

Tap, Scan, and Connect Over Bluetooth and TCP/IP – Zebra Android Link-OS™ SDK – Java – Android Studio

This sample application demonstrates how to connect to printers over both Bluetooth and TCP/IP connection by scanning or entering a Bluetooth MAC (Media Access Control) address, WIFI MAC Address, IP Address, or performing a Near Field Communication (NFC) touch action. The application can pair or connect with a Zebra printer that has Bluetooth or WIFI enabled and can print a label upon successful connection.

This application, developed using Android Studio, is designed for any handheld device that runs on Android version 4.0 or newer.

Note: This application is provided AS-IS, for example purposes only.

Technical Prerequisites

You must have:

- An available Zebra printer with Bluetooth and/or WIFI enabled capabilities
- Android device with Bluetooth capabilities and/or connected to the same WIFI network as the Zebra printer

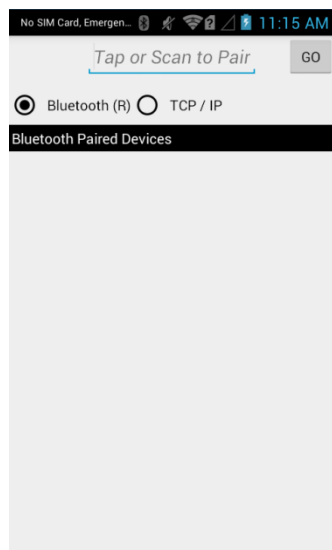
Note: (Optional) Android device has an enabled scanner.

Connecting To Your Printer

Follow these steps to connect your Android device to the printer over a TCP/IP connection.

1. Start the application on your Android device.

A text field appears at the top of your device.



2. Select the TCP/IP radio button to switch to WIFI connection mode.



The screenshot shows the Zebra printer configuration app interface. At the top, the status bar indicates 'No SIM Card, Emergen...' and the time is 11:16 AM. Below the status bar, there is a search bar with the text 'Tap or Scan to Search' and a 'GO' button. Underneath, there are two radio buttons: 'Bluetooth (R)' and 'TCP / IP'. The 'TCP / IP' radio button is selected. Below the radio buttons, there is a section titled 'Wifi Printer Information' with a black header. This section contains several labels: 'Unique ID:', 'Bluetooth:', 'IP Address:', 'Port:', 'MAC Address:', and 'WIFI Address:'. At the bottom of this section, there is a button labeled 'Print Configuration Label'.

3. Touch the device to the NFC logo on the Zebra printer.



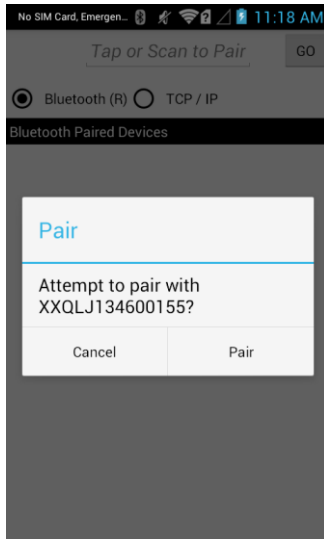
4. Scan a Bluetooth MAC address (Bluetooth mode selected) or WIFI MAC address/ IP address (TCP/IP mode selected) and press **GO**.



The screenshot shows the Zebra printer configuration app interface. At the top, the status bar indicates 'No SIM Card, Emergen...' and the time is 1:18 PM. Below the status bar, there is a search bar with the text 'AC3FA409EFE4' and a 'GO' button. Underneath, there are two radio buttons: 'Bluetooth (R)' and 'TCP / IP'. The 'TCP / IP' radio button is selected. Below the radio buttons, there is a section titled 'Wifi Printer Information' with a black header. This section contains several labels: 'Unique ID:', 'Bluetooth:', 'IP Address:', 'Port:', 'MAC Address:', and 'WIFI Address:'. At the bottom of this section, there is a button labeled 'Print Configuration Label'.

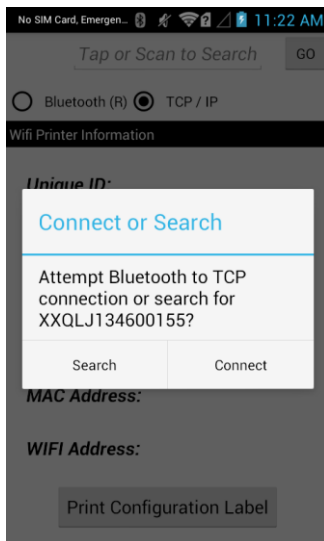
The application displays an alert message.

5. Verify that the Serial number matches the Zebra printer and press **Pair**.

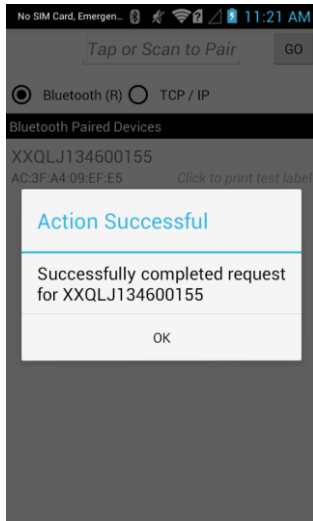


If in TCP/IP mode, the application displays an alert message asking if you would like to connect using a Bluetooth to TCP/IP connection or Search the network for the printer.

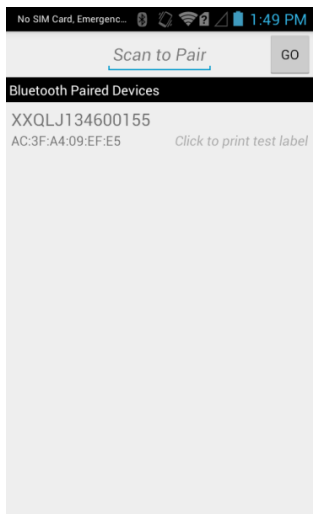
6. Verify the Serial number matches the Zebra printer and press **Connect**.



Once the connection is successful, the application displays an alert message.



7. Verify that the Serial Number displayed matches the Zebra printer and press **OK**.
8. Verify the Zebra printer is in the list of paired devices.



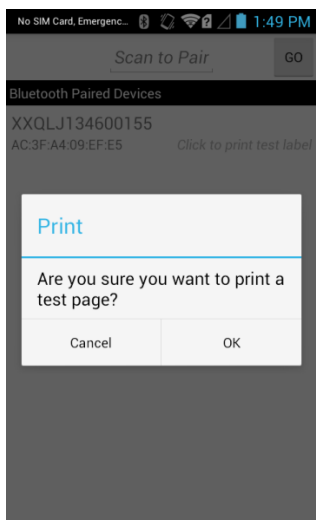
9. Verify that the Zebra printer has been connected.

In TCP/IP mode, the application displays a list of the printer's current settings.

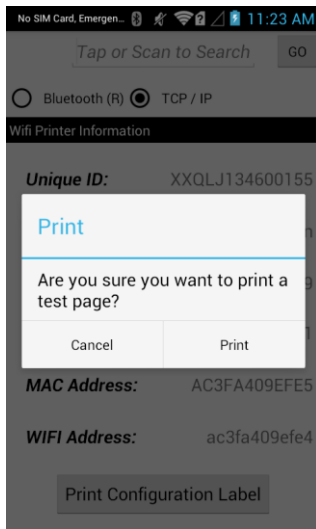


10. Select the Zebra printer in the list of paired devices to print a configuration label.

The application displays an alert message to confirm.



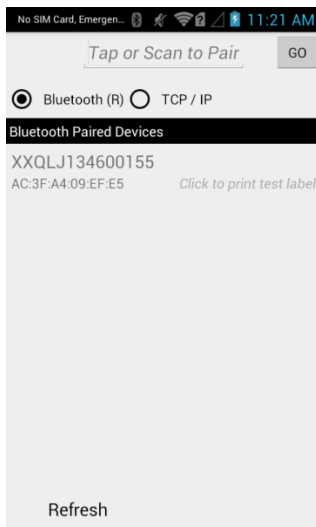
11. In TCP/IP mode, select the "Print Configuration Label" button while a Zebra printer is connected (the printer has its information displayed) to print a configuration label.



12. Press **Print**.

The application displays an alert message to confirm.

Note: Pressing the Menu item on the Android devices' action bar brings up the option, "Refresh", to refresh the pair devices list or refresh the current TCP/IP connection,



For more information on developing Android solutions, go to [Getting Started with Android Development – Zebra Android Link-OS SDK – Android Studio](#).

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Document Control

Version	Date	Description
1	08/2015	Initial Release
2	10/2017	Updated Gradle version to 3.3, updated Gradle Plugin version to 2.3.3, updated Android Plugin to version 2.3.3, and updated Build Tools version to 25.0.0

All links and information correct at time of writing
Created for the Zebra Global ISV Program by Zebra Development Services