigns that include Interactive Notification buttons. You must have Interactive Notifications enabled for your account to see this feature.



"Send to Everyone in App Channel List" is now a Controlled Availability feature

For customers whose accounts were created prior to the 18C Update, you now have the option of disabling the "Everyone in the App Channel List" Audience selection option in Push and In-app Campaign Workbooks. For customers whose accounts are created after the 18C Update, the option to send to everyone in the App Channel List is disabled by default.

When the "Everyone in the App Channel List" option is disabled, the Audience panel of Push and In-app Campaign Workbooks will not have the "Everyone in the App Channel List" option. This benefits Marketers by preventing accidental launches to all members of the App Channel List. To disable this option, please contact your Customer Success Manager for assistance. Before you disable this option, edit campaigns that have the "Everyone in App Channel List" option selected to use an audience or filter instead. Otherwise, the campaign will have validation errors.

Support for real-time custom events

Real-time custom events are a special type of custom event that override how Responsys handles enactments when the Enactment Batching feature is enabled. If your account has Enactment Batching enabled and you need to send near-real-time messages, then we highly recommend having your account enabled for the Real-time Events feature. This feature is intended for Responsys customers who use the Mobile App channel. Part of this feature enables you to create real-time custom events. When a real-time custom event is triggered, Responsys handles the enactments in near real-time instead of batching them. This ensures that your customers receive the campaign messages (including Email, SMS, Push, and In-app) without the delay imposed by enactment batching. For more information, see the Defining Custom Event Types topic in the Oracle Responsys Help Center.

Changes and enhancements for 18B

The Responsys 18B functionality in this guide requires the Mobile App Platform Push SDK 6.37 or later.

App Channel List attributes added to Filter Designer

New recency and interaction behavioral attributes are now available for use in Classic and Simple App Channel filters.

- New recency attributes: Push bounce date, Last Push click date, Last App Uninstall date, Last Msg. Center sent date
- New interaction attributes: Push Skipped, Push Bounced, Push Clicked, App Uninstalled, Msg. Center Sent

These attributes enable you to retarget Mobile App users more effectively based on their behavioral data. You can use these attributes with new or existing Classic and Simple filters. For more details, see "Behavioral attributes for App Channel List Filters" on page 67.

Export App Channel List Filter results

Using the new Connect user interface in Responsys, you can now export App Channel List Filter results. This enables Marketers to analyze mobile app audiences on their own systems. For more details, see "Exporting App Channel List Filter results (Optional)" on page 68.

NOTE: This capability is only available with the new Connect user interface, which is currently under measured deployment and will roll out over time.

Email conversions from Mobile Apps

When your email campaign has deep links to your mobile app, you can now track downstream mobile app events such as Conversions and Purchases. These Conversions and Purchases will be attributed to the email campaign that led users to the mobile app.

Whenever a user clicks a tracked link in their email and lands in your mobile app, the Responsys mobile app platform initializes and maintains a "conversion context." Your mobile app developers can use the platform to decide whether to raise a Conversion / Purchase Event. Marketers can then track Conversions and Purchases generated by their email campaigns.

For more information about how to set up your Email campaigns to track conversions and purchases from your mobile app, see "Cross-channel conversion tracking" on page 58. Mobile App Developers can find more setup details in the <u>Oracle Responsys Mobile App Platform Cloud Service SDK Developer's</u> Guide.

Message Center enhancements

The Oracle Responsys Mobile App Cloud Platform SDK (Push SDK version 6.37.0 onwards) retrieves "Message Center" messages from Responsys at fixed intervals every time a mobile app is launched. The Push SDK stores retrieved messages locally, and they are served from the local storage on the device to your mobile app on demand.

The new Message Center infrastructure imposes some limitations for designing and editing Push campaigns. See "Guidelines for Push Campaign Design and Message Center" on page 54 for more details.

What's new for customers migrated to v2 Integrated Push?

If your mobile app was integrated with Responsys through the Oracle Push Cloud Service SDK **before** September 2016 (that is, the v1 Integrated Push architecture), the following items are new **after** Oracle Responsys migrates your account to the v2 Integrated Push architecture:

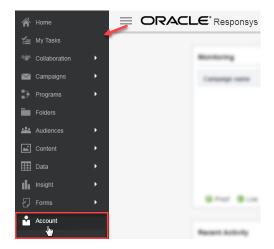
- App Channel List data is now populated in Responsys in near real time. You do not need to schedule a Connect job to import App Channel List data.
- New fields are available in the App Channel List. See "<u>App Channel List System Fields Reference</u>" on page 22 for details.

- Responsys allows for multiple App Channel List PETs, however each mobile app can have only one
 Preferences PET. You can use the other PETs for various purposes, such as mobile app behavioral
 targeting. See "Using an App Channel List PET for mobile app behavioral targeting (Optional)" on
 page 32 for details.
- New App Channel List fields are exposed in Filter Designer in Responsys. See <u>this FAQ item</u> on page 76 for details.
- You can now create filters based on past push behavior. Refer to the Responsys online help for details.
- Mobile App Developers now have a Responsys interface for adding their apps to Responsys. You
 must create one or more Responsys users for each Mobile App Developer who will be responsible
 for this task.

Adding Mobile App Developer users to Responsys

The first step in setting up the Mobile App channel in Responsys is to add the mobile app to Responsys. Mobile App Developers now have a Responsys interface, the Mobile App Developer Console, which is only for adding their apps to Responsys and for obtaining the SDK files that they must incorporate into the apps. You must create one or more Responsys users for each Mobile App Developer role responsible for this task. We recommend creating at least one user per platform – for example, an Android development team gets a user, and an iOS development team gets a different user.

- 1. Log in to the Responsys application.
- 2. From the navigation menu, choose **Account**, as shown on the next page.



- On the Account Management page, locate the User Management section and click the Add User link. The Add a User to this Account page is displayed.
- 4. Complete the following fields:
 - Login name
 - Email address
 - User display name (displayed in the upper-right corner of the Responsys screen)
- 5. On the **Role Assignment** tab, choose one or more of the following roles:

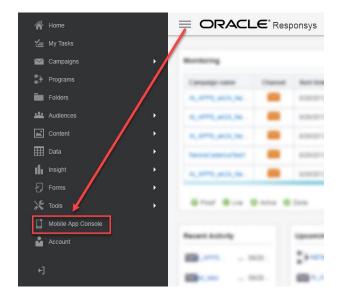
NOTE: If you want to provide access **only** to the Mobile App Developer Console, **choose only the following roles**. Choosing other roles in addition to the Mobile App Admin or Developer roles results in the user getting access to the entire Responsys application.

- **Mobile App Admin**: Has all privileges of Mobile App Developer, plus the ability to delete apps and platforms.
- **Mobile App Developer**: Has full access to the Mobile App Developer Console, but cannot delete apps and platforms.
- 6. If the **Organization Hierarchy** tab is present, click it and choose **Root**.
- 7. Click **Create**. Responsys sends an email to the user's email address, addressed to the username and containing a temporary password and a link to the Responsys login page.

NOTES:

- When the new user clicks the link in the new user email, the login page displays in the web browser. The cursor is placed in the Username field (above the Password field), but the field itself does not show a label when the focus is on it. The user must enter the username ("Dear username...") from the email into the field.
- After the user enters the username and password and clicks the Sign In button, the system prompts the user to create a new password.
- Users who have other Responsys roles in addition to the Mobile App Developer or Mobile App
 Admin roles will see the Responsys home page when they log in, rather than the Mobile App
 Developer Console.

To access the Mobile App Developer Console from the Responsys Home page: Click the navigation menu (), and then select Mobile App Console.



For more information about using the Mobile App Developer Console, refer to the "Mobile App
Config – Responsys" section of the <u>Oracle Responsys Mobile App Platform Cloud Service SDK</u>
Developer's Guide.

Setting up the App Channel List

Before you begin

A Marketer or an Account Admin should consider the following before setting up the App Channel List:

- 1. Contact Profile List We recommend using the same list that is used to send Email and/or SMS campaigns. This enables the Marketer to include the Push messaging formats in their multi-channel campaign.
- 2. Match Key This is the user identifier attribute that the system uses to associate a device record to a known profile record. A Marketer should pick one of Email Address or Mobile Number or Customer ID. We recommend choosing the dominant identifier in the Contacts Profile List, to maximize the conversion of unknown devices to known users. The project team should also consider data security. For example, Customer ID is more secure than an email address.

NOTES:

- Please use caution when choosing a match key. It cannot be reset to another value once set. For example, you cannot choose to change the match key to CUSTOMER_ID_ after you have set it to EMAIL_ADDRESS_.
- We do not recommend choosing EMAIL_SHA256_HASH_ or EMAIL_MD5_HASH_ as the match
 key for the user identifier. Doing so can cause confusion when an App Channel List record is
 created and a Profile List record does not currently exist for the email address. For more details,
 please see the FAQ item, "Should I use SHA256 or MD5HASH as the match key?" on page 75.

Setting a match key requires co-ordination between the Marketer and the Mobile App Developer. A Marketer should be able to figure the best field for the match key. He or she should relay that back to the Mobile App Developer so they set the right value for match key from within the mobile app code. Within the mobile app code, this field is referred to as user_identifier.

3. Before "Step 2 – Associate the App Channel List to your app" (on page 20), ensure that the mobile app is set up in Responsys. Responsys Account Admins do this by logging onto the Mobile App Developer Console and verifying the mobile app that you are trying to set up is available on the Manage Apps page. For more details about the Mobile App Developer Console, please refer to the "Manage Apps and Platforms" topic of the Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide on docs.oracle.com.

- 4. Ensure that your Account is enabled for Push Channel List. This can be done using the following steps:
 - a. Log in to Responsys.
 - b. From the navigation menu, select **Data**, and then select **Manage Lists**.
 - c. Select one of your Contact Profile Lists.
 - d. Under the **List Information** section, you should see an option called **Create App Channel List**, as shown below.

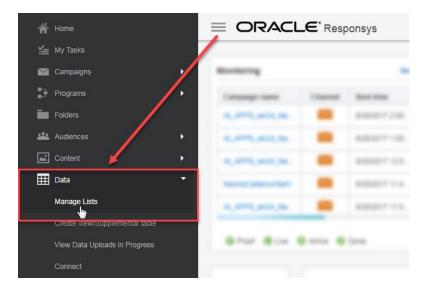
NOTE: If you do not see this option, please raise a support ticket to get this enabled for your account.



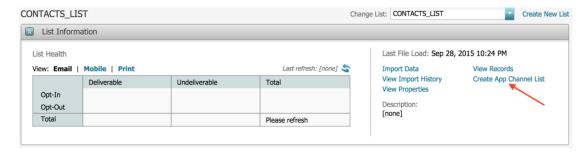
5. Ensure that the Mobile App Developers are using the latest Oracle Responsys Mobile App Platform Cloud Service SDK, and that all team members working on a specific mobile app are using the same version. Mobile App Developers can find the latest SDK versions on the platform-specific SDK download sites, as described in the <u>Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide</u>.

Step 1 – Create the App Channel List

- 1. Log in to the Responsys application.
- 2. From the navigation menu, select **Data**, and then select **Manage Lists**.

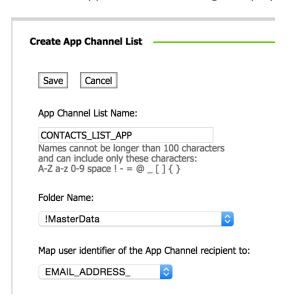


3. Select the Contact Profile List. We recommend using the same list that your account uses to send Email and/or SMS campaigns. This enables the Marketers to include the Push messaging formats in their multi-channel campaigns.



4. Under the List Information section, click the Create App Channel List link.

The Create App Channel List dialog is displayed.

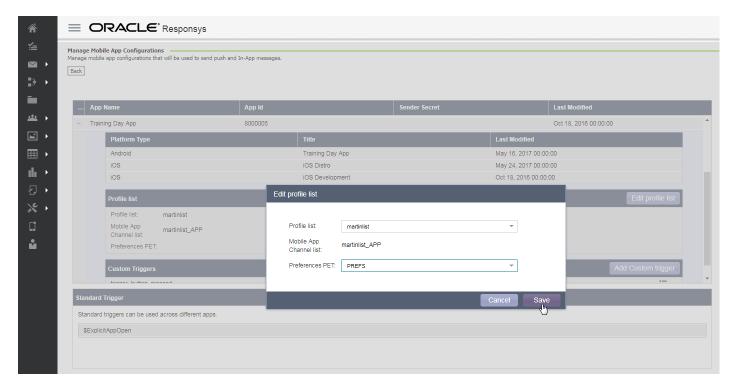


- 5. Enter a name for the App Channel List. By default, this is set to a concatenated string of your Profile List name and the literal "APP".
- 6. Select a Folder Name. By default, the folder is set to the same folder as your Contact Profile List.
- 7. The third field, with the label "Map user identifier of the App Channel recipient to:", is the match key. As discussed in Item #2 in the "Before you begin" section (on page 17), select the match key that corresponds to the user identifier used in the mobile app code:
 - EMAIL_ADDRESS_
 - MOBILE_NUMBER_
 - CUSTOMER_ID_
 - EMAIL_SHA256_HASH_
 - EMAIL_MD5_HASH_
- 8. Click Save.

Step 2 – Associate the App Channel List to your app

- 1. From the navigation menu, select **Account**.
- 2. On the Account Management page, locate the Campaign Management section, and then select Manage Mobile App Configurations.

- 3. On the Manage Mobile App Configurations page, select the **App Name** of the mobile app that you want to configure.
- 4. Click on the "+" button to display the detailed view of the app. You should see the list of platforms.
- 5. Click **Edit Profile List**. This should open up a dialog that displays the Profile List and the App Channel List. Select the Profile List, and the corresponding App Channel List will be automatically displayed.
- 6. If you have defined a Notification Preferences PET, then you should be able to select that as well. Selecting a Notification Preferences PET is required *only* when the mobile app will be sending user preferences data to Responsys.



App Channel List – System Fields Reference

App Channel List contains the following fields. All of these are system fields and cannot be updated through the Data Viewer.

Column Name	Description
RIID_	Numeric. A unique Recipient ID for the Device. This is the key that is logged for all activities (Sent, Opens, and Conversions). NOTE: You can use RIID_ as a match key for an App Channel List PET import in Responsys.
PROFILE_RIID_	Numeric. This is a foreign key reference to the Contact Profile List. As described before, every App Channel List is associated to a Contact Profile List. When this field has a value, it corresponds to a Known contact in the Profile List. Conversely, when this field is blank, it implies the user's profile is unknown. It implies that the user has not chosen to sign in to the mobile app with their user identifier.
CHANNEL_PERMISSION_STATUS_	Text. Indicates whether the user has opted in to receive push notification from this device. This could be set to either "I" (Opted-In) or "O" (Opted-Out), to reflect the User Preferences on the device. See the FAQ item about Channel Permission Status (page 78) for more details.
CHANNEL_DELIVERABILITY_STATUS_	Text. Indicates whether messages can be sent to this device or not. It is set to "D" (Deliverable) when the system creates an App Channel List record (that is, a new user installs an app on a specific mobile device for the first time). It is set to "U" (Undeliverable) when the device can no longer be reached, such as when the user has uninstalled the mobile app. See the FAQ item about Channel Permission Status (page 78) for more details.
CHANNEL_PERMISSION_REASON_	Text. For accounts using the v2 Integrated Push architecture, this is set to "PU:MERGE" when the record is added to the App Channel List. Accounts migrated from the v1 Integrated Push architecture may have App Channel List records where this value is set to "CO:MERGE," meaning that the record was added by a Connect job.

Column Name	Description
CREATED_DATE_	DATETIME. Date and Time when the record is created in Responsys.
MODIFIED_DATE_	DATETIME. Date and Time when the record is last updated in Responsys.
API_KEY_	Text (to 100 characters). A unique key for a given mobile app in Responsys.
DEVICE_ID_	Text (to 255 characters). A unique key for a mobile app on a specific device, generated upon first run of the mobile app. This means that different apps on the same device will have different device IDs. This ID changes when a mobile app is uninstalled and re-installed. Used internally by Responsys. NOTE: Device ID + API Key combination can be used as a match key for an App Channel List PET import in Responsys.
PLATFORM_TYPE_	Text. Indicates the platform of the device. Values are: • APNS - Apple iOS platform • SAPNS - Apple iOS Development platform • GCM - Google Android platform • WNS - Windows platform (not supported for v2)
UPDATED_AT_DATE_	DATETIME. This is the date when the mobile app last communicated with the Responsys system; this may be due to a user interaction or other cause (such as background location update).
INSTALLED_AT_DATE_	DATETIME. This is the date when the mobile app is first run on the device, which is when Responsys detects that the mobile app was installed.
CARRIER_	Text (to 50 characters). A column that indicates the carrier code, which is sent by the mobile platform.
MOBILE_COUNTRY_CODE_	Numeric. Country code of the device. Populated when available.
APP_VERSION_	Text (to 25 characters). Version of the mobile app that is on the device.

Column Name	Description
LOCALE_	Text (to 25 characters). Locale of the device. Usually expressed as a combination of the two char ISO language code and the two char ISO country code.
TIME_ZONE_	Text (to 50 characters). Time zone of the device.
DEVICE_TOKEN_	Text (to 1024 characters). Primary handle to send messages to GCM and APNS platforms.
SCREEN_WIDTH_	Integer. Screen width of devices, in pixels.
SCREEN_HEIGHT_	Integer. Screen height of device, in pixels.
SCREEN_DENSITY_	Number. Screen density multiplier (for example, "2" for a first-generation Apple Retina Display).
SDK_VERSION_	Text (to 25 characters). Oracle Responsys Mobile App Platform Cloud Service SDK version, used by Oracle Responsys for troubleshooting. Hidden column.
OS_VERSION_	Text (to 25 characters). Operating System version.
MANUFACTURER_	Text (to 100 characters). Device manufacturer.
DEVICE_MODEL_	Text (to 100 characters). Model identifier of the device. Hidden column.
ADVERTISER_ID_	Text (to 255 characters). Unique, platform-specific advertiser ID for the device. Depending on the platform, it is either the IDFA or the Google AD ID.
	NOTE: Can be used as a match key for an App Channel List PET import in Responsys. We do not recommend using this as a match key to import into the App Channel List PET when an account has more than one app using the same App Channel List. Because ADVERTISER_ID_ is unique for a device, there will be a conflict when a device has installed more than one app from the same account. Also, device users can reset the Advertiser ID and generate a new one at any time, so there is no guarantee that this value will remain unchanged.

Column Name	Description
EXT_DEVICE_TRACKING_ID_	Text (to 255 characters). Allows data captured by other SDKs, such as external analytics data about a device.
	NOTE: Can be used as a match key for an App Channel List PET import in Responsys. This ID represents the unique Device ID of an external system. Using the Oracle Responsys Mobile App Platform Cloud Service SDK, a Mobile App Developer can log this during the first device registration and subsequent device registration updates.
VENDOR_ID_	Text (to 255 characters). IDFV, or Identifier for Vendors. Shared by all apps from the same company. Hidden column.
DEVICE_COUNTRY_CODE_	Text (to 2 characters). Country; value is set based on the last known location of the device.
DEVICE_CITY_	Text (to 100 characters). City; value is set based on the last known location of the device.
DEVICE_POSTAL_CODE_	Text (to 25 characters). Zip code or postal code; value is set based on the last known location of the device.
ADMIN_AREA1_	Text (to 50 characters). Refers to a geographic classification, such as state, province, region, etc. Value is set based on the last known location of the device.
ADMIN_AREA2_	Text (to 50 characters). Refers to a geographic sub- classification, such as county, district, etc. Value is set based on the last known location of the device.
REGISTRATION_UPDATED_DT_	Timestamp. To be used internally by the system. Hidden column.
IP_ADDRESS_	Text (to 50 characters). IP of the device. Hidden column.
APP_ID_	Text (to 50 characters). Mobile application ID.
USER_IDENTIFIER_	Text (to 50 characters). For logged in users, it contains the value of the USER_IDENTIFIER (match key) from the mobile app. For logged out users, it contains null. Used when the mobile app retrieves a logged in user's Message Center messages from Responsys.

Column Name	Description
PUSH_PERM_AUTH_STATUS	Text (to 50 characters). When an iOS app implements iOS
	Provisional Authorization, this column indicates whether the
	iOS user is still in the Provisional Authorization state (P) or
	not. For more information, see the <u>Responsys Help Center</u> .
PUSH_PERM_BADGES	Text (to 50 characters). This column indicates whether the
	iOS user has opted in to App Icon Badging on this iOS device.
	This could be set to either I (Opted-In) or O (Opted-Out), to
	reflect the user preferences on the iOS device. For more
	information, see the <u>Responsys Help Center</u> .
APP_LOCATION_PERMISSION	Text (to 50 characters). This column indicates whether or not
	the app user has granted the app access to location services
	on the device. For more information, see the Responsys Help
	<u>Center</u> .

Setting up an App Channel Preferences PET (Optional)

App Channel Preferences PETs store preferences in Responsys that are explicitly declared by the mobile app user. Good examples of using an App Channel Preferences PET are:

- Allowing users to opt in to receiving notifications for specific types of promotions. For example,
 a mobile app user may opt in to receive a "Summer Deals" notification. Or, for a sports mobile
 app, users could select their favorite sports teams, and receive notifications specific to their
 teams.
- Allowing users to choose Language and Currency options
- Allowing user to set the maximum number of messages per week

App Channel Preferences PETs are **not** designed to store behavior data. For example, this is not the place to store the user's top 3 products, nor is it the place to store product categories that the user has browsed in the last *X* days.

If the mobile app has user notification preferences data that will be sent to Responsys, you must create a Preferences Profile Extension Table (PET) for the App Channel List, so that Responsys can store this data. However, the following conditions must be met in order to bring in data into an App Channel PET:

- The App Channel List's Preferences PET must be declared as a "Preferences PET" in the Account →
 Mobile App Configuration View
- Preferences PET columns must be created with the "PR" prefix in their names

• For each column in the Preferences PET, there must be a corresponding field with the same exact name that should be logged from within the mobile app code. This means that you must coordinate with the app development team to decide what notification preference columns will be set within the app before you start to create the App Channel List PET.

For example, let's assume that app users of the Durham Denim App can select whether to receive notifications for:

"Summer Deals"

"Deal of the Day"

Mobile App Developers use the following two fields to log these user preferences:

SUMMER_DEALS

DEAL_OF_THE_DAY

Therefore, the Responsys Account Admin or Marketer creating the Preferences PET must add the following two columns to the PET to log these user preferences:

PR_SUMMER_DEALS

PR_DEAL_OF_THE_DAY

Any deviation would result in the preferences not being registered within Responsys.

NOTE: Preferences fields are case sensitive. For example, "SUMMER_DEALS" is not same as "Summer_Deals". To avoid confusion, the Mobile App Developer should always declare preferences in upper case, for example, "SUMMER_DEALS". This is a best practice, because the system always creates column names in PETs in upper case.

You can associate multiple App Channel PETs with the same Profile List/App Channel List combination; for example, you might have a PET with user segments from a third-party SDK for mobile app behavioral targeting. (See "<u>Using an App Channel List PET for mobile app behavioral targeting</u> (<u>Optional</u>)" on page 32.) However, please note that you can have only **one** Preferences PET per mobile app.

Before you begin

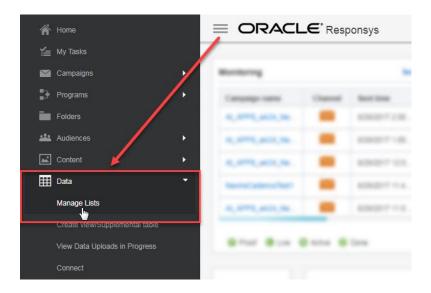
Before you get started on creating an App Channel Preferences PET, it is important to understand the following:

- App Channel Preferences PETs are limited to only storing mobile app user preferences as of the current release.
- Each mobile app may have only one App Channel List Preferences PET.
- You must prefix the column names for the App Channel List Preferences PET with "PR_". For
 example, if the Mobile App Developer has a preference with a key of PRICE_LIMIT, the column name
 in the Preferences PET must be PR_PRICE_LIMIT.
- You can store a maximum of 30 preferences in a PET. In case, you need to store more than this limit, you should get approval from Responsys Product Management. Please create a My Oracle Support (MOS) ticket requesting approval and clearly state why you need more than 30 preferences.
- Marketer and the Mobile App Developer must coordinate on requirements. The Mobile App
 Developer uses the Oracle Responsys Mobile App Platform Cloud Service SDK Preferences
 Notifications feature to set the preferences within the app. As a Marketer (or Responsys Account
 Admin), you should know the exact list of these preferences' names and their data types. Use this
 information to create columns in your App Channel List Preferences PET.

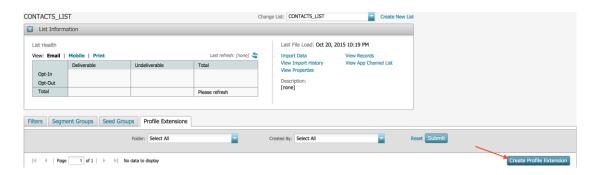
- You can only create an App Channel List Preferences PET for a Profile List table that is already associated with an App Channel List.
- Ensure that Mobile App Developers have integrated the latest Oracle Responsys Mobile App Platform Cloud Service SDK into your app.

Step 1 – Create the App Channel List PET

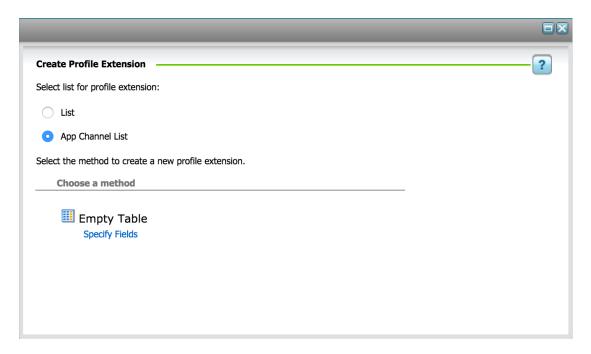
- 1. Log in to the Responsys application.
- 2. From the navigation menu, choose **Data**, and then choose **Manage Lists**.



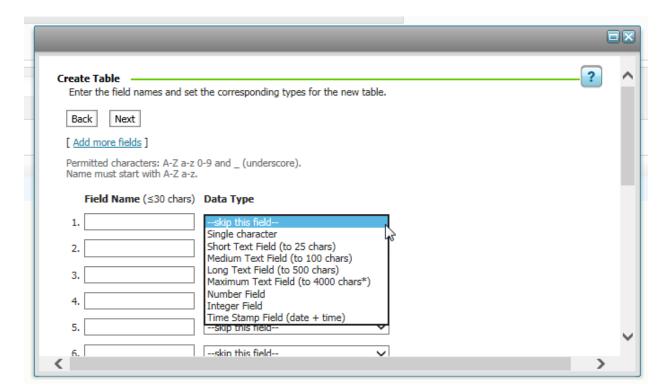
3. From the Change List drop-down, ensure that you have selected the Profile List that is already associated with an App Channel List.



4. Click **Create Profile Extension**. The Create Profile Extension dialog is displayed, and you should see an option to create an App Channel (as shown below).



- 5. Click Empty Table Specify Fields.
- 6. On the **Create Table** dialog, create the fields and specify their data types.



The Mobile App Developer should provide a list of the preferences fields and their data types in the mobile app.

- Remember to prefix the field names you receive from the Mobile App Developer with "PR_".
- Use the following table to determine the data type to choose when you create the field:

For the following Mobile App Data Type:	Use the following Responsys Data Type:	Notes:
Boolean	Short Text Field (to 25 characters)	Use a short text field because Responsys does not have a Boolean data type, and Boolean values in the signal file are expressed as "true" or "false".
Number	Number Field	
String	Depending on the length, choose one of the following: Short Text Field (to 15 characters)	Coordinate with the Mobile App Developer to determine the length of data to expect from the mobile app.
	Medium Text Field (to 100 characters)	
	Long Text Field (to 500 characters)	
	Maximum Text Field (to 4000 characters)	

7. Click **Next** and provide a Name for the App Channel PET to complete the App Channel PET creation.

Step 2 – Associate the App Channel List PET

- 1. From the navigation menu, choose **Account**.
- 2. On the Account Management page, locate the Campaign Management section, and then select **Manage Mobile App Configurations**.
- 3. On the Manage Mobile App Configurations page, select the **App Name** of the mobile app that you want to configure.
- 4. Click the "+" button to display the detailed view of the app. You should see the list of platforms.

- 5. Click **Edit Profile List**. This should open up a dialog that displays the Profile List and the App Channel List. Select the Profile List, and the corresponding App Channel List will be automatically displayed.
- 6. Click the "Preferences PET" dropdown. You should see the App Channel Preferences PET name that was created during the previous step. If you see more than one PET in the list, ensure that you choose the *preferences* PET name.

Using an App Channel List PET for mobile app behavioral targeting (Optional)

Significant percentages of mobile app users do not sign up and provide profile data. This makes it difficult to create marketing campaigns that are of interest to the recipients. Responsys enables you to enhance the information about unknown device users by importing device-based mobile analytics data.

Third-party analytics tools capture information about device users, based in their activity and location – for example, one user who books travels often and who registers for conferences in various cities may be identified as a "Business Traveler," whereas another user who regularly purchases coffee at their local coffee house may be identified as a "Coffee Drinker". You may also have additional data about mobile app users from an internal system of record that you may wish to import, such as the user's assumed age range or income range.

Once the analytics data is imported into an App Channel List PET, Marketers can create filters using the data. Filters, in turn, enable marketers to send messages to the audience most likely to respond to them.

Options available for importing external device data

There are two options available for importing external device data into Responsys:

- 1. Log the external device ID within the Responsys Push Cloud Service SDK
 - Every mobile-aware external SDK also has the concept of a Device ID. Mobile App Developers should be able to log the external Device ID as "External Device Tracking ID" within their mobile app code. This should be done as part of a new device registration and subsequent device registration updates.
- 2. Log Responsys Device ID and API Key within the external SDK
 - A Mobile App Developer should be able to get the Oracle Responsys Mobile App Platform Cloud Service SDK's Device ID and API Key and log that with every user interaction. For example, when the user views a product, adds a product to the wish list, and the like, the Mobile App Developer should get the Responsys Device ID and API Key and log that as part of the interaction.

Importing an App Channel List PET

This section contains the basic instructions for setting up a Connect job to import an App Channel List PET. For more details about the options in the import job wizard, click the blue online help button in the upper right corner of the Responsys screen.

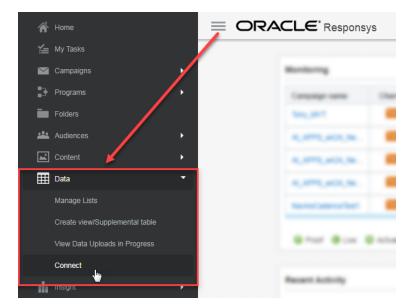


Before you begin:

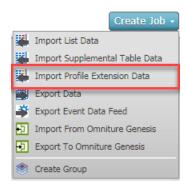
- Determine the fields to be imported and their data types, which will help determine the fields and their data types when you create the App Channel List PET. Also, note the column containing the match key.
- Create an App Channel List Profile Extension Table, with columns for the imported data.
 (Automatically generating a new PET is not supported for this type of import job.) The steps are identical to those in "Step 1 Create the App Channel List PET" on page 29, except that you are not restricted to the column-naming format that is required for a preferences PET.

To create the Connect Import Job:

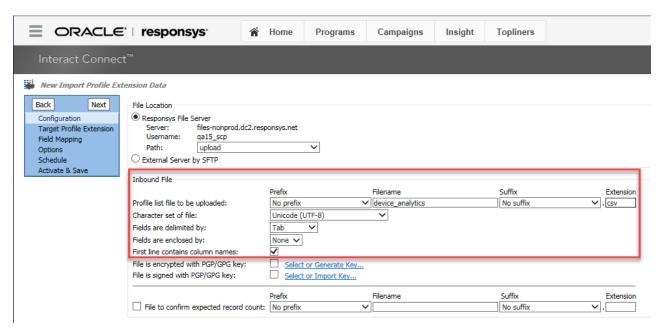
1. From the navigation menu, choose **Data**, and then choose **Connect**.



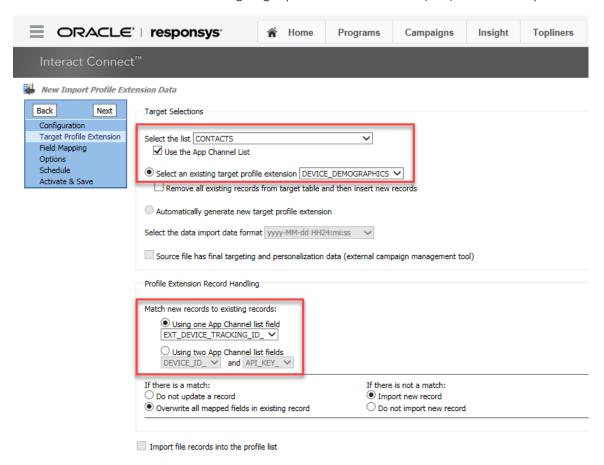
2. Click the **Create Job** button, and then select **Import Profile Extension Data**.



3. **Configuration:** Enter file name and extension, and complete the rest of the screen per the import file characteristics. Click **Next** to continue.



- 4. On the **Target Profile Extension** page, set the **Target Selections**:
 - a. Select the Profile List from the drop-down list, and then select the **Use the App Channel List** check box.
 - b. Select the name of the existing target profile extension table (PET) from the drop-down list.



5. Select the match key, using one of the two options described in this step.

OPTION 1: If the Mobile App Developer develops the mobile app for Option 1 from the "Options available for importing external device" on page 32, use the **single match key option**:

- Using one App Channel list field:
 - o RIID
 - ADVERTISER ID

NOTE: We do not recommend using this as a match key to import into the App Channel List PET when an account has more than one app using the same App Channel List. Because ADVERTISER_ID_ is unique for a device, there will be a conflict when a device has installed more than one app from the same account. Also, device users can reset the Advertiser ID and generate a new one at any time, so there is no guarantee that this value will remain unchanged.

EXT_DEVICE_TRACKING_ID_
 NOTE: This field is the unique device identifier assigned by the third-party SDK; this ID remains the same.

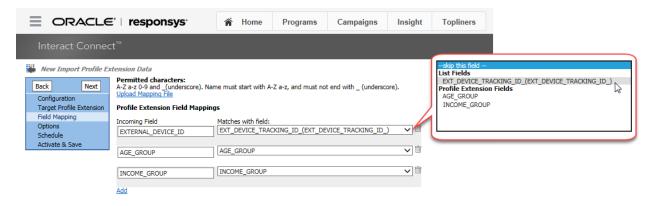
-OR-

OPTION 2: If the Mobile App Developer develops the mobile app for Option 2 from the "Options available for importing external device" on page 32, use the **combination match key option**:

Using two app channel list fields: DEVICE_ID_ and API_KEY_

(For more details about these fields, see the "App Channel List – System Fields Reference" on page 22.)

- 6. Accept the default values for the match/no match scenarios, and then click Next.
- 7. On the **Field Mapping** page, click the **Upload the Mapping File** link. In the Upload Mapping File dialog, browse to and upload the import file. Ensure that the field settings are correct for your file, and then click **Done**.
- 8. On the same **Field Mapping** page, set the field mappings between the import file and the App Channel PET. For the match key, map the correct field to the match key field shown in the **List Fields** section of the list. Click **Next** to continue.

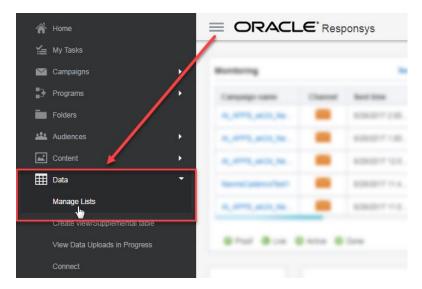


- 9. On the **Options** page, enter an email address to be notified of failed jobs. Change the default settings, if desired. Click **Next** to continue.
- 10. On the **Schedule** page, set the schedule for the job, per your project requirements. Click **Next** to continue.
- 11. On the Activate & Save page:
 - a. Enter the job name in the field provided.
 - b. If you are ready for the job to be activated, select the **Activate** radio button. Once saved, the job will run per the **Schedule** settings.
 - c. Click **Save** to save the job settings.

Creating filters for App Channel List PETs

After the App Channel List PET import is completed, set up filters to target known users, based on the third-party analytics data. Marketers creating campaigns and programs in Responsys can then send campaigns only to known users who meet the filter criteria. (If you have an App Channel List Preferences PET, the same steps are used to create filters based on the mobile app user's notification preferences.)

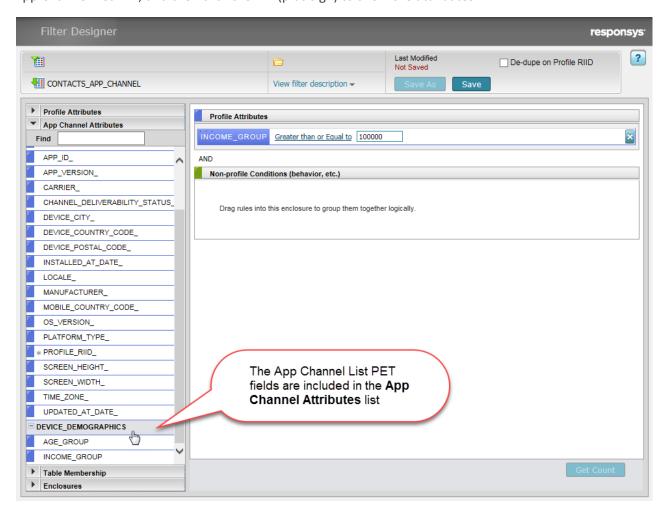
- 1. Log in to the Responsys application.
- 2. From the navigation menu, select **Data**, and then select **Manage Lists**.



- 3. On the **Manage Lists** screen, if the screen does not show the correct Profile List, use the **Change List** field to change the Profile List to the one associated with the mobile app.
- 4. Click Create Filter, select Create App Channel List Filter, then select Profile data.



5. Construct your filter (refer to the Responsys online help for instructions, if needed). To locate your App Channel List PET attributes, expand the App Channel List Attributes, scroll to the name of your App Channel List PET, and then click the "+" (plus sign) to show the attributes.



Setting up custom triggers for In-App messages (Optional)

A "trigger," within the context of mobile In-App messaging, means an end-user action within the mobile app that a Marketer wants to respond to with a message. For example, this could be a user action of adding products to a wish list. A Marketer could use that action and respond with an offer back to the user in the form of an In-App message.

In-App messaging campaigns rely on triggers to display the message in the mobile app. Responsys and the Oracle Responsys Mobile App Platform Cloud Service SDK support the standard trigger, \$ExplicitAppOpen, for all apps. The standard trigger opens the in-app message when the device user opens the app.

Optionally, Marketers may want other mobile app actions to trigger an In-App message, such as when an app user adds merchandise to a cart. Or, per our recommendation in the *Oracle Responsys Mobile*

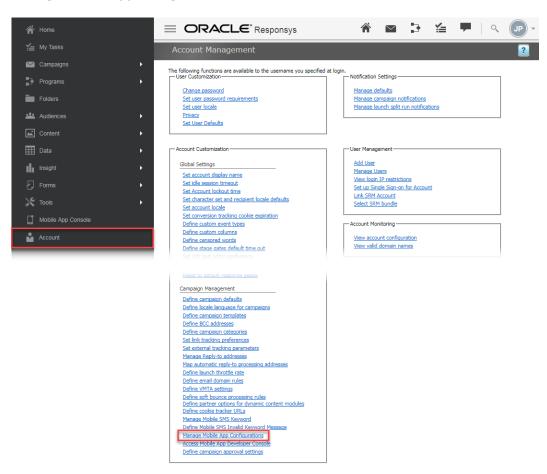
App Platform Cloud Service SDK Developer's Guide, Android mobile app developers may need to add custom triggers to their app if the app has a splash screen, tutorial or other activity that is displayed before the home/main activity is displayed. Mobile App Developers can code the app to support custom triggers. The Responsys Account Admin configures Responsys to use the app's custom triggers. To use the custom triggers defined for and coded in a mobile app:

- Responsys Account Admin users must first add the custom trigger names for the app to the Manage Mobile App Configuration page.
- After the custom trigger names are added to Responsys, Marketers can select a custom trigger when they create their In-App Message campaigns.

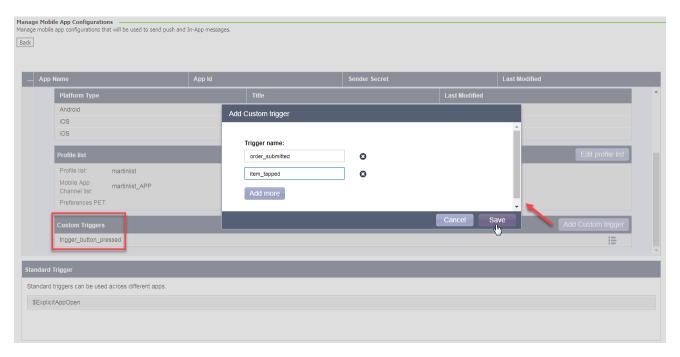
Adding a custom trigger for a mobile app

Before you begin: Obtain a case-sensitive list of any added custom triggers from the Mobile App Developers.

- 1. From the navigation menu, select **Account**.
- 2. On the Account Management page, locate the Campaign Management section, and then select Manage Mobile App Configurations.



- 3. On the Manage Mobile App Configurations page, select the **App Name** of the mobile app that you want to configure.
- 4. Click on the "+" button to display the detailed view of the app. You should see the list of platforms.
- 5. Click **Add Custom Trigger**. This opens up a dialog that enables you to enter the name of a custom trigger for your app.



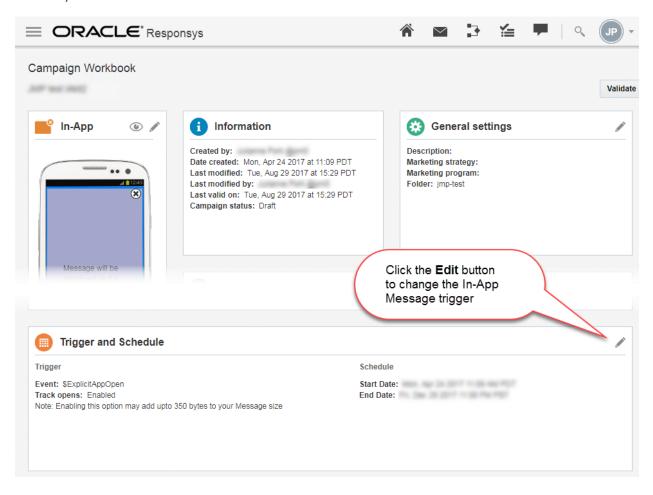
6. Type the custom trigger names in the fields provided. Click **Add More** if you want to add more custom triggers. When you have finished adding custom triggers, click **Save**.

How custom triggers are used in campaigns

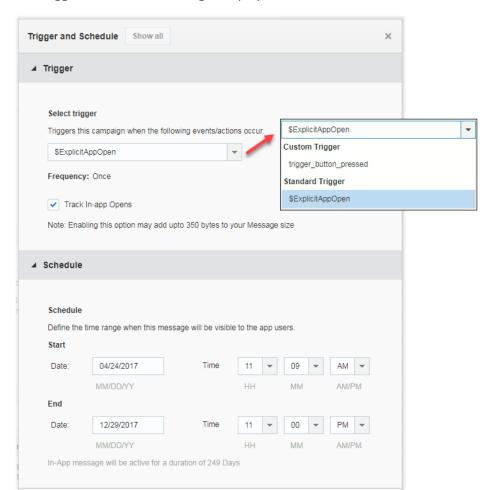
Marketers can change the default trigger, \$ExplicitAppOpen, to a custom trigger defined for the app.

Step 1 – Select the custom trigger in the In-App Campaign Workbook

1. From the In-App Campaign Workbook page, locate the **Trigger and Schedule** section. You may need to scroll your screen to view it.



2. Click the **Edit** icon, which resembles a pencil.



The **Trigger and Schedule** dialog is displayed.

3. In the **Trigger** section:

- a. Select the desired trigger.
- b. Optionally, select the **Track In-app Opens** check box. This option enables you to track when the number of times the In-App message is displayed.

Cancel

Save

NOTE: You must also enable Link Tracking in the In-App Message Designer section of the campaign workbook.

4. In the **Schedule** section, set the date range using the **Start** and **End** date and time fields.

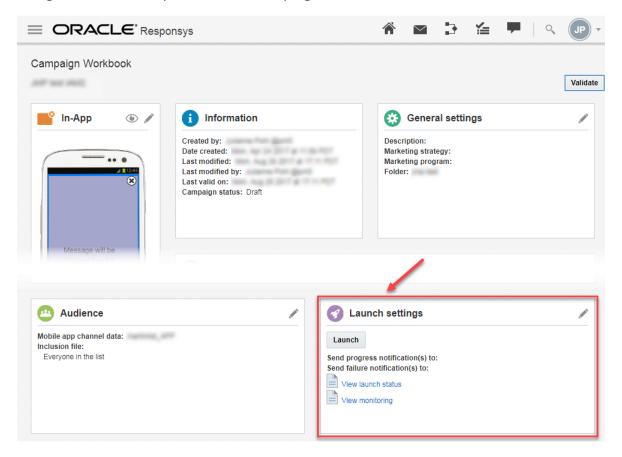
This schedule defines how long the In-App message will be valid. For example, a Marketer might decide to offer a promotion only for one week. Any user who took the action (activated the trigger) outside the boundary of this pre-defined time limit will not see the In-App message. This should not be confused with the Responsys Scheduled Filter concept.

5. Click Save.

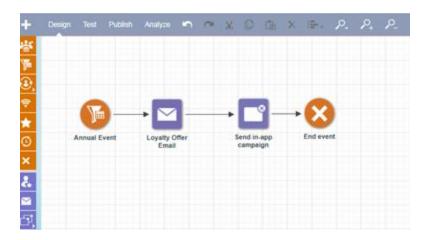
Step 2 – Launch the In-App message campaign

After the In-App message campaign is defined, marketers must launch the campaign for it to be sent to devices running your mobile app. They can do so in one of two ways:

• Launch directly from the Campaign Workbook. Use the **Launch settings** to schedule the launch timing and indicate how you want to receive progress and failure notifications.



• Include the campaign in a Responsys cross-channel marketing program by adding a **Send in-app** campaign activity to their program, as illustrated on the next page.



Whether you schedule the campaign from a campaign workbook or include it in a marketing program, the SDK uses pull-based technology to fetch it from Responsys and the mobile app stores it until needed. The mobile app displays the In-App message only if the custom trigger action occurs *within* the time range scheduled in the campaign workbook.

Example: The "Holiday Deals" in-app campaign was defined as having \$ExplicitAppOpen as the custom trigger and it was scheduled to be visible between 11/23/2018 and 11/27/2018. It was included in the "Holiday Deals – In App" program, which launched on 11/19/2018. The program's starting event was a scheduled filter that included all members of the app channel list, so all devices in the list received the message before the scheduled date range for the campaign.

Customer Jane Smith's device was in the app channel list and it received the in-app message. When she opened the mobile app on 11/20/2018, the app did not display in-app message, even though it was already present on her device. That is because the mobile app keeps track of **when** the in-app message should be displayed and **what action** triggers it. When she opened the app during the scheduled time – for example, on 11/26/2018 – the app displayed the in-app message as expected.

For More Information: Marketers can learn more about creating Mobile App Channel campaigns by viewing the topic <u>Mobile App Overview</u>, which is available from the Oracle Responsys Help Center.

Using Interactive Notifications (Optional)

NOTE: This feature is a Controlled Availability feature. Please work with your Oracle Customer Success Manager (CSM) to obtain approval for enablement

When Marketers design Push Campaigns in Responsys, they now have an option to add greater interactivity to their Push Notifications through Interactive Notifications. Interactive Notifications enable Marketers to add action buttons to their Push Notifications, and they allow mobile app users to interact with Push notifications.

About Interactive Notifications

Marketers have the option to add Interactive Notification buttons to their Push campaigns. When a mobile app user receives a Push notification that has Interactive Notification buttons, the user will see the buttons below the message. When a mobile app user clicks an Interactive Notification button, the resulting action depends the button's definition:

- Launch a URL, which could go to a deep link within the mobile app or to a web page outside of the mobile app. The Marketer must specify the URL after selecting the interaction for the campaign.
- **Dismiss the Push notification** without taking further action.

Responsys supports a pre-defined set of 23 Standard Interactive Notifications that Marketers can add to their Push campaigns. See the "Adding Interactive Notification buttons" section of the <u>Push – Designing a Campaign</u> topic in the *Oracle Responsys Help Center* for more details about the Standard Interactive Notification buttons.

If you need buttons other than those provided in the Standard Interactive Notifications, Responsys supports adding Custom Interactive Notifications for mobile apps. Mobile app developers must define Custom Interactive Notifications in their mobile app code using the Mobile App SDK and must configure them for the app using the Mobile App Developer Console.

Enabling Standard Interactive Notifications for your mobile app

To enable Standard Interactive Notifications:

- 1. Contact the Responsys account's Oracle Customer Success Manager (CSM) to request enablement for the Responsys account. Interactive Notifications is a Controlled Availability feature.
- 2. The Mobile App Developers must obtain and build the mobile app with the Mobile App SDK for your supported platform. This feature requires the Mobile App SDK version 6.35 or greater, depending on the Standard Interactive Notifications that you want to use (see Notes on the following page). The Mobile App SDK supports several default Interactive Notification buttons and categories, and your mobile app requires no additional configuration to use the defaults.

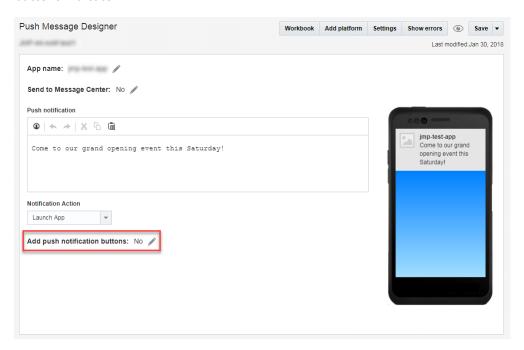
NOTES:

- Standard Interactive Notifications added after Mobile App SDK version 6.35 will require you to build your mobile app with the supporting SDK version. Mobile app users must also have that version of your mobile app installed on their devices. For example, the **Opt In OR Opt Out** buttons are only visible to mobile app users if the mobile app they are using is built with the Mobile App SDK version 6.38 (when available) or greater.
- Interactive Notifications currently supported for only two Notification Actions: Launch App,
 Open URL.
- Interactive Notifications are not supported for the Rich Push format.

How to add interactive notification buttons to your Push campaign

To add interactive notification buttons to your Push campaign:

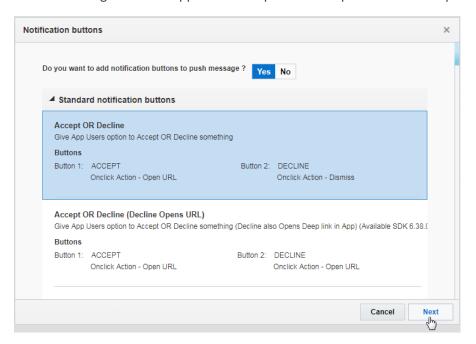
- 1. From the *Push Campaign Workbook* page, locate the **Push** tile and click the edit icon () to open the **Push Message Designer**. (If this is a new campaign, you can also click the Create message button.)
- 2. On the *Push Message Designer* page, click the edit icon () to change the **Add push notification** buttons indicator.



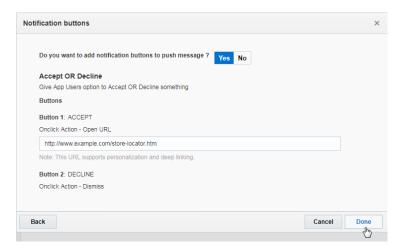
3. The *Notification buttons* dialog displays a prompt of "Do you want to add notification buttons to push message?" Select **Yes**.

The *Notification buttons* dialog changes to display your choices for notification buttons. Scroll the dialog to see all of your options.

- Standard notification buttons are the buttons defined by Responsys. Recipients will only see the buttons if the version of your mobile app they are using was built with the supporting SDK version. These versions are displayed in the descriptions of the notification buttons. If you do not know which version of the Mobile App SDK your mobile app is using, ask your mobile app development team.
 - **TIP**: To ensure that buttons are visible to Push campaign recipients, use filters to target recipients' devices by SDK version.
- **Custom notification buttons** (below the standard set) are those defined by your mobile app development team. If your team has not defined custom buttons, you will not see this section in the dialog.
- 4. Click your desired button set to select it, and then click **Next**. For example, you could choose **Accept OR Decline** to give mobile app users the option to accept or decline an option.

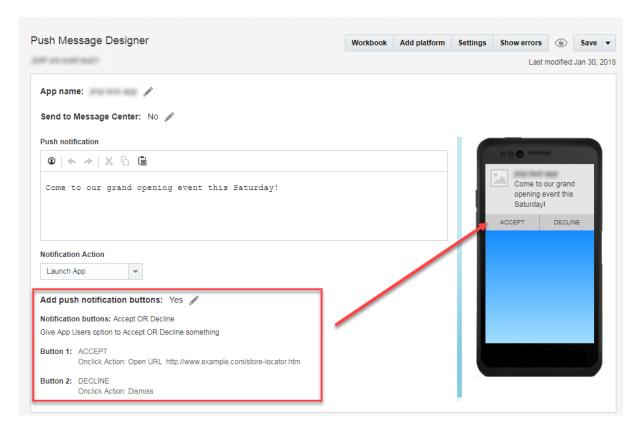


5. Depending on the button set you choose, you must enter one or more web links (URLs) to open when the user clicks the button. You can enter a deep link for one of your mobile app screens (obtain these from your mobile app development team) or a web page. You can also personalize this link (as described in "Personalizing Push campaign settings (Optional)" on page 55).



6. Click **Done** to save your changes and close the dialog, or click **Cancel** to close the dialog without saving your changes.

The *Push Message Designer* page displays the notification button settings, and you can see the buttons on the preview. Save your work, and then continue defining the Push campaign.



Adding Custom Interactive Notification buttons

If you need buttons other than the standard set, your Mobile App Developer team can add them to the mobile app, and they will be available for Marketers to select from the Push Campaign Workbook as described in the previous section. For more details, see the <u>Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide</u>.

Defining your Mobile App Message Center (Optional)

NOTE: The Message Center feature is currently released under our Controlled Availability program. Please work with your Oracle Customer Success Manager (CSM) to obtain approval for enablement.

The Mobile App Message Center feature enables mobile apps to have a "message center" or "inbox" for messages received by the mobile app on a user's device. Marketers can use Message Center in one of two ways:

- When designing Push campaigns, marketers can indicate that they want Responses to retain the
 message in the Mobile App Message Center. After the Push campaign message is delivered to
 recipients, the recipients can use their mobile apps to access these messages later if the mobile
 app implements the Mobile App Message Center feature.
 - **Note that billing has changed for this method**: when marketers send a Push that is stored in Message Center, your account is billed for only **one** message (interaction), even though two messages (Push and Message Center) are sent.
- Marketers can send messages directly to the Message Center, without a Push notification. The
 advantage to this method is method does not require the recipients to have opted in to receive
 Push notifications. The SDK fetches these messages from Responsys and stores them on the
 device. When a recipient opens the mobile app and goes to the Message Center on the mobile
 app, the messages are available. (Message Center direct messages are billed similarly to other
 campaign types.)

Adding Mobile App Message Center to your mobile app

Mobile app developers can learn more about how to implement this feature in the "Message Center" topic of the <u>Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide</u>.

For this feature to work as expected by marketers:

The mobile app must use the Oracle Responsys Mobile App Platform Cloud Service SDK 6.39
(18D) or later. The 6.39 version of the SDK contains key bug fixes for this feature. Oracle
recommends that your mobile app always use the latest SDK.

- Using the SDK, the mobile app developer must code their app to enable Message Center and to retrieve the Mobile App Message Center data. The SDK returns the 20 most recent messages for the Message Center specified in the request.
- Work with your development team to design a mobile app user experience that is appropriate
 for your brand and your customers. The SDK only supports retrieving messages from Responsys.
 It does not provide a mobile app user interface.

The following image illustrates an example of a possible Mobile App Message Center design. Mobile apps receive the Subject, Message, Sent Date, Expiration Date, and a link to the Message Icon image from Responsys as part of the Mobile App Message Center data. Marketers configure this data for each Push message in the Push Campaign Workbook in Responsys, as described in the next section.

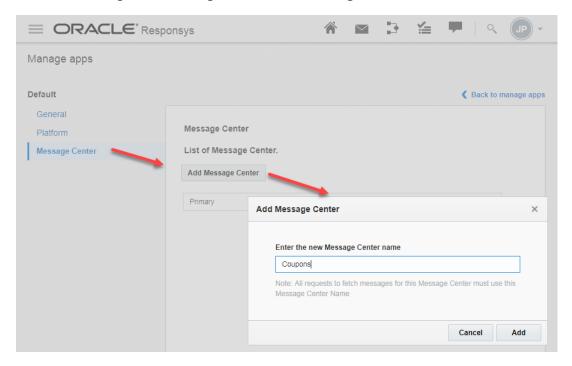


Adding Message Centers for a mobile app

Responsys supports five Message Centers per app, including Primary (the system default). You may add up to four additional message centers.

- 1. Log in to Responsys as a user with access to the Mobile App Developer Console.
- 2. If the navigation menu is not displayed, click the navigation menu button (), and then select **Mobile App Console**. The *Manage apps* page is displayed.
- 3. From the *Manage apps* page, locate the mobile app that you will configure for multiple Message Centers, and click its **Edit** icon ().
- 4. On the mobile app's settings page, click **Message Center**. This displays the *Message Center* settings page, which shows the default Message Center, "Primary".

- 5. Click Add Message Center.
- 6. In the Add Message Center dialog, enter the new Message Center name, and then click Add.



7. Repeat steps 5 and 6 for each Message Center that you want to add. You may add up to four Message Centers.

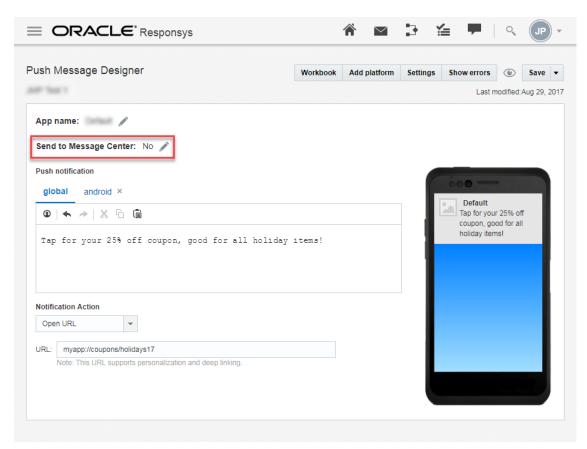
How Mobile App Message Center is used in campaigns

When defining a Push campaign in Responsys, marketers can indicate that the Push message should be sent to the Mobile App Message Center. The following steps show how to do this.

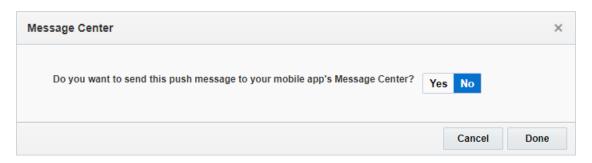
Marketers can also send a Message Center campaign directly to the Mobile App Message Center on the user's device without sending a Push notification. <u>Learn more about this new campaign type</u>.

NOTE: Before performing these steps, marketers should ensure that the mobile app they choose in the Push Message Designer supports Mobile App Message Center.

- 1. From the Push Campaign Workbook page, open the Push Message Designer.
- 2. On the **Push Message Designer** page, click the edit icon () to change the **Send to Message Center** indicator.

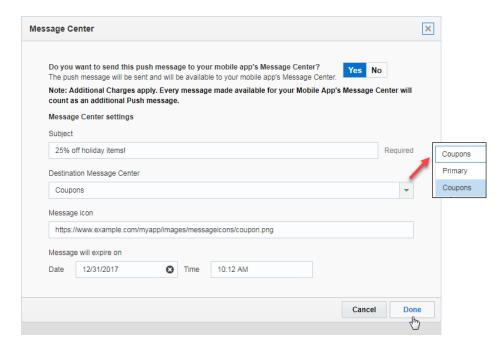


3. On the **Message Center** dialog, select **Yes**. The dialog displays additional **Message Center settings** fields.



- 4. Complete the Message Center settings fields:
 - a. Subject: Enter a subject line for your message. This field is required.
 - b. **Message Center:** Choose the name of the message center for the message. "Primary" is the default, but there may be other choices if your mobile app supports multiple message centers.
 - c. Message icon: Optionally, enter the URL for the message center icon.
 - d. Message Center message will expire on: Select a date and time at which the message will expire. After the expiration date and time have passed, the message will no longer be available in the mobile app's Message Center.

When completed, the dialog should look similar to the following:



5. Click **Done** to save your changes and close the dialog, or click **Cancel** to close the dialog without saving your changes. Continue defining the Push campaign.

Guidelines for Push Campaign Design and Message Center

If you have designed a Rich Push campaign that is also being sent to the Message Center, you must consider the following:

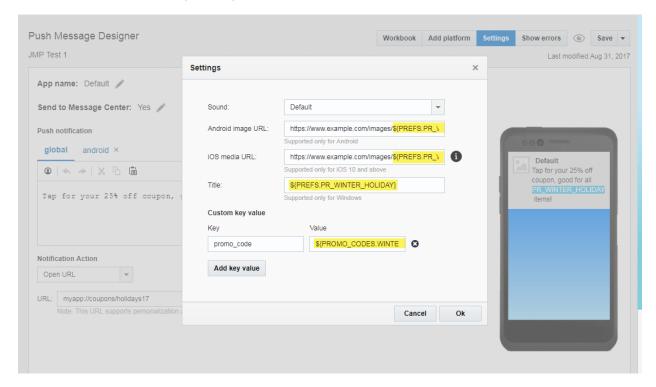
- Personalization limitations: For compatibility with future releases, we recommend that you
 limit the number of personalization tokens in your Rich Push campaign messages. Oracle
 Responsys supports five or fewer average length personalization token-value pairs (25
 characters long each).
- Dynamic Content Regions incompatible with Rich Push campaigns using Message Center: Use of Dynamic Content Region (DCR) in a Rich Push Message when a Rich Push campaign is also being sent to the Message Center is not permitted. Dynamic Content Region (DCR) usage for such campaigns will be disabled in a future update. When this takes effect, any launches you have scheduled for such campaigns will not work. If you do launch any campaigns with Dynamic Content Region (DCR), such campaigns will be disabled / "Closed" by Oracle.

Personalizing Push campaign settings (Optional)

A Marketer can design more flexible Push campaigns by personalizing various settings in the Push Message Designer. These settings fields accept Responsys Personalization Language (RPL) values.

In the Settings dialog, you can personalize the following fields:

- Android Image URL
- iOS Image URL
- Title
- Values of custom key/value pairs



■ ORACLE Responsys Workbook Add platform Settings Show errors

✓ Save ▼ Push Message Designer Last modified: Aug 30, 2017 App name: Default 🥒 Message Center Send to Message Center: Do you want to send this push message to your mobile app's Message Center? Push notification The push message will be sent and will be available to your mobile app's Message Center Note: Additional Charges apply. Every message made available for your Mobile App's Message Center will global android × count as an additional Push message. Default 0 | A X | A D Message Center settings Tap for your 25% off Subject Tap for your 25% of 25% off \${PREFS.PR_WINTER_HOLIDAY} items! Required Destination Message Center Coupons Notification Action Message icon Open URL https://www.example.com/myapp/images/messageicons/\${PREFS.PR_WINTER_HOLIDAY}.png Message will expire on URL: myapp://coupons/holid Date 12/31/2017 Time 10:12 AM Cancel Done

In the Message Center settings dialog, you can personalize the Subject Line and Message Icon fields.

How to personalize Push and Message Center settings

Responsys Personalization Language (RPL) is the language used to create highly personalized messages. When personalizing Push message settings and Message Center settings fields, Marketers manually type the RPL code into the fields, as shown in the examples in the previous section.

B

When Responsys processes the RPL code, there is a risk that the RPL code will result in null or empty string value. If this happens, Responsys sends the Push notification with a null or empty string value wherever that RPL code is used (for example, in a custom-key value pair). To prevent this, Marketers can do one of the following:

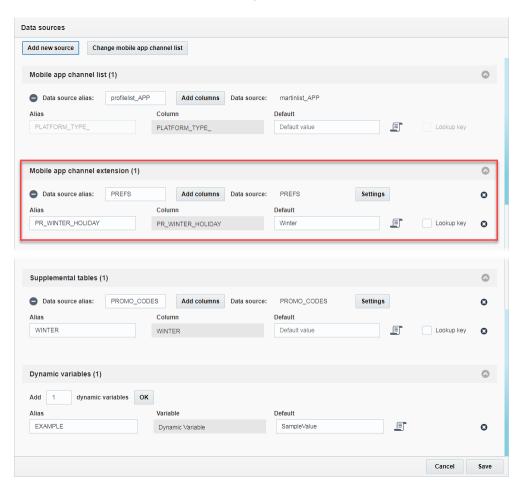
- Where applicable, set a default value to use. This can be done in the RPL code or, if using a data source defined in the campaign, in the Data Sources settings.
- Use the <code>?skip</code> built-in within your RPL code. When you use <code>?skip</code>, it checks whether the value of a field has a null or empty string value. If it does, then Responsys skips the record and does not send the Push message to the recipient. For example, if you use the RPL interpolation

\${profile_list.firstname?skip} and there is no value for the firstname field in the database for the record, then the Push message is not sent for that recipient.

Need information about RPL? You can find details about how to use Responsys Personalization Language (RPL) in the Responsys online help. When logged in to Responsys, click the user menu and choose **Help**. In the online help **Contents** list, click **Guides and Best Practices**. Click *RPL Quick Reference Guide* for an introduction to RPL or *RPL User Guide and Language Reference* for more details about how to use RPL.

Reminder: Marketers must use the *Data sources* settings in the Campaign Workbook to specify the data sources that they will use for personalization. Data sources may be the Profile List, Mobile App Channel List, Profile Extension Tables, Supplemental Data Tables, and Dynamic Variables. For more information about working with data sources, see the Responsys online help.

For example, if you planned to use a column named **PR_WINTER_HOLIDAY** column from an App Channel Preferences PET named **PREFS**, you would add it as shown:



Enabling mobile app reporting for mobile app campaigns

Mobile app reporting for Push and In-App message campaigns is available in Responsys through the Interactive Dashboards. Responsys users with the "Mobile Apps Analytics Manager" role can view a performance summary of Push notifications and In-app messages. Using the Mobile Apps Interactive Dashboards, they can:

- Trend notification performance metrics over time and drill down on areas of interest, such as campaign conversions
- View notifications split by the device OS
- Analyze data for the past 48 hours broken down by the hour
- Conduct granular analysis with detailed tabular reports

For help getting started with Interactive Dashboards, see the following topics on the Responsys Insiders community on Topliners:

- Next Generation Reporting with Oracle Responsys
- Getting Started with Interactive Dashboards

Responsys users can learn more about using this feature by accessing the online help while logged in to Responsys, and then searching for the topic "About the Mobile Apps Interactive Dashboard."

Enabling engagement and conversion metrics in the mobile apps

Mobile App Developers must add the code appropriate for the platforms supported by the mobile app. The "Mobile App Reporting" topic in the <u>Oracle Responsys Mobile App Platform Cloud Service SDK</u>

<u>Developer's Guide</u> provides instruction for Mobile App Developers who will enable the mobile apps for tracking conversion metrics.

Enabling a Responsys user for Interactive Dashboards

To view the *Mobile Apps* dashboards, users must have the **Mobile Apps Analytics Manager** role assigned to their user profiles in Responsys.

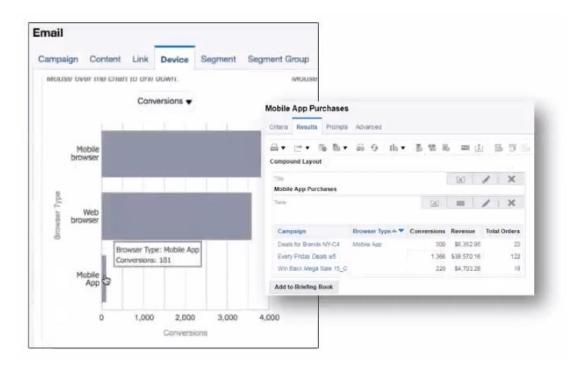
Follow the instructions in the document <u>Assigning Roles for Interactive Dashboards: Setup Guide</u> on the Responsys Insiders community on Topliners.

Cross-channel conversion tracking

When your email campaign has deep links to your mobile app, you can now track downstream mobile app events such as Conversions and Purchases. With proper configuration of both the mobile app and

the Email campaign, these Conversions and Purchases will be attributed to the email campaign that led users to the mobile app.

Whenever a user clicks a tracked link in their email and lands in your mobile app, the Responsys mobile app platform initializes and maintains a "conversion context." Your mobile app developers can use the platform to decide whether or not to raise a Conversion / Purchase Event. Marketers can then track Conversions and Purchases generated by their email campaigns.



Configuring the mobile app

Before Marketers can view cross-channel conversion data in Interactive Dashboards, Mobile App Developers must refactor the mobile app to support tracking email conversions from mobile apps.

Mobile App Developers can find more setup details in the <u>Oracle Responsys Mobile App Platform Cloud</u>

Service SDK Developer's Guide.

Setting up the Email campaign

When editing your Email campaign using **Email Message Designer**, click the **Link tracking** button. Scroll to the right to view the **iOS link URL** and **Android link URL** columns in your table. For each tracked link, add the app link to the column(s) that your mobile app supports. (For more information about setting up link tables, see the Responsys online help.) Mobile App Developers will be able to provide the app link in the format that the mobile app understands. The app links will look something like this: example-app://products/1234.

After the campaign is launched and your mobile app users view the email message on their mobile devices, if they click on a tracked link that has a mobile app link associated with it, the link opens in the mobile app instead of in a web browser.

Viewing reporting for conversions and purchases attributed to Email Campaigns

After the Email campaign is launched, open Interactive Dashboards. The **Browser Types** report on the **Device** dashboard for Email Campaigns will now help you compare conversions across mobile apps, mobile browser, or web browser for your email campaigns. This information can help you determine which conversion medium to best allocate your marketing budget to.

Using Push campaign launch settings (Optional)

Responsys 18A brings fully functional launch settings to Mobile App campaigns:

- Throttling Settings enable Marketers to set the throttling rate (messages per hour) for Push
 campaigns. Marketers can use the account defaults or override them as needed. Marketers can
 set the throttling rate in the Campaign Workbook launch settings or they can set the throttling
 rate in Program for Push campaigns launched from Program. Note that the throttling rate is only
 for batch-launched campaigns only.
- Notifications enable Marketers to specify who should receive notifications during a successful launch, and the types of notifications to send during the launch. If a launch failure occurs, Marketers can send notifications based on the type of failure. Marketers can use the account defaults or override them as needed.

Responsys supported a minimal set of launch notifications in previous releases. For Responsys 18A, the launch notifications support three new notifications: "When launch starts", "When there is an empty launch", and "Send Skipped launch notification(s) to".

This section provides instructions for setting the account defaults and for editing launch settings at the campaign and program levels.

Setting Push Campaign launch defaults for your account

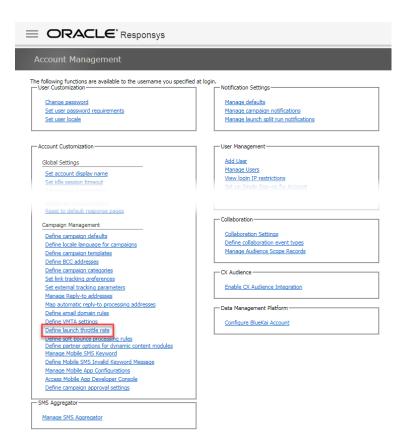
Responsys Account Administrators can set the default launch rate and the default notifications to send during the launch. Values set here will be shown as the defaults in the Campaign Workbook and in the Program, but Marketers can override those values as needed.

To set the default Push message launch throttle rate for your account:

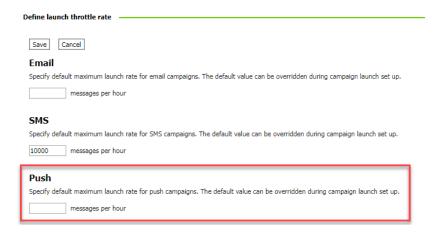
- 1. Log in to the Responsys application.
- 2. From the navigation menu, choose **Account**.



 On the Account Management page, locate the Account Customization section, and then locate the Campaign Management sub-section. Click the Define launch throttle rate link.



4. From the **Define launch throttle rate** page, locate the **Push** section, and then type the default maximum launch rate (messages per hour) in the field. The minimum value is **3601**.

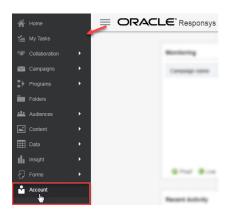


5. Click **Save** to save your changes, or click **Cancel** to return to the Account Management page without making changes.

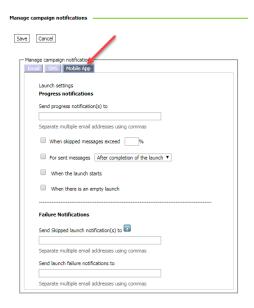
NOTE: The default value you set here will not affect existing Push campaigns. If Marketers want to throttle the campaign, they must set the throttling rate in the campaign workbook manually.

To set the default Mobile App campaign launch notification options for your account:

- 1. Lo Log in to the Responsys application.
- 2. From the navigation menu, choose **Account**.



- On the Account Management page, locate the Notification Settings section. Click the Manage campaign notifications link.
- 4. On the Manage campaign notifications page, click the Mobile App tab.



5. Complete the fields to send the default desired notifications.

For **Progress Notifications**: In the field provided, enter the email addresses (separated by commas) to receive progress notifications. Next, select and configure the types of notifications you want to send.

- For "skipped messages exceed", notifications are sent when the specified percentage of messages is skipped.
- For "sent messages", you can send the notification after the specified percentage of messages is sent, or when the launch is complete.
- When the launch starts
- When there is an empty launch

For **Failure Notifications**: Enter email addresses (separated by commas) for the types of notifications you want to send:

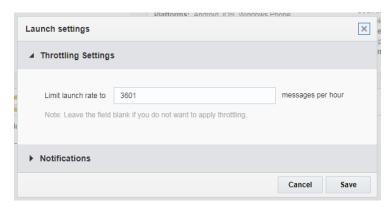
- Skipped launch notifications
- Launch failure notifications.
- 6. Click **Save** to save your changes, or click **Cancel** to return to the Account Management page without making changes.

Using Push Campaign launch settings for a campaign

From the Campaign Workbooks, Marketers can manage the throttling settings for Push campaigns and the launch notification settings for Push campaigns and In-app message campaigns.

To manage Throttling Settings (Push campaigns only):

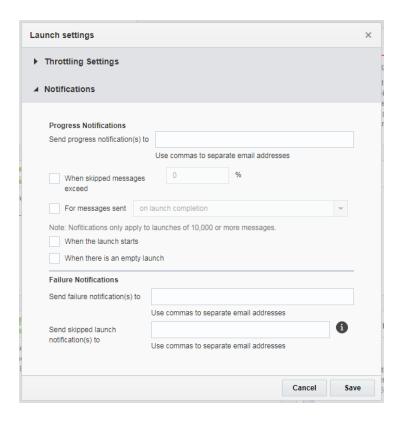
- 1. From the **Push Campaign Workbook**, locate the **Launch settings** tile and click the **Edit** button. The system displays the *Launch settings* dialog (as shown on the next page).
- 2. If the **Throttling Settings** fields are not displayed, click the heading to display it.



- 3. For launch rate, you have the following options: accept the default, change the launch rate, or clear the field if you do not want to apply throttling.
- 4. Click **Save** to save your changes, or click **Cancel** to close the dialog without saving your changes.

To manage Notifications settings:

- 1. From the **Push Campaign Workbook**, locate the **Launch settings** tile and click the **Edit** button. The system displays the *Launch settings* dialog.
- 2. If the **Notifications** fields are not displayed, click the heading to display it.



- 3. For the Progress Notifications and Failure Notifications sections, you can either accept the default values (if present), or you can override them. Enter the email addresses (separated by commas) for the notifications you want to send. For progress notifications, you must also select the types of notifications to send. See the Responsys online help for launch settings for more information about the options.
- 4. Click **Save** to save your changes, or click **Cancel** to close the dialog without saving your changes.

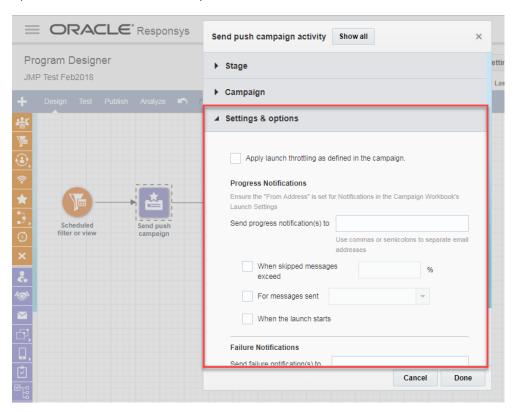
Managing launch settings for the Send Push Campaign activity in a Program

For Program launches, Marketers can manage the throttling and notification settings for the **Send push** campaign activity.

To manage launch settings and options for Push campaigns used in marketing programs:

1. From Program designer, locate the **Send push campaign** activity for which you want to manage settings, and double-click the activity. (Note that the stage label may have been changed to another value than "Send push campaign.")

2. From the *Send push campaign activity* dialog, click **Settings & options**. The system displays the options available for this activity.



- 3. To throttle the campaign launch, select the **Apply launch throttling as defined in the campaign** check box. If you do not want the campaign launch throttled, deselect the check box.
 - If you add the activity to the Program Designer canvas after setting a launch throttling rate for the program, the check box will be selected.
 - If you are applying throttling to an existing program for an existing campaign, you must set
 the throttling rate in the campaign, and then select this check box in the program. You could
 also unselect and then re-select the campaign to pick up the defaults set in the campaign
 workbook.
- 4. Modify the Progress Notifications and Failure Notifications as desired. You can accept the default values, or modify the fields to override the defaults.
 - The notification types "When there is an empty launch" and "Send skipped launch notifications" do not apply for programs, so they are not shown on this dialog.
 - If the values were set for the campaign before you added it to the program, the default values should be displayed.

- If the values from your campaign do not show here, that is because you added them after
 the activity was added to the program canvas. You can either modify the fields manually, or
 you can unselect and then re-select the campaign to pick up the defaults set in the
 campaign workbook.
- 5. Click **Done** to save your changes, or click **Cancel** to close the dialog without saving your changes.

Behavioral attributes for App Channel List Filters

With 18B, all recency and interaction behavioral attributes are now available for use in creating App Channel Filters. Marketers now have the ability to create Audiences using all mobile app user behavioral data that Responsys captures. This will enable Marketers to retarget mobile app users based on their behavioral data. These attributes are backward compatible: you will be able to edit and to add new attributes to existing Simple and Classic Filters

See the Responsys online help for more details about creating App Channel List Filters using Push Recency and Push Interaction attributes. The online help also provides information about creating Audiences that use these filters.

The table below lists the attributes. The 18D Update added a new attribute, **Last Push button click date**. This allows marketers to filter recipients based on when they last clicked an Interactive Notification button in a Push notification.

Push Recency Attributes	Push Interaction Attributes
Last Push sent date	Push Sent
Last Push bounce date	Push Opened
Last Push opened date	Push Clicked
Last Push Button click date	Push Converted
Last Push click date	Push Skipped
Last Push conversion date	Push Bounced
Last App Uninstall date	Msg. Center Sent
Last Msg. Center sent date	App Uninstalled

Exporting App Channel List Filter results (Optional)

Using the new Connect user interface in Responsys, you can now export App Channel List Filter results. This enables Marketers to analyze mobile app audiences on their own systems.

NOTE: This capability is only available with the new Connect user interface, which is currently under measured deployment and will roll out over time.

To export App Channel List Filter results:

1. Log in to Responsys. From the navigation menu, choose **Data**, and then choose **Connect**.

If you see the classic Connect user interface, stop. Wait to configure this until your account has been updated to use the new Connect user interface.

- 2. Click Create.
- 3. Select **Export Data**.
- 4. On the **Select Object** page, select the **List filter** option.
- 5. Select the **User App Channel List** check box. This includes App Channel List Filters in the list of filters. If it is not selected, then only the Profile List filters will be displayed.
- 6. Select the App Channel List Filter for which you want to export the results.
- 7. Continue setting up the Connect job with your desired settings, and then run the job.

Exporting Mobile App Event data (Optional)

Oracle Responsys Connect enables Marketers to transfer campaign event data (CED) feeds from Responsys. You can set up an **Export Feed Data** job to export mobile app behavioral data represented by Mobile App Event types. You can then import this data into your systems for additional analysis.

You can export event data for the following Mobile App Event types. As of 18C, Responsys supports Push Button Clicked, which tracks Interactive Notification button clicks.

- Push Sent
- Push Failed
- Push Opened
- Push Converted
- Push Skipped

- Push Bounced
- Push Clicked
- App Uninstalled
- Message Center Sent
- Push Button Clicked

For instructions about how to create a Connect job for CED feeds, refer to the Responsys online help.

Platform-specific Tasks

Implementing mobile app pre-permission messaging (iOS) (Optional)

With 6.33, the Push SDK has separated the methods for registration and opt-ins. This means that Mobile App Developers can ensure that the system registers mobile app users at installation, but can delay prompting mobile app users to opt in to receive push notifications or to permit the app to receive the user's location information. Marketers should work with mobile app developers to design the opt-in messaging and timing. For more details, see the "iOS Step-by Step Setup Instructions" in the Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide.

Impact on App Channel List records: When registration and opt-in occur separately, the system sets the Channel Permission Status to "O" and the Channel Deliverability Status to "D" for the device at registration time.

Later, when the mobile app prompts the user to opt-in for push notifications, the user's response determines the Channel Permission Status.

- If the user accepts, the permission status is set to "I".
- If the user chooses not to opt in, the permission status stays "O". If at some point later the user decides to opt-in, then the user must go to the device settings to change the push notification permission for the app.

Handling PEM file expiration notices (iOS)

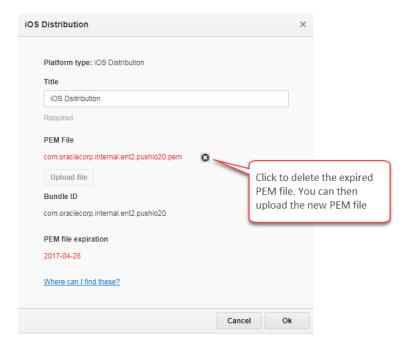
Responsys sends email reminders before a PEM file used by an iOS app is about to expire. This allows Mobile App Developers to update the PEM file in the system. The system:

- Sends an email to Account Primary Contacts and to the Responsys user who configured the mobile app using the Mobile App Developer Console.
 - **TIP**: You can add others to this distribution list by request. Contact your CSM and provide a list of email addresses of people that should receive this notification.
- Sends the first reminder 30 days in advance, and if the file is not updated, the reminders repeat at 14 days and at 7 days before the expiration date.

To update your mobile app's PEM file:

- 1. When you receive one of these emails, coordinate with the Mobile App Developers of the project as soon as possible to get the PEM file updated.
 - Mobile App Developers should follow the instructions in one of the following topics, depending on the type of PEM file that they must generate:

- Generating a Development PEM
- Generating a Distribution PEM
- 2. Once you have the new PEM file, follow the instructions for logging into Responsys given in the email, and then access the Mobile App Developer Console.
- 3. From the Manage Apps page, click the **Edit** icon () for your mobile app.
- 4. On the Platforms tab, choose Edit on the iOS Distribution Platform row.
- 5. From the *iOS Distribution* dialog, upload your PEM file. Note that you must delete the expired PEM before you can upload the new PEM file.



After a successful upload, you should see the Bundle ID and PEM file expiration date displayed.

Next Steps

After you and the mobile app development team complete the tasks needed to create the mobile app and configure Responsys to work with it, the marketers using Responsys can create and manage Push and In-App messaging campaigns and can create Programs in Responsys to orchestrate their mobile app campaigns.

Using the Responsys APIs

The Responsys Web Services API enables Responsys customers to manage certain aspects of their content, data, and campaigns through either the SOAP or the REST API.

NOTES:

- The SOAP API does not have an API call for triggering a Push campaign directly. You must use the REST API to when using API calls to trigger a Push campaign directly or to schedule a Push campaign launch. If you have a pre-existing implementation written for SOAP and cannot move to REST, the workaround is to write REST code for the desired Push tasks.
 - Use the REST endpoint for Trigger Push Campaign if you want to send to particular recipients. You can include optional data for personalization.
 - Use the REST endpoint for Schedule Push Campaign Launch to schedule a launch for a Push campaign, using the audience already defined in the Campaign Workbook.
 - You can get a list of all Push campaigns for your account using the Fetch All Push Campaigns endpoint.
- Responsys requires the Enactment Batching feature to be enabled when using trigger custom
 event with mobile app campaigns in a marketing Program. Otherwise, the mobile app campaign
 events in the program will not be processed. However, there are some tradeoffs to consider
 before enabling the feature. Please review the "How Enactment Batching Affects Processing"
 section of the "Send Requests" topic in the Responsys REST API Guide, so that you can decide
 whether enactment batching is correct for your business needs.
- If your account has enactment batching and you need to send near real time mobile push messages, such as event reactions, then we highly recommend one of these two options:
 - Use the Trigger Push Message REST API, or
 - Have the Real-time Custom Events feature enabled for your account. This feature overrides enactment batching for custom events that you define with a type of "Realtime".

For more information about this feature, see the <u>Defining Custom Event Types</u> topic in the *Oracle Responsys Help Center*. To have this feature enabled for your account, please contact your Customer Success Manager for assistance.

When an account has Enactment Batching enabled, Responsys program orchestrations can only use real-time custom events to perform near-real-time processing for any campaign type. That is because for standard custom events, Responsys will batch enactments together into a single enactment group before entering the enactments into a program. This results in an approximately 20 minute delay between standard custom event triggering and entry into a Responsys Program. Please note that the 20-minute delay applies to all channels—including Email and SMS activities—that are part of the standard custom event processing.

• If your account has been enabled for Automatic Failover for Transactional Messaging (AFTM), you can use the HA Trigger Push Message REST API to ensure that the system continues to send push messages during planned or unplanned service disruptions in the primary environment. To

obtain the latest *Oracle Responsys AFTM Developer's Guide*, or to learn more about the AFTM feature, see the <u>AFTM documentation page</u> in Responsys Insiders on Topliners.

For more information about Responsys APIs, refer to the following documents on docs.oracle.com:

REST API Guide: <u>HTML</u> or <u>PDF</u>

• SOAP API Guide: <u>PDF</u>

Learning about Responsys – More resources

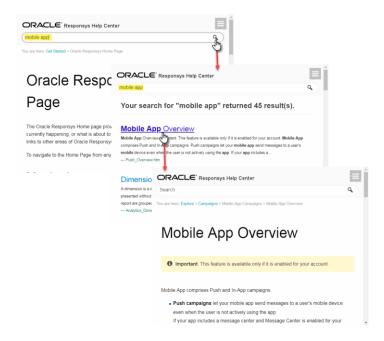
Responsys Insiders community: Responsys Insiders is a customer community where users can access resources, ask questions, and learn about upcoming events, such as product release information and training videos. To join the community, go here. To find documentation specific to mobile apps, choose the **Mobile** category.

Responsys page on docs.oracle.com: The <u>Oracle Responsys</u> page on the Oracle Help Center provides links to the Oracle Responsys Release Center and to Responsys documentation. Unlike the Responsys Insiders community, you do not need to be a Responsys customer to access documents on docs.oracle.com.

Online help for Oracle Responsys: The <u>Responsys Help Center on docs.oracle.com</u> provides access to user documentation. You can also view it while logged in to Oracle Responsys. To access the online help in Responsys, click the menu in the upper right corner of the page, and then choose **Help**.



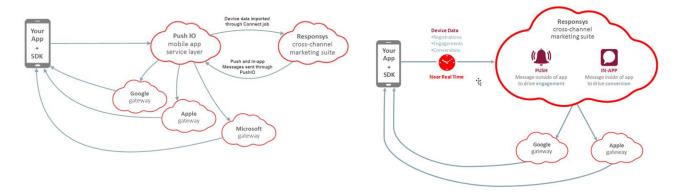
Online help opens into its own web browser window. You can also search the online help for specific topics, as illustrated below. From an open online help window, click **Search** on the Contents pane, enter the search term in the Search screen, and click the **Search** button. Click the topic title to open it.



Frequently Asked Questions (FAQs)

Q: What is the difference between the "v1" and "v2" Integrated Push architecture?

A: The Responsys Integrated Push architecture enables Marketers to define Push and In-app Messages in Responsys and deliver them through mobile apps that incorporate the Oracle Responsys Mobile App Platform Cloud Service Software Development Kit (SDK). It also enables Responsys to receive data from mobile apps.



v1 Integrated Push architecture

v2 Integrated Push architecture

"v1" is the first version of this technology and "v2" is the second version. The v2 Integrated Push architecture was introduced in Responsys Release 6.29, and it enables Responsys to receive data from the mobile app in near real time. See "What's new for customers migrated to v2 Integrated Push?" on page 13 for specific details. To summarize:

- For Marketers, the most noticeable difference is that in v2, Responsys receives mobile app data from devices in near real time. Marketers create Push and In-app Message campaigns using the campaign workbooks in Responsys as they did in v1. They also have more filtering options.
- For Responsys Account Administrators, the main difference is simplified setup: you do not need to configure a Connect job to import the device data, because the mobile app recipients' devices send the device data directly to Responsys.
- For Mobile App Developers, there are differences in how they code the mobile application to use the Oracle Responsys Mobile App Platform Cloud Service SDK. v2 also introduced a Mobile App Developer Console in Responsys for configuring mobile apps and their platform settings.

NOTE: For v2, we support iOS and Android.

Q: I have more than one mobile app. Do I need to have more than one App Channel List?

A: No. More than one mobile app can use the same App Channel List. With one Contact Profile List, you should be able to map all of your apps to the same App Channel List. Please note that all mobile apps for a given App Channel List must use the same match key to associate the device to a known user.

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Q: I have one Contact Profile List per region. How do I setup the App Channel List?

A: More than one mobile app can be mapped to the same Contact Profile List. However, it is not possible to map a mobile app to more than one Contact Profile List.

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Q: I have associated an App Channel List to my Contact Profile List. However, I want to remove this and associate another App Channel List. Is this possible?

A: No, this is not possible through the UI. It is possible to do some backend changes to make this change. However, this could take a significant amount of time. This also means that you cannot do any campaign launches during this time. We recommend that you stay with one App Channel List unless you can absolutely justify the need to change.

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Q: I have created an App Channel List with EMAIL_ADDRESS_ as the match key. However, I want to change this to CUSTOMER_ID_ now. Is this possible?

A: No, this is not possible. This is why you should spend some time before setting up the App Channel List to decide on your match key. As stated before in this document, setting a match key requires coordination between the Marketer and the Mobile App Developer. A Marketer should be able to figure the best field for the match key. He or she should relay that back to the Mobile App Developer so they set the right value for match key from within the mobile app code.

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Q: Should I use SHA256 or MD5HASH as the match key?

A: No, we do not recommend using EMAIL_SHA256_HASH_ or EMAIL_MD5_HASH_ as the match key (or as the user identifier in the mobile app). Using the SHA-256-hashed email address or the MD5-hashed email address can cause confusion when an App Channel List record is created and a Profile List record does not currently exist for the email address.

Example: A Responsys user has created the App Channel List using SHA256 or MD5HASH as the match key. A new mobile app user registers from their device using the email address "user@example.com". (For simplicity's sake, assume that the SHA256/MD5HASH value of "user@example.com" is "ABC123".) Responsys receives the device registration and one of the following occurs:

- Email address matches an existing Profile List record: If a Profile List record exists for "user@example.com", then the system is able to match the profile record in the Profile List and can associate the profile record to the App Channel List device record.
- Email address does not match an existing Profile List record: If "user@example.com" does not have an existing record in the Profile List, the system creates a new Profile List record with the SHA256/MD5HASH. The system also associates the profile record to the App Channel List device record. However, because MD5/SHA are one-way keys, the system cannot use the incoming USER_IDENTIFIER value of "ABC123" and convert that to "user@example.com". Therefore, in this example, the profile record has the hashed email address value but the EMAIL_ADDRESS_ field in the profile record would be blank. This can cause a lot of confusion for Responsys users, because users usually search for Profile List records using the plain text Email Address. However, if at a later time the user signs up with "user@example.com" using a web form or some other mechanism, then Responsys will correctly associate the same profile record and not create a new one.

Q: I already have a mobile app integrated with the Oracle Responsys Mobile App Platform Cloud Service SDK. How do I figure what value is set for match key?

A: If you already have a mobile app integrated with the Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide SDK, then you should consult your Mobile App Development team. Specifically, you should ask them for the value that is set for the field "USER_IDENTIFIER". This should help you determine the match key. If no value is set, then you can request them to set one of the fields as discussed in Step $1 \rightarrow$ Point 7 of the "Step 1 - Create the App Channel List" section on page 20. Please note that this change in the mobile app might mean that you have to roll out a new version of the mobile app for your users. If you want to discover the declared match key in Responsys, please file a My Oracle Support (MOS) request.

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Q: Can I use all the fields in the App Channel List in Filter Designer?

A: No. Filter Designer uses a subset of the App Channel List fields.

Only the following fields (pages 71-72) are available through the Filter Designer as of the 19D Update:

ADMIN_AREA1_ LOCALE_

ADMIN_AREA2_ MANUFACTURER_

API_KEY_ MOBILE_COUNTRY_CODE_

APP_ID_ OS_VERSION_

APP_LOCATION_PERMISSION_ PLATFORM_TYPE_

APP_VERSION_ PROFILE_RIID_

CARRIER_ PUSH_PERM_AUTH_STATUS_

CHANNEL_DELIVERABLITY_STATUS_ PUSH_PERM_BADGES_

CHANNEL_PERMISSION_STATUS_ RIID_

CREATED_DATE_ SCREEN_HEIGHT_

DEVICE_MODEL_ SCREEN_WIDTH_

DEVICE_CITY_ SDK_VERSION_

DEVICE_COUNTRY_CODE_ TIME_ZONE_

DEVICE_POSTAL_CODE_ UPDATED_AT_DATE_

INSTALLED AT DATE USER IDENTIFIER

NOTES:

• If you have defined a Preferences PET, the attributes defined in that table are also available in the App Channel Attributes list in Filter Designer.

• If your mobile app was released before 6.29, its App Channel List will not have values for the new 6.29 fields until your account is migrated to the v2 Integrated Push architecture. Once it is migrated, when a user interacts with the app, then the App Channel List will capture data for the new fields.

Q: I have defined a campaign and launched it. However, I don't see any Push notifications being sent. Why?

A: There could be many possible reasons as to why the push notifications are not sent. One common reason when it comes to the Mobile App channel is that the scheduled filter does not have any App Channel attributes. It should have at least one App Channel attribute. This means that the filter query behind the Scheduled filter should be defined as "App Channel List Filter". To fix this, review the query behind the Scheduled filter. If it does not have any App Channel attribute, define a new filter. When you create a new filter on the Contact Profile List, ensure that you select the filter type as "App Channel List Filter" so that App Channel attributes are available for your query criteria.

Q: On the Manage Mobile App Configuration page, why do I not see any Profile Lists when I click the Edit Profile List button?

A: This list is populated with Profile List names that have a corresponding App Channel List. If there are no Profile Lists with corresponding App Channel List, then this list will be empty. To correct this, locate the Profile List that you want to use with the mobile app, and create an App Channel List for it:

- 1. From the Responsys navigation menu, choose **Data** → **Manage Lists**.
- 2. On the Manage Lists page, use the **Change List** drop-down list to view the Profile List that you want to use.
- 3. In the List Information section, click the **Create App Channel List** link.

Q: Can I use a SQL View instead of a scheduled filter?

A: No, a SQL view is not supported as a starting point for programs with Mobile App channel.

Q: Can I create a PET for the App Channel List

A: Yes, you can create a PET table for the App Channel List. See the section "Setting up an App Channel Preferences PET (Optional)" on page 26 for instructions and limitations.

Q: Can I associate multiple App Channel PETs to the same Profile List/App Channel List combination?

A: Yes, you can. However, please note that you can have only one Preferences PET per mobile app.

Q: How do users opt in or opt out of receiving push notifications? How are the Channel Permission Status set in the App Channel List?

A: The GCM and APNs platform providers manage notification permissions differently. Responsys handles notification permissions as follows:

- When a new user installs an app on a specific mobile device for the first time and agrees (implicitly or explicitly, per platform) to receive notifications, Responsys creates an App Channel List record and sets the Channel *Deliverability* Status to "D" (Deliverable) and the Channel *Permission* Status as follows:
 - o For iOS apps, the app must ask for the user's permission to receive notifications. Responsys creates an App Channel List record for the user and marks the Channel Permission Status as "⊥" (Opted-In) or "○" (Opted-Out) depending on the user's response to the iOS System Message or

from their choices in the System Settings.

As of the 6.33 SDK release, mobile app developers can separate registration and the system prompt for push notification permission. When registration and opt-in occur separately, the system sets the Channel Permission Status to " \bigcirc " and the Channel Deliverability Status to " \bigcirc " for the device at registration time. Later, when the mobile app prompts the user to opt-in for push notifications, the user's response determines the Channel Permission Status. If the user accepts, the permission status is set to " \bot ". If the user chooses not to opt in, the permission status stays " \bigcirc ". If at some point later the user decides to opt-in, then the user must go to the device settings to change the push notification permission for the app.

- o For Android, Channel Permission Status is set to "I" (Opted In) when a user installs the mobile app on their device. Users are opted in to receive notifications by *platform* default when they install the app, and the notifications permissions are shown at install time. Users have the ability to opt out or opt in through settings later.
 - As of the 18D/6.39 SDK release, the SDK can capture when the users opt out or opt in to Push Notifications on their device, and it stores those values in the App Channel List. When a user chooses "Opt Out of Push Notifications for App" on their device, CHANNEL_PERMISSION_STATUS_ in App Channel List is set to "O" (Opted Out). When a user chooses "Opt In to Push Notifications for App" on their device, CHANNEL_PERMISSION_STATUS_ in App Channel List is set to "I" (Opted In). Before 18D/6.39, users could still opt out or opt in on their device, but the values were not captured in Responsys and the operating system suppressed notifications for opted out users.
- Responsys marks the Channel Deliverability Status "U" (Undeliverable) when the platform provider
 informs Responsys that a push notification cannot be sent to the user, which can happen when
 Responsys tries to send a push notification to the user. For example, the platform provider may send
 this message because the user has uninstalled the app.

Glossary

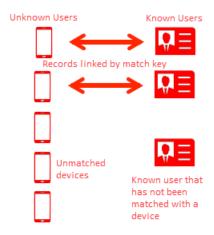
App Channel List: A list designed to store device information of all devices that have installed the mobile app. It is always associated to a Contact Profile List. A Contact Profile List can have ONE App Channel List associated with it. Once an App Channel List is associated, the association cannot be deleted. This is a system restriction as of 6.25 release (Aug 2015).

App Channel List Filter: A special type of Filter available for Contact Profile Lists that have an App Channel List associated with it. Marketers should use these filters for defining scheduled filters when sending only to unknown devices. Marketers should also use App Channel List Filters when designing a multi-channel program.

Custom trigger vs. custom event: Although they sound similar, these are two very different concepts in Responsys:

- A "trigger," in the context of mobile In-App messaging campaigns, means an end-user action within the mobile app that a Marketer wants to respond to with a message. A custom trigger refers to an end-user action that is not the standard one of opening a mobile app (\$ExplicitAppOpen). For example, this could be a user action of adding products to a wish list. A Marketer could use that action and respond with an offer back to the user in the form of an In-App message. Custom triggers require additional coding in the mobile app and configuration by the account administrator.
- A custom event is a signal from an external source that alerts Responsys when notable
 customer activity occurs and should be recorded, or alternately when a notable activity occurs
 to a customer. Custom events can be triggered by loads (manual or automated), form submits,
 or through the Web Services API. Marketers can use custom events as starting events in a
 marketing program orchestration, but they require additional configuration by the account
 admin.

Known vs. unknown users: When a user installs a mobile app on a device, the only information Responsys receives is the device information, which is stored in the App Channel List. These are **unknown users**. In contrast, the Contact Profile List contains user information. These are **known users**. These records can be linked through the match key.



Match key: A user identifier attribute that is used to associate a device record (unknown user) to a known profile record (known user). A match key could be one of Email Address (in various formats), Customer ID, or Mobile Number. When a user installs a mobile app on his or her device, Responsys gets only the device information of that user. When a user signs-up (or signs-in) with one of the above identifiers, the system can associate the device with a known profile record.

Mobile App Message Center: A Responsys feature that enables marketers to persist their sent Push campaign messages, so that mobile app users can view them later in the mobile app. Developers implement the feature in their mobile app using the Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide SDK. Developers can find more information in the "Message Center" topic of the *Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide*.

At runtime, the mobile app fetches the 20 most recent and unexpired messages from a Message Center in Responsys and displays them to mobile app users. Depending on whether the user is logged in, the messages received may vary as follows:

- If the mobile app user is logged in, and the mobile app has set the USER_IDENTIFIER, then the resulting messages are those meant for the logged-in (known) app user.
- If the mobile app user is not logged in, then the resulting messages are those meant for the device running the mobile app or for all logged out (unknown) users.

Notification Preferences PET: A Profile Extension Table that is associated to the App Channel List. It is used for storing mobile app user preferences for a given mobile app. For example, a mobile app can provide a set of options like "Lightning Deals", "Monday Madness" etc. A user can subscribe to one or more of these options. For each device where the mobile app is installed, the system maintains these preferences in the Notification Preferences PET. Marketers can use preferences data to send relevant messages to those users who have subscribed to a specific option. For Mobile App Developer details about Notification Preferences, please refer to the platform-specific "Notification Preferences" topics in the <u>Oracle Responsys Mobile App Platform Cloud Service SDK Developer's Guide</u>. (To find these topics, click the platform name on the navigation list—for example, "iOS"—and then click "Notifications Preferences".)