

In-app update prompt via Firebase Remote Config (App Distribution / TestFlight)

10/26/2026 12:29 PM - Kunal Jangid

Status:	New	Start date:	10/26/2026
Priority:	Normal	Due date:	
Assignee:	Kunal Jangid	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour

Description

Overview

Add an in-app update prompt to ChargeWatch so internal users are notified whenever a new build is released. The logic is the same as evcsms-mobile (Firebase Remote Config). Since ChargeWatch is not on Play Store / App Store, the "Update Now" action redirects to the internal distribution channels:

- **Android** → Firebase App Distribution (App Tester)
- **iOS** → TestFlight

Behaviour

- On Login / Home screen, the app fetches Remote Config and compares the installed version with the latest version.
- An update is shown when:
 - remote version > installed version, **or**
 - version is the same and remote build number > installed build number
- **Optional update** → dismissible dialog ("Later" / "Update Now"), shown once per session.
- **Force update** → non-dismissible dialog (back button blocked). Can be enabled for everyone or only for specific user IDs.
- Dev flavor (com.chargejet.watch.app.dev) reads *_dev keys, Live flavor (com.chargejet.watch.app) reads keys without suffix.

Remote Config Keys (Firebase project: charge-watch)

Live key	Dev key	Type	Example	Purpose
android_latest_version	android_latest_version_dev	String	1.0.2	Latest Android version
android_latest_build	android_latest_build_dev	Number	45	Latest Android build (0 = ignore)
ios_latest_version	ios_latest_version_dev	String	1.0.2	Latest iOS version
ios_latest_build	ios_latest_build_dev	Number	45	Latest iOS build (0 = ignore)
force_update	force_update_dev	Boolean	false	Force update for all users
force_update_user_ids	force_update_user_ids_dev	String	12,34	Force update only for these user IDs
update_message	update_message_dev	String	Bug fixes and improvements	Message shown in dialog
android_update_url	android_update_url_dev	String	https://appdistribution.firebase.dev/i/xxxx	App Distribution tester link
ios_update_url	ios_update_url_dev	String	itms-beta://beta.itunes.apple.com/v1/app/<Apple ID>	TestFlight link

Technical Changes

- New: lib/services/update_service.dart – Remote Config init, version + build comparison, optional/force dialogs, redirect logic

- New: lib/constants/remote_config_keys.dart – Remote Config key constants
- home_screen.dart, login_screen.dart – trigger update check after first frame
- pubspec.yaml – added firebase_remote_config
- ios/Runner/Info.plist – added itms-beta to LSApplicationQueriesSchemes
- AndroidManifest.xml – added https VIEW intent in <queries>
- Branch: feature/in-app-update-prompt (commit 1067cc6)

Pending / Setup

1. Create the above parameters in Firebase Remote Config (charge-watch project) for both Live and Dev.
2. Generate App Distribution invite links (Android) for Live and Dev tester groups.
3. Get Apple ID of both iOS apps from App Store Connect → App Information, and set ios_update_url / ios_update_url_dev.
4. Push branch and raise PR.

Testing Checklist

- [] Dev: set android_latest_build_dev = 45 (current build 44) → optional dialog appears
- [] "Later" closes dialog; dialog not shown again in same session
- [] "Update Now" opens App Tester / App Distribution link (Android)
- [] "Update Now" opens TestFlight (iOS)
- [] force_update_dev = true → dialog cannot be dismissed (incl. back button)
- [] force_update_user_ids_dev with a specific user ID → force dialog only for that user
- [] Version/build equal or lower → no dialog
- [] No internet / Remote Config fetch fails → app opens normally, no crash
- [] Repeat for Live flavor after release

Notes

- On every release, update Remote Config version/build **and** versionCode / versionName in android/app/build.gradle flavors. Android reports this hardcoded value.
- Release builds may take up to 5 minutes to pick up new Remote Config values.