Documentation :
Dedicated Crosscall Buttons Intents

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Summary

Definition

An Intent is a messaging object you can use to request an action from another app component. Although intents facilitate communication between components in several ways, there are three fundamental use cases:

Starting an activity

An Activity represents a single screen in an app. You can start a new instance of an Activity by passing an Intent to startActivity(). The Intent describes the activity to start and carries any necessary data.

Starting a service

A Service is a component that performs operations in the background without a user interface. With Android 5.0 (API level 21) and later, you can start a service with JobScheduler.

For versions earlier than Android 5.0 (API level 21), you can start a service by using methods of the Service class. You can start a service to perform a one-time operation (such as downloading a file) by passing an Intent to startService(). The Intent describes the service to start and carries any necessary data.

Delivering a broadcast

A broadcast is a message that any app can receive. The system delivers various broadcasts for system events, such as when the system boots up or the device starts charging. You can deliver a broadcast to other apps by passing an Intent to sendBroadcast() or sendOrderedBroadcast().

Intents' protection

Google requires us to protect the intents sent by buttons' press (so that they can't be broadcasted to the whole system, but rather to a particular application).
To do so, we have implemented two methods depending on the architecture of our products. These methods are described in the following sections.

Core-Z5 & Core-X5 & Core-T5

Method to get intents

On these products, there is no more whitelist system. Instead, you have to manually declare your application as a PTT app. To do this, you can follow the procedure below :

Configuration on the Buttons N°1 :
Settings>Buttons>Programmable Button 1>Long press>Pus to talk application.

Configuration on the Buttons N°2 :
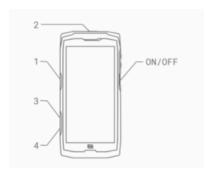Settings>Buttons>Programmable Button 2>Long press>Pus to talk application.

Configuration on the Buttons N°3 :
Settings>Buttons>Programmable Button 3>Long press>Pus to talk application.

Configuration on the Buttons N°4 :
Settings>Buttons>Programmable Button 2>Long press>Pus to talk application

If the application is not declared as a PTT App, it will not receive the intents. If it is declared as a PTT App, it will receive the intents but will not be launched (request from our PTT application development partners).

Intents sent

Assuming that an application is configured on one of the two buttons and that it is in our whitelist, the following intents will be sent :

A-PPT Button
When pressing the PTT button (grey button on the left side of the phone when you are facing the screen)

- android.intent.action.FUNCTION_KEY_DOWN_PRESSED.
  - This intent is sent as soon as there is a push on the button, whether the push is short or long.

- android.intent.action.FUNCTION_KEY_SHORT_PRESSED
  - This intent is sent as soon as the button is released after less than a second being pressed.

- android.intent.action.FUNCTION_KEY_LONG_PRESSED
  This intent is sent as soon as the button is pressed for more than one second.

- android.intent.action.FUNCTION_KEY_RELEASED
  - This intent is sent as soon as the button is released after a short or long press.

B-SOS Button

When pressing the SOS button (red button on the right side of the phone when you are facing the screen)

- android.intent.action.FUNCTION_KEY1_DOWN_PRESSED
  - This intent is sent as soon as there is a push on the button, whether the push is short or long.

- android.intent.action.FUNCTION_KEY1_SHORT_PRESSED
  - This intent is sent as soon as the button is released after less than a second being pressed.

- android.intent.action.FUNCTION_KEY1_LONG_PRESSED
  - This intent is sent as soon as the button is pressed for more than one second.

- android.intent.action.FUNCTION_KEY1_RELEASED
  - This intent is sent as soon as the button is released after a short or long pres

C-Channels Button

Channel Up:
- Any Press channel up button (on press event) => Broadcast android.intent.action.channelup.press

- Release channel up button (on release event) => Broadcast android.intent.action.channelup.release

Channel Down
- Any Press channel up button (on press event) => Broadcast android.intent.action.channeldown.press

- Release channel up button (on release event) => Broadcast android.intent.action.channeldown.release

Button's location

SOS

PPT 1

Buttons changes channels

Expected Behaviour

The following paragraphs assume that an application is correctly declared as a PTT app and is correctly configured on one of the two buttons.

Button is pressed while screen is on and unlocked

When the button linked to the PTT app is pressed, if it is running in the background, it will receive the intents, but if it is not running in the background, nothing will happen.

Button is pressed while screen is on and locked

When the button linked to the PTT app is pressed, if it is running in the background, it will receive the intents, but if it is not running in the background, nothing will happen. Note that you will not be requested to unlock the screen.

Button is pressed while screen is off

When the button linked to the PTT app is pressed, if it is running in the background, it will receive the intents, but if it is not running in the background, nothing will happen. Note that the screen will not light up, and no unlocking will be request

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