

PxPlus Apps for iOS & Android

PxPlus 2019 (v16)

Agenda

- PxPlus Android & iOS App
- Two PxPlus App Options
- Why Two Options?
- PxPlus Generated App
- PxPlus App Launcher

Note: All features discussed are new in PxPlus 2019

PXPLUS ANDROID & iOS APP

PxPlus Android & iOS App

- PxPlus developed a native Android and iOS [app](#)
- Makes it possible to run an *iNomads* application as an app
- Also enables any web application to run as an app
- Installed from mobile app store
- Launched using app icon

Goals of PxPlus App

- Seamless use of *iNomads* or web applications on smartphones and tablets
- Harness the power of the mobile device capabilities
- No need to re-write the application
 - Recommend cosmetic screen changes

PxPlus App Features

- Full screen web view
 - No menu, toolbar or buttons
- No back/forward navigation
 - Handle in application
- Supports mobile device screen orientation switching

PxPlus App Features

- Scan barcodes with the device camera
- Get location via GPS
- Viewing of PDFs
- Downloading/Uploading files
- Touch signature capture



PxPlus App Security

- App should point at *iNomads* or web application running HTTPS
- TLS 1.2 or higher is recommended
- App will warn user if using an untrusted certificate
- Access to device's location is disabled when using unsecure HTTP

Two PxPlus App Options

- PxPlus Generated App
 - Generated via [PxPlus Mobile App Generator](#)
 - Directly launches an *iNomads* or web application
 - Must self publish app in Google Play Store and/or Apple App Store
- PxPlus App Launcher
 - PxPlus published [free](#) app in Google Play Store and Apple App Store
 - Dynamically configured to launch any *iNomads* or web application
- Both use PxPlus mobile app



Why Two Options?

- Each option serves different needs
- PxPlus Generated App
 - Custom branding via app name and logo
 - Ability to sell an app thru an app store
 - Directly launches *iNomads* or web application without any setup
- PxPlus App Launcher
 - No need to publish app saving time and money
 - Test *iNomads* or web application as an app
 - One app many different applications

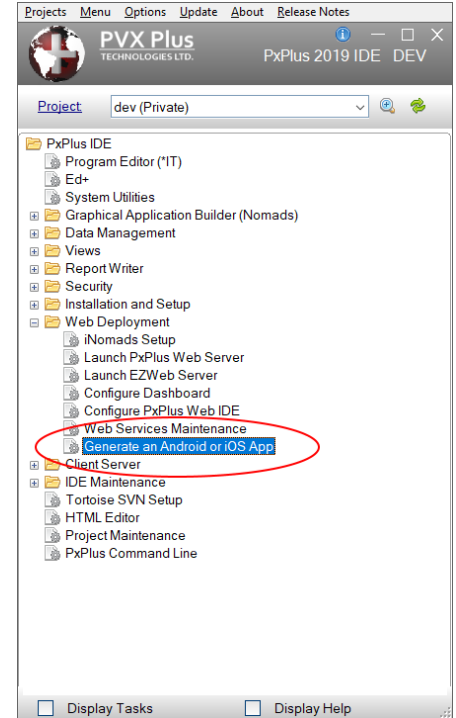
PXPLUS GENERATED APP



How to Generate an App

- Use the [Generate an Android or iOS App](#) utility
 - From the PxPlus IDE
 - Expand Web Deployment category and select Generate an Android or iOS App
 - From a graphical device
 - Run the `*tools/appwizard` program

- [Generate an Android or iOS App](#) documentation



Developer Apple Tax

- Apple is a premium brand with a cool factor
 - Costly annual fee for the mandatory developer program needed to publish apps
 - Added cost of a macOS computer which is required to upload to the App Store
- Apple is security and privacy focused
 - Slow development process due to a more thorough App Store review
 - Typically takes longer than Google Play Store review

App Identification

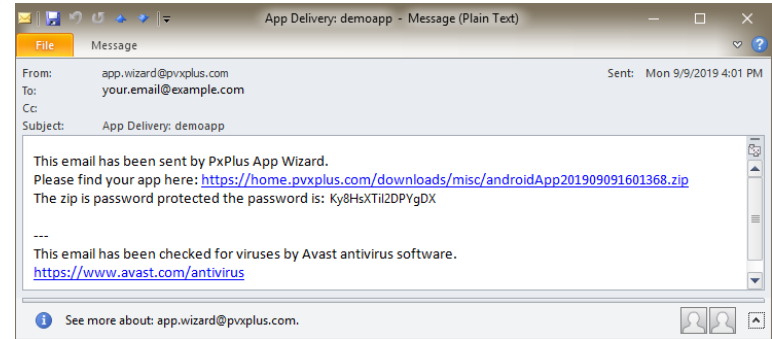
- **App ID** is a reverse DNS style **unique** store ID of the app
 - Case sensitive
 - Android
 - At least one period
 - Begin with a letter
 - A-Za-z0-9._
 - iOS
 - Length of 1-155
 - A-Za-z0-9.-
- **App Name** is the display name of the app
 - Max length: 50 characters (Android) or 30 characters (iOS)

Example App ID

• `com.mycompany.myapp`

Results of App Generation

- App generation is not instantaneous and can take up to 15 minutes
- When complete, you'll receive an email
 - From: app.wizard@pvxplus.com
 - Subject: "App Delivery: app name"
 - Link to download the encrypted ZIP file
 - Password to decrypt the ZIP file
- Zip file contains app file(s) which can then be uploaded to mobile app store
 - Android: [.apk](#) (Android Package) & [.aab](#) (Android App Bundle)
 - iOS: [.ipa](#) (iOS App Store Package)



How to Update a Generated App

- Don't need to update very often as most changes happen in the *iNomads* or web application
- Only need to generate an app update
 - Change name, icon or URL
 - To use an updated PxPlus mobile app
- Use the [Generate an Android or iOS App](#) utility
 - [App ID](#) same as original generated app
 - Increase the [Version](#) number
 - Change any of the other fields as needed
 - If available, the newest version of the PxPlus mobile app will be used

Generate an App Programmatically

- Alternatively you can generate an app programmatically

```
CALL "*tools/appwizard;send_request", dest_email$, app_type$, app_id$, app_name$, version$,  
icon_path$, icon_bkg_clr$, target_url$, result$
```

- The `icon_bkg_clr$` argument accepts hex color values
 - `#DC143C` - Crimson (shade of Red)
- If successful, `result$` will be "SUCCESS"
- If unsuccessful, `result$` will contain an error message

Upload to Google Play Console

- To test and publish in the Google Play Store you must upload an Android app to the Play Console
- [Google Play Developer Account](#) is required
 - Currently \$25 USD one-time registration fee
- Go to the [Play Console](#) and sign in
 - Create a new application
 - Set privacy policy
 - Create an internal release
 - Upload the [.aab](#) or [.apk](#) file and then save

Upload to Google Play Console

Google Play Console

All applications

Search for apps



All applications

Game services

Order management

Download reports

Alerts

Settings

Filter

CREATE APPLICATION

App name	Active installs	New Google Play rating	Last update	Status
PVX Plus Forum com.pvxplus.forum.example	—	★ —	Aug 13, 2019	Unpublished
PXP Android Test com.vonsagan.androidtest2	—	★ —	Aug 13, 2019	Unpublished
PxPlus App Launcher com.pvxplus.applauncher	1	★ —	May 13, 2019	Published

Page 1 of 1

Upload to Google Play Console

The screenshot displays the Google Play Console interface. On the left is a navigation sidebar with options: All applications, Game services, Order management, Download reports, Alerts, and Settings. The main area shows a table of applications with columns for App name, Active installs, New Google Play rating, Last update, and Status. A 'CREATE APPLICATION' button is visible in the top right. A modal dialog box titled 'Create application' is open in the center, containing the following fields:

- Default language ***: A dropdown menu showing 'English (United States) - en-US'.
- Title ***: A text input field containing 'Test Create' with a character count of '11/50'.

At the bottom of the dialog are 'CANCEL' and 'CREATE' buttons. The background table lists three applications: 'PVX Plus Forum' (Unpublished), 'PVX Android Test' (Unpublished), and an application with status 'Published'. A 'Page 1 of 1' indicator is at the bottom right of the table.

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Upload to Google Play Console

Google Play Console

Store listing

Test Create

← All applications

- Dashboard
- App releases ✓
- Android Instant Apps
- Artifact library
- Device catalog
- App signing
- Store listing** ✓
- Custom store listings
- Content rating ✓
- App content ✓
- Pricing & distribution ✓
- In-app products
- Translation service
- Services & APIs
- Optimization tips

Contact details

Website

Email *

Please provide an email address where you may be contacted. This address will be publicly displayed with your app.

Phone

Privacy Policy *

If you wish to provide a privacy policy URL for this application, please enter it below. Also, please check out our [User Data policy](#) to avoid common violations.

Privacy Policy

Not submitting a privacy policy URL at this time. Learn more

SAVE DRAFT

Upload to Google Play Console

Google Play Console

App releases

Test Create

MANAGE

Alpha

Add Android App Bundles or APKs to alpha to make your app available for closed testing.

MANAGE

Internal test track

Internal test

The internal test track makes your app available for internal testing within minutes.

MANAGE

Internal app sharing

Upload test versions of apps and share them with your team by sending them a link. [Manage internal app sharing](#)

Pre-registration

Pre-registration - unavailable

To start pre-registration, upload an APK to a track of your choice. Once uploaded you will be able to manage and start pre-registration

MANAGE

Country Availability

Production countries	Beta countries	Alpha countries
--	--	--
No Production release	No Beta release	No Alpha release

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Upload to Google Play Console

The screenshot displays the Google Play Console interface. On the left is a navigation sidebar with various options, including 'App releases' which is currently selected. The main content area is titled 'App releases' and contains a sub-section for 'Internal test'. Below this, there is a large illustration of a paper airplane, a propeller plane, and a rocket. Underneath the illustration, the 'Create release' section is visible, featuring a blue button labeled 'CREATE RELEASE' which is circled in black. Below the 'Create release' section is the 'Manage testers' section, which includes a dropdown menu set to 'Internal test'. At the bottom of the page, there is a copyright notice: '© 2019 Google · Mobile App · Help · Site Terms · Privacy · Developer Distribution Agreement'.

Upload to Google Play Console

The screenshot shows the Google Play Console interface for creating a new release to internal test. The left sidebar contains navigation options like 'All applications', 'Dashboard', 'App releases', 'Android Instant Apps', 'Artifact library', 'Device catalog', 'App signing', 'Store listing', 'Custom store listings', 'Content rating', 'App content', 'Pricing & distribution', 'In-app products', 'Translation service', 'Services & APIs', and 'Optimization tips'. The main content area is titled 'New release to internal test' and features a progress indicator with two steps: '1 Prepare release' and '2 Review and rollout'. Below the progress indicator, there is a section titled 'Let Google manage and protect your app signing key (recommended)'. This section contains text explaining that Google Play will create and manage the app signing key, and that this is a requirement for using the recommended app publishing format. Below this text are two expandable sections: 'Understand the benefits' and '(Advanced options) Provide the app signing key that Google Play uses for this app'. At the bottom of this section, there are two buttons: 'CONTINUE' (highlighted with a red circle) and 'GO OUT'. Below this section, there is a section titled 'Android App Bundles and APKs to add' with an 'ADD FROM LIBRARY' button. Below this is a large grey area with the text 'Drop your app bundles & APKs here, or select a file.' and a 'BROWSE FILES' button. At the bottom, there is a 'Release name' input field.

Google Play Console

App releases

Test Create

← All applications

Dashboard

App releases

Android Instant Apps

Artifact library

Device catalog

App signing

Store listing

Custom store listings

Content rating

App content

Pricing & distribution

In-app products

Translation service

Services & APIs

Optimization tips

Manage your app's Android App Bundles, APKs, review release history, and rollout your app to production or testing tracks. [Learn more](#)

← New release to internal test

1 Prepare release 2 Review and rollout

Let Google manage and protect your app signing key (recommended)

Google Play will create and manage the app signing key for your app. Google Play signs each release with this key so Android devices can trust the release is really from you. [Learn more](#)

This step is a requirement for using the recommended app publishing format, the Android App Bundle, and benefiting from Google Play's Dynamic Delivery. If you're about to publish an APK, you can still select 'Continue' now and start using the Android App Bundle later. [Learn more](#)

Understand the benefits

(Advanced options) Provide the app signing key that Google Play uses for this app

CONTINUE GO OUT

Android App Bundles and APKs to add

These app bundles and APKs will be served in the Google Play Store after the rollout of this release. [ADD FROM LIBRARY](#)

Drop your app bundles & APKs here, or select a file.

BROWSE FILES

Release name

Upload to Google Play Console

Google Play Console

App releases

Test Create

← All applications

Dashboard

App releases

Android Instant Apps

Artifact library

Device catalog

App signing

Store listing

Custom store listings

Content rating

App content

Pricing & distribution

In-app products

Translation service

Services & APIs

Optimization tips

Manage your app's Android App Bundles, APKs, review release history, and rollout your app to production or testing tracks.
[Learn more](#)

← New release to internal test

1 — 2

Prepare release Review and rollout

Let Google manage and protect your app signing key (recommended)

✓ Enabled.

Upload key: The key you use to sign your first release. Sign every subsequent release with the same key to verify it's from you. Keep your upload key safe. If it's ever lost or compromised, contact developer support to replace it.

[Learn more about how App Signing by Google Play works.](#)

Android App Bundles and APKs to add

These app bundles and APKs will be served in the Google Play Store after the rollout of this release.

[ADD FROM LIBRARY](#)

Drop your app bundles here, or select a file.

[BROWSE FILES](#)

Release name

Name to identify release in the Play Console only, such as an internal code name or build version.

Enter a release name

0/50

Suggested name is based on version name of first app bundle or APK added to this release.

Upload to Google Play Console

Google Play Console

App releases

Test Create

Type	Version code	App download size [?]	
Android App Bundle	2251253	1.01 to 1.03 MB	REMOVE

Release name

Name to identify release in the Play Console only, such as an internal code name or build version.

1.0.0 5/50

Suggested name is based on version name of first app bundle or APK added to this release.

What's new in this release?

🌐 Release notes translated in 0 languages

Enter the release notes for each language within the relevant tags or copy the template for offline editing. Release notes for each language should be within the 500 character limit.

```
<en-US>
Initial internal release.
</en-US>
```

DISCARD **SAVE** PREVIEW

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Upload to Apple App Store Connect

- To test and publish in the Apple App Store an iOS app is uploaded to App Store Connect
- Enrollment in the [Apple Developer Program](#) is required
 - Currently \$99 USD/per year fee
- Go to the [Apple Developer: iOS Provisioning Portal](#) and sign in
- Create an app/bundle ID that matches the one used to generate the app

Upload to Apple App Store Connect

Developer Account

Devon Austen
PVX Plus Technologies Ltd

PVX Plus Technologies Ltd

Apple Developer Program

People
Send invitations to your development team so they can take advantage of membership resources.

Certificates, Identifiers & Profiles
Manage the certificates, identifiers, profiles, and devices you need to develop and distribute apps.

App Store Connect
Publish and manage your apps on the App Store with App Store Connect.

Program Resources

- Overview
- Membership
- People
- Certificates, IDs & Profiles
- App Store Connect
- CloudKit Dashboard
- Code-Level Support

Additional Resources

- Documentation
- Downloads
- Forums
- Feedback Assistant
- Account Help
- Contact Us

Upload to Apple App Store Connect

Apple Developer Devon Austen ▾
PVX Plus Technologies Ltd - 2AF9G85SLJ

Certificates, Identifiers & Profiles

[Certificates](#) **Identifiers +** [App IDs ▾](#)

[Identifiers](#) [Devices](#) [Profiles](#) [Keys](#) [More](#)

NAME ▾	IDENTIFIER	PLATFORM
App Launcher	com.pvxplus.applauncher	iOS
CATS Demo	com.pvxplus.catsdemo	iOS
com-vonsagantest10	com.vonsagantest10	iOS
Forum	com.pvxplus.forum	iOS
iOS Test	com.vonsagan.iostest2	iOS
iostest3	com.vonsagan.iostest3	iOS
PXP Test	com.vonsagan.test8	iOS
PXP Test	com.vonsagan.test10	iOS
PXP Test	com.vonsagan.test6	iOS
table demo	com.pvxplus.tabledemo	iOS
XC Wildcard	*	iOS

Upload to Apple App Store Connect

Certificates, Identifiers & Profiles

[< All Identifiers](#)

Register a New Identifier



- App IDs**
Register an App ID to enable your app to access available services and identify your app in a provisioning profile. You can enable app services when you create an App ID or modify these settings later.
- Services IDs**
For each website that uses Sign In with Apple, register a services identifier (Services ID), configure your domain and return URL, and create an associated private key.
- Pass Type IDs**
Register a pass type identifier (Pass Type ID) for each kind of pass you create (i.e. gift cards). Registering your Pass Type IDs lets you generate Apple-issued certificates which are used to digitally sign and send updates to your passes, and allow your passes to be recognized by Wallet.
- Website Push IDs**
Register a Website Push Identifier (Website Push ID). Registering your Website Push IDs lets you generate Apple-issued certificates which are used to digitally sign and send push notifications from your website to macOS.
- iCloud Containers**
Registering your iCloud Container lets you use the iCloud Storage APIs to enable your apps to store data and documents in iCloud, keeping your apps up to date automatically.
- App Groups**
Registering your App Group allows access to group containers that are shared among multiple related apps, and allows certain additional interprocess communication between the apps.
- Merchant IDs**
Register your Merchant Identifiers (Merchant IDs) to enable your apps to process transactions for physical goods and services to be used outside of your apps. Generate a Apple Pay Payment Processing certificate for each registered Merchant ID to validate transactions initiated within your app.
- Music IDs**
For each app that uses the Apple Music API, register a music identifier (Music ID) and then create an associated MusicKit private key.
- Maps IDs**
For each app that uses the Apple Maps API, register a Maps Identifier (Maps ID) and then create an associated

Upload to Apple App Store Connect

Developer

Devon Austen
PVX Plus Technologies Ltd - 2AF9G85SLJ

Certificates, Identifiers & Profiles

[< All Identifiers](#)

Register an App ID

Back

Continue

Platform

iOS, tvOS, watchOS macOS

App ID Prefix

2AF9G85SLJ (Team ID)

Description

My App ID

You cannot use special characters such as @, &, *, ', "









Bundle ID Explicit Wildcard

com.pvxplus.myappid

We recommend using a reverse-domain name style string (i.e., com.domainname.appname). It cannot contain an asterisk (*).

Capabilities

ENABLED NAME

- | | |
|--------------------------|--|
| <input type="checkbox"/> |  Access WiFi Information |
| <input type="checkbox"/> |  App Groups |
| <input type="checkbox"/> |  Apple Pay Payment Processing |
| <input type="checkbox"/> |  Associated Domains |
| <input type="checkbox"/> |  AutoFill Credential Provider |
| <input type="checkbox"/> |  ClassKit |
| <input type="checkbox"/> |  Custom Network Protocol (Supported only on: macOS) |
| <input type="checkbox"/> |  Data Protection |

Upload to Apple App Store Connect

Developer

Devon Austen
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Certificates, Identifiers & Profiles

[< All Identifiers](#)

Confirm your App ID

[Back](#) [Register](#)

Platform

iOS, tvOS, watchOS

App ID Prefix

2AF9G85SLJ (Team ID)

Description









My App ID

Bundle ID

com.pvxplus.myappid (explicit)

Capabilities

ENABLED NAME

- | | |
|--------------------------|--|
| <input type="checkbox"/> |  Access WiFi Information |
| <input type="checkbox"/> |  App Groups |
| <input type="checkbox"/> |  Apple Pay Payment Processing |
| <input type="checkbox"/> |  Associated Domains |
| <input type="checkbox"/> |  AutoFill Credential Provider |
| <input type="checkbox"/> |  ClassKit |
| <input type="checkbox"/> |  Custom Network Protocol (Supported only on: macOS) |
| <input type="checkbox"/> |  Data Protection <ul style="list-style-type: none"><input checked="" type="radio"/> Complete Protection<input type="radio"/> Protected Unless Open<input type="radio"/> Protected Until First User Authentication |

Upload to Apple App Store Connect

- Go to [App Store Connect](#) and sign in
- Create a new app selecting the app/bundle ID you just created
- From a macOS machine, launch Application Loader (installed with XCode) and then select the generated app [.ipa](#) file to upload
- Apple puts the app through some automated tests expect a delay of up to 30 minutes

Upload to Apple App Store Connect



News

Phased release for automatic updates now available for tvOS apps

Now you can release an update to your tvOS app in stages over a 7-day period by enabling Phased Release for Automatic Updates. [Learn More](#)



My Apps



App Analytics



Sales and Trends



Payments and
Financial Reports



Users and
Access



Agreements, Tax,
and Banking



Resources and
Help

Upload to Apple App Store Connect

App Store Connect My Apps ▾

Devon Austen ▾
PVX Plus Technologies Ltd



Search

All Statuses ▾



New App
New macOS App
New iOS App Bundle



CATS Demo

● iOS 1.0 Prepare for Submi...



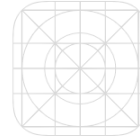
PVX Plus Forum

● iOS 1.0 Prepare for Submi...



PxPlus Table
Demo

● iOS 1.0 Prepare for Submi...



PXP iOS Test

● iOS 1.0 Prepare for Submi...



PXP iOS Test 3

● iOS 1.0 Prepare for Submi...

Upload to Apple App Store Connect

App Store Connect My Apps

Devon Austen PVX Plus Technologies Ltd

Search

All Statuses

New App

Platforms ?
 iOS tvOS

Name ?
PxPlus Test Create

Primary Language ?
English (U.S.)

Bundle ID ?
Test Create - com.pxplus.testcreate

SKU ?
PXPLUS_TESTCREATE

User Access ?
 Limited Access Full Access

Cancel Create

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Upload to Apple App Store Connect



Upload to Apple App Store Connect



How to Test the Android App

- The **easiest** way is to install the **.apk** file directly onto an Android device
 - Requires that installing apps from unknown sources be enabled
- Alternatively you can release the app for internal testing via the Play Console
 - Complete required sections
 - Store listing, Content rating, Pricing & distribution and App content
 - Add testers to the internal release created when app was uploaded
 - Roll out the internal release to testers

How to Test the Android App

The screenshot shows the Google Play Console interface for the 'Store listing' of an application named 'Test Create'. The left sidebar contains a navigation menu with the following items: All applications, Dashboard, App releases (with a green checkmark), Android Instant Apps, Artifact library, Device catalog, Store listing (circled in black), Custom store listings, Content rating (with a green checkmark), App content (with a green checkmark), Pricing & distribution (with a green checkmark), In-app products, Translation service, Services & APIs, and Optimization tips. The main content area is titled 'Product details' and shows the 'ENGLISH (UNITED STATES) - EN-US' locale. It includes a 'Manage translations' dropdown and a note: 'Fields marked with * need to be filled before publishing.' The form fields are: 'Title *' with the value 'Test Create' (11/50 characters), 'Short description *' (0/80 characters), and 'Full description *' (0/4000 characters). Below the form, there is a note: 'Please check out our [Metadata policy](#) to avoid some common violations related to app metadata. Also, please make sure to review all the other [program policies](#) before you submit your apps. If your app or store listing is [eligible for advance notice](#) to the Google Play App Review team, [contact us](#) prior to publishing.' At the bottom of the page, there is a 'Graphic assets' section and a 'SAVE DRAFT' button.

How to Test the Android App

Google Play Console

Content rating

Test Create

All applications

- Dashboard
- App releases
- Android Instant Apps
- Artifact library
- Device catalog
- App signing
- Store listing
- Content rating**
- App content
- Pricing & distribution
- In-app products
- Translation service
- Services & APIs
- Optimization tips

The Google Play content rating system for apps and games is designed to deliver reputable, locally relevant ratings to users around the world. The rating system includes official ratings from the International Age Rating Coalition (IARC) and its participating bodies (see their [Terms of Use](#)).

Developer responsibilities:

- Complete the content rating questionnaire for each new app submitted to Developer Console, for all existing apps that are active on Google Play, and for all app updates where there has been a change to app content or features that would affect the responses to the questionnaire.
- Provide accurate responses to the content rating questionnaire. Misrepresentation of your app's content may result in removal or suspension.

Your rating will be used to:

- Inform consumers about the age appropriateness of your app.
- Block or filter your content in certain territories or to specific users where legally required.
- Evaluate your app's eligibility for special developer programs.

The content rating questionnaire and the new Content Ratings Guidelines are a condition of your participation in the Google Play store. [Learn more](#)

CONTINUE

IARC

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How to Test the Android App

Google Play Console

Pricing & distribution

Test Create

All applications

- Dashboard
- App releases
- Android Instant Apps
- Artifact library
- Device catalog
- App signing
- Store listing
- Custom store listings
- Content rating
- App content
- Pricing & distribution**
- In-app products
- Translation service
- Services & APIs
- Optimization tips

Managed Google Play | Daydream | Wear OS by Google | Android TV | Android Auto

This application is **PAID** **FREE**

To publish paid applications, you need to set up a merchant account. [Learn more](#)

App Availability: Your app is currently in a draft state. When you rollout a release, your app will become available on Google Play and any Play approved partner and/or offline distribution channels.

Countries *
Unavailable countries: 149 + rest of world
Available countries: 0
Beta and Alpha synced with production

HIDE COUNTRIES

	Status	<input checked="" type="radio"/> Unavailable	<input type="radio"/> Available
Albania	Unavailable	<input checked="" type="radio"/>	<input type="radio"/>
Algeria	Unavailable	<input checked="" type="radio"/>	<input type="radio"/>

SAVE DRAFT

How to Test the Android App

Google Play Console

App content

Test Create

All applications

- Dashboard
- App releases ✓
- Android Instant Apps
- Artifact library
- Device catalog
- App signing
- Store listing ✓
- Custom store listings
- Content rating ✓
- App content** ✓
- Pricing & distribution ✓
- In-app products
- Translation service
- Services & APIs
- Optimization tips 1

Target audience and content

Let us know the target age group of your app, and other information about its contents. This helps you make sure your app is safe for children.

START

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How to Test the Android App

Google Play Console

App content

Test Create

← All applications

Dashboard

App releases ✓

Android Instant Apps

Artifact library

Device catalog

App signing

Store listing ✓

Custom store listings

Content rating ✓

App content ✓

Pricing & distribution ✓

In-app products

Translation service

Services & APIs

Optimization tips 1

← Target audience and content

1 2 3 4 5

Target age App details Ads Store presence Summary

Instructions for app access *

If parts of your app are restricted based on login credentials, memberships, location, or other forms of authentication, provide details so that Google can review your app

All functionality is available without special access

All or some functionality is restricted

Username or phone number

Password

Any other instructions for accessing the app

0/500

PII *

Does your app collect any PII (personally-identifiable information)?

Yes

No

Legal and regulatory compliance *

I certify that this app (including all APIs, SDKs, and ads) complies with all applicable laws and regulations relating to children

Examples include the US Children's Online Privacy Protection Act (COPPA), and the EU General Data Protection Regulation (GDPR)

How to Test the Android App

The screenshot displays the Google Play Console interface for managing app releases. The left sidebar contains navigation options, with 'App releases' highlighted and circled. The main content area is titled 'App releases' and shows several tracks for testing:

- Beta**: Add Android App Bundles or APKs to beta to make your app available for open testing. [MANAGE](#)
- Closed track**: [CREATE CLOSED TRACK](#)
- Alpha**: Add Android App Bundles or APKs to alpha to make your app available for closed testing. [MANAGE](#)
- Internal test track**: You have a release in internal test that hasn't been rolled out. [EDIT RELEASE](#) [MANAGE](#)
- Internal app sharing**: Upload test versions of apps and share them with your team by sending them a link. [Manage internal app sharing](#)
- Pre-registration**: **Pre-registration - available** [MANAGE](#)
Start your pre-registration campaign here. You can allow users to sign up to be notified about when your app is available to download in the Play store.
- Country Availability**

How to Test the Android App

Google Play Console

App releases

Test Create

Manage testers

internal test

Choose how to run your testing program. [Learn more](#)

100 internal testers per app

Your internal test can have up to 100 testers at any time. The first 100 testers who attempt to opt-in to your internal test program will succeed.

Users	List name	Users	
<input type="checkbox"/>	Ashfaq	1	EDIT
<input type="checkbox"/>	Devon	1	EDIT
<input type="checkbox"/>	Testers	4	EDIT

[CREATE NEW LIST](#)

Feedback Channel [?](#)

Opt-in URL

[REMOVE TESTERS](#) [SAVED](#)

You have a release that hasn't been rolled out

[EDIT RELEASE](#)

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How to Test the Android App

The screenshot shows the Google Play Console interface for managing app releases. The left sidebar contains navigation options, with 'App releases' selected and marked with a green checkmark. The main content area displays a table of releases and configuration options for a selected release.

Type	Version code	App download size	
Android App Bundle	2251253	1.01 to 1.03 MB	REMOVE

Release name
Name to identify release in the Play Console only, such as an internal code name or build version.

1.0.0 5/50

Suggested name is based on version name of first app bundle or APK added to this release.

What's new in this release?
Release notes translated in 1 language
Enter the release notes for each language within the relevant tags or copy the template for offline editing. Release notes for each language should be within the 500 character limit.

```
<en-US>
Initial internal release.
</en-US>
```

1 language translation entered: en-US

DISCARD SAVED **REVIEW**

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How to Test the Android App

Google Play Console

App releases

Test Create

Manage your app's Android App Bundles, APKs, review release history, and rollout your app to production or testing tracks. [Learn more](#)

← Confirm rollout to internal test: 1.0.0

Prepare release Review and rollout

Review summary

This release is ready to be rolled out.

Android App Bundles in this release [Expand all](#)

Type	Version code	Uploaded	App download size [?]	Installs on active devices
1 app bundle added				
Android App Bundle	2251253	Yesterday, 5:12 PM	1.01 to 1.03 MB	No data

What's new in this release?

Default – English (United States) – en-US
Initial internal release.

1 language translation

PREVIOUS DISCARD **START ROLLOUT TO INTERNAL TEST**

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How to Test the iOS App

- Only way to test the generated iOS app is to use TestFlight
- From App Store Connect
 - Go to TestFlight
 - Fill in encryption compliance form
 - Pick App Store Connect users to test

How to Test the iOS App

App Store Connect My Apps ▾

PxPlus Test Create ▾

Devon Austen ▾ | PVX Plus Technologies Ltd | ?

App Store Features **TestFlight** Activity

BUILDS

iOS

FEEDBACK

Crashes

Screenshots

TESTERS & GROUPS ?

App Store Connect Users

Add External Testers

APP INFORMATION



Test Information ⚠

About TestFlight Data ?

iOS Builds

The following builds are available to test. [Learn more about build status and metrics.](#)

▾ Version 1.0.0

Build	App Store Connect Users ?	External Testers ?	Invitations	Installations	Last 7 Days ?	Crashes	Feedback
 201908151635	 Missing Compliance						

How to Test the iOS App

App Store Connect My Apps ▾

PxPlus Test Create ▾

Devon Austen ▾ | PVX Plus Technologies Ltd | ?

App Store Features **TestFlight** Activity

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▾ Version 1.0.0

Build	App S	External Testers ?	Invitations	Installations	Last 7 Days ?	Crashes	Feedback
 201908151635	⚠						

This build is missing export compliance information.
[Provide Export Compliance Information.](#)

How to Test the iOS App

The screenshot displays the App Store Connect dashboard. At the top, it shows 'App Store Connect My Apps' and 'PxPlus Test Create'. The user is identified as 'Devon Austen' from 'PVX Plus Technologies Ltd'. The main navigation includes 'App Store', 'Features', 'TestFlight', and 'Activity'. The left sidebar lists various sections: 'BUILDS' (with 'iOS' selected), 'FEEDBACK', 'Crashes', 'Screenshots', 'TESTERS & GROUPS', 'APP INFORMATION', and 'About TestFlight Data'. The main content area is titled 'iOS Builds' and shows 'Version 1.0.0' with a table of builds. One build is visible with ID '201908151635' and a 'Missing Compliance' warning. A modal dialog titled 'Export Compliance Information' is overlaid on the screen, asking: 'Does your app qualify for any of the exemptions provided in Category 5, Part 2 of the U.S. Export Administration Regulations?'. The dialog includes a 'Yes' radio button (selected) and a 'No' radio button. Below the question is an information box with a blue 'i' icon and text: 'If you are making use of ATS or making a call to HTTPS, you are required to submit a year-end self classification report to the US government. Learn More'. Further text explains the importance of proper classification. At the bottom of the dialog, there are three buttons: 'Back', 'Cancel', and 'Start Internal Testing'. The 'Start Internal Testing' button is circled in black. The footer contains copyright information for 2019 Apple Inc. and links to 'Terms of Service', 'Privacy Policy', and 'Contact Us'.

App Store Connect My Apps

PxPlus Test Create

Devon Austen
PVX Plus Technologies Ltd

App Store Features TestFlight Activity

BUILDS

iOS

FEEDBACK

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TESTERS & GROUPS

App Store Connect Users

Add External Testers

APP INFORMATION

Test Information

About TestFlight Data

iOS Builds

The following builds are available to test. [Learn more about build status and metrics.](#)

Version 1.0.0

Build	App Store Connect ID	Status
	201908151635	Missing Compliance

Export Compliance Information

Does your app qualify for any of the exemptions provided in Category 5, Part 2 of the U.S. Export Administration Regulations?

Yes
 No

i If you are making use of ATS or making a call to HTTPS, you are required to submit a year-end self classification report to the US government. [Learn More](#)

Make sure that your app meets the criteria of the exemption listed below. You are responsible for the proper classification of your product. Incorrectly classifying your app may lead to you being in violation of U.S. export laws and could make you subject to penalties, including your app being removed from the App Store.

You can select Yes for this question if the encryption of your app is...

Back Cancel **Start Internal Testing**

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How to Test the iOS App

The screenshot shows the App Store Connect interface for an app named 'PxPlus Test Create'. The left sidebar has a menu with 'App Store Connect Users' circled in black. The main content area shows 'App Store Connect Users' with a description: 'App Store Connect Users can use the TestFlight app to test all available builds. They'll also be notified when a new build is added and can test builds.' Below this, there are tabs for 'Testers' and 'Builds', and a section for 'Testers (0)'. A modal dialog titled 'Add App Store Connect Users' is open, containing the text: 'Select up to 25 testers, and they'll be invited to test all available builds in the TestFlight app. They'll also be notified when new builds are added. If you'd like to add a tester you don't see, add them in [Users and Roles](#).' The 'Users and Roles' link is circled in black. The dialog also features a search bar, a table of existing testers, and 'Cancel' and 'Add' buttons at the bottom.

App Store Connect My Apps ▾

PxPlus Test Create ▾

Devon Austen ▾
PVX Plus Technologies Ltd

App Store Features **TestFlight** Activity

BUILDS

iOS

FEEDBACK

Crashes

Screenshots

App Store Connect Users

APP INFORMATION

Test Information ⚠

About TestFlight Data ?

App Store Connect Users

App Store Connect Users can use the TestFlight app to test all available builds. They'll also be notified when a new build is added and can test builds.

Testers Builds

Testers (0) +

Add App Store Connect Users

Select up to 25 testers, and they'll be invited to test all available builds in the TestFlight app. They'll also be notified when new builds are added. If you'd like to add a tester you don't see, add them in [Users and Roles](#).

Testers 0 of 25 Available

Email ^	Name	Role
<input type="checkbox"/> mac@vxplus.com	Devon Austen	Account Holder, Admin
<input type="checkbox"/> support@vxplus.com	Pvx Plus	Admin

Cancel Add

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How to Test an App

- Confirm icon looks sharp and its features are easily visible
- Make sure that the app display name is correct and is readable
- Verify app goes to the correct URL and that it functions correctly
- Test app on several different mobile devices with different screen sizes
- If issues are found, fix and re-generate the app using the same app ID

How to Publish the App

- Fill out information for app store page
 - Name
 - Short/Long descriptions
 - Category
 - Content rating
 - License agreement
 - Privacy policy
 - Screenshots and marketing images/videos
 - Pricing
 - Countries to make available



How to Publish the iOS App

App Store Connect My Apps ▾

PxPlus Test Create ▾

Devon Austen ▾
PVX Plus Technologies Ltd

App Store Features TestFlight Activity

APP STORE INFORMATION

App Information

Pricing and Availability

IOS APP

1.0 Prepare for Submiss...

+ VERSION OR PLATFORM

App Information

This information is used for all platforms of this app. Any changes will be released with your next app version.

Save

Localizable Information

English (U.S.) ▾ ?

Name ?

PxPlus Test Create 12

Privacy Policy URL ?

http://example.com

Subtitle ?

Optional 30

Apple TV Privacy Policy ?

General Information

Bundle ID ?

com.pxplus.testcreate

SKU ?

PXPLUS_TESTCREATE

Apple ID ?

1476752689

Rating ?

No Rating

Primary Language ?

English (U.S.)

Category ?

Primary ▾

Secondary (optional) ▾

License Agreement [Edit](#)
[Apple's Standard License Agreement](#)

td.

How to Publish the iOS App

App Store Connect My Apps ▾

PxPlus Test Create ▾

Devon Austen ▾
PVX Plus Technologies Ltd

App Store Features TestFlight Activity

APP STORE INFORMATION

App Information

Pricing and Availability

IOS APP

1.0 Prepare for Submiss...

+ VERSION OR PLATFORM

Pricing and Availability

Save

Price Schedule

All Prices and Currencies

Price ?	Start Date ?	End Date ?
Choose ▾		

Pre-Orders

Pre-orders allow customers to order your app before its release date. Once your app is released for download, customers will be notified and your app will automatically download to their device. For paid apps, customers will be charged before download. Any app that hasn't been published to the App Store can be made available for pre-order. [Learn More](#)

Make available for pre-order

Availability

To view your availability options, choose a price first.

Distribution for Business and Education

- Available at a reduced price for educational institutions ?
- Available for education and business without a reduced price
- Available privately as a custom app for business ?

How to Publish the iOS App

App Store Connect My Apps ▾

PxPlus Test Create ▾

Devon Austen ▾
PVX Plus Technologies Ltd

App Store Features TestFlight Activity

APP STORE INFORMATION

- App Information
- Pricing and Availability
- IOS APPS
 - 1.0 Prepare for Submission
- + VERSION OR PLATFORM

iOS App 1.0

● Prepare for Submission

Save Submit for Review

Version Information

English (U.S.) ▾ ?

App Previews and Screenshots ?

iPhone 6.5" Display iPhone 5.5" Display iPad Pro (3rd Gen) 12.9" Display iPad Pro (2nd Gen) 12.9" Display

View All Sizes in Media Manager

Drag up to 3 app previews and 10 screenshots here.
We'll use these for all iPhone display sizes and localizations selected in Media Manager.
View [iOS Screenshot Properties](#) and [App Preview Properties](#).

0 of 3 App Previews | 0 of 10 Screenshots | [Choose File](#) | [Delete All](#)

Promotional Text ?

Keywords ?

Support URL ?

Marketing URL ?

Description ?

170 100

td.

How to Publish the App

- Google Play Store
 - From the App releases section
 - Create a new production release
 - Process the same as creating an internal release
- Apple App Store
 - From the Prepare for Submission section
 - Select build to release
 - Fill out review information
 - Press Submit for Review
- The app review process can take up to 3 days

How to Publish the Android App

Google Play Console

App releases

Test Create

All applications

- Dashboard
- App releases** ✓
- Android Instant Apps
- Artifact library
- Device catalog
- App signing
- Store listing ✓
- Custom store listings
- Content rating ✓
- App content ✓
- Pricing & distribution ✓
- In-app products
- Translation service
- Services & APIs
- Optimization tips 1

To help better protect our users, we'll take more time to thoroughly review your app. [Learn more](#)

Manage your app's Android App Bundles, APKs, review release history, and rollout your app to production or testing tracks. [Learn more](#)

Production track

Production [MANAGE](#)

Add Android App Bundles or APKs to production to make your app available to all users on the Google Play Store.

Open track

Beta [MANAGE](#)

Add Android App Bundles or APKs to beta to make your app available for open testing.

Closed track

[CREATE CLOSED TRACK](#)

Alpha [MANAGE](#)

Add Android App Bundles or APKs to alpha to make your app available for closed testing.

Internal test track

You have a release in internal test that hasn't been rolled out [EDIT RELEASE](#)

Internal test [MANAGE](#)

How to Publish the iOS App

App Store Connect My Apps ▾

PxPlus Test Create ▾

Devon Austen ▾
PVX Plus Technologies Ltd

App Store Features TestFlight Activity

APP STORE INFORMATION

App Information

Pricing and Availability

iOS 10

1.0 Prepare for Submissi...

+ VERSION OR PLATFORM

iOS App 1.0

● Prepare for Submission

Save

Submit for Review

4000

› iMessage App

› Apple Watch

Build ⊕

Select a build before you submit your app.

Submit your builds using Xcode or Application Loader. [See supported versions](#)

General App Information

App Store Icon ?

Choose File

Version ?

Copyright ?

Trade Representative Contact Information ?

Display Trade Representative Contact Information on the Korean App Store.

PVX Plus Technologies Ltd

First name

Last name

td.

How to Publish the iOS App

App Store Connect My Apps ▾

PxPlus Test Create ▾

Devon Austen ▾
PVX Plus Technologies Ltd

App Store Features TestFlight Activity

APP STORE INFORMATION

- App Information
- Pricing and Availability

IOS APP

- 1.0 Prepare for Submission
- + VERSION OR PLATFORM

iOS App 1.0

● Prepare for Submission

App Review Information

Sign-In Information ?
Provide a user name and password so we can sign in to your app. We'll need this to complete your app review.

Sign-in required

User name Password

Contact Information ?

First name Last name
Phone number Email

Notes ?

4000

Attachment ?

Choose File (Optional)

Version Release

Pre-orders are an easy way to generate sales and exposure before release. To make your app available for pre-order, go to [Pricing and Availability](#).

After your app has been approved, we can release it for you immediately. If you want to release the app yourself, choose a date or manually release it at any point after the approval. While your app is in the "Pending Developer Release" state, you can give out promotional codes, continue TestFlight Beta Testing, or reject the release and submit a new build. Whichever of these you choose, we have to process your app before it's made available on the App Store. While your app is in the "Processing for App Store" state, you can't get new promotional codes, invite new testers, or reject your app.

Manually release this version

Automatically release this version ?

Automatically release this version after App Review is complete ?

Submit for Review

Generated App Demo (CATS)

- We generated a app for the CATS demo application
- We uploaded the generated app to App Store Connect and enabled testing using TestFlight



PXPLUS APP LAUNCHER



Skip the Publishing Hassle

- Use the [PxPlus App Launcher](#) and skip the publishing hassle
 - Avoid paying for a developer account
 - Save money not having to buy a Mac
 - Don't need to learn how to use the Apple/Google developer portals
 - No need to write any marketing copy or create screenshots for the app store page
 - Don't have to hire a lawyer to write a licensing agreement and privacy policy
 - Skip waiting for an app review
- Only drawback is no custom branding and a little setup is needed

Developer Setup

- Create an [Application Group](#) and password by emailing info@pvxplus.com and in the body of the email include:
 - Company name
 - PxPlus serial number
 - Desired [Application Group](#) name and password
- Define an [Identifier](#) that points to a URL using the [Application Setup](#) website
- Give the users the [Application Group](#) and [Identifier](#) for their application

How to Use the PxPlus App Launcher

- Install the [PxPlus App Launcher](#) from a mobile app store
- On initial run, from [Application Setup](#) screen
 - Enter [Application Group](#) and [Identifier](#)
 - Press [Set & Run](#)
- User's application will now automatically load every time [PxPlus App Launcher](#) is run



More on Application Selection

- Hold down progress circle for three seconds to get back to **Application Selection** screen
- Select the **Reset** button to clear a previously set auto launch application
- Select the **Run Only** button to run application once



Recap

- Without re-writing code you can turn an *iNomads* or web application into a mobile app that takes advantage of mobile device capabilities
- Generate a branded app that directly launches an *iNomads* or web application using the [Generate an Android or iOS App](#) utility and possibly sell the app in a mobile app store
- Easily get *iNomads* or web applications running as an app with the [PxPlus App Launcher](#) with no need to publish an app in a mobile app store

Additional Resources

The help link(s) below refer to the current on-line help pages. The functionality may have been further updated since the PxPlus 2019 (version 16) release.

- [Generate an Android or iOS App](#)
- [App Launcher for Android and iOS](#)