

# Bluetooth Printer Management



**ZEBRA**

## User Guide



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# Contents

<b>About This Document .....</b>	<b>6</b>
Who Should Use This Document .....	6
How This Document Is Organized .....	6
 <b>Android Device Setup .....</b>	 <b>7</b>
Overview .....	7
System Requirements .....	9
Minimum Requirements .....	9
Before you start .....	10
Android Device Installation .....	12
Connection Manager Setup .....	12
Bluetooth Connector Setup .....	15
Connect a Printer to your Android Device .....	18
Connect to Your MDM .....	23
Create a QR Code .....	27
 <b>App Use .....</b>	 <b>28</b>
Connection Manager Screens and Functions .....	28
Connection Manager Main Screen .....	28
Connection Manager Settings .....	29
Connection Manager Log .....	30
Connection Manager About .....	31
Bluetooth Connector Screens and Functions .....	32
Bluetooth Connector Main Screen .....	32
Bluetooth Connector Settings .....	33
Bluetooth Connector Log .....	34
Bluetooth Connector About .....	35

<b>Troubleshooting</b>	<b>36</b>
Installation Issues	36
Initial Installation	36
Printer Discovery	37
Application Permissions	37
Manually Set Permissions	38
Check Bluetooth is Enabled on the Printer	38
Connection Issues	39
Server Connection Issues	39
Printer Connection Issues	39
Miscellaneous	40
Why do I see printer commands on my label?	40
Contact Zebra Support	40
 <b>Key Considerations</b>	 <b>41</b>
Bluetooth Connection Overview	41
Printing Channel	41
Status Channel	42
General Information	42
Other Considerations	42
Firmware Downloads	42
Using Bluetooth Connections	43
Functional differences when using Printer Profile Manager Enterprise	44
Managing Printers over Bluetooth vs. Network Connections	44
 <b>Appendix</b>	 <b>45</b>
QLn Printer Support	45

# About This Document

This section provides you with contact information, document structure and organization, and additional reference documents.

## Who Should Use This Document

This User Guide is intended for use by IT personnel or company associates who need to perform routine maintenance, upgrade, or troubleshoot problems with mobile printers via Bluetooth.

## How This Document Is Organized

The User Guide is set up as follows:

Section	Description
<a href="#">Android Device Setup</a>	This section provides an introduction, and setup procedures for your Android device.
<a href="#">App Use</a>	This section details other screens and functions for Bluetooth Connector and Connection Manager apps.
<a href="#">Troubleshooting</a>	This section will assist you with troubleshooting issues.
<a href="#">Key Considerations</a>	This section provides things to consider and important dependencies.
<a href="#">Appendix</a>	This section provides a list of unsupported printers.

# Android Device Setup

This section provides an introduction, and setup procedures for your Android device.

## Overview

Bluetooth Printer Management provides real-time visibility into the operations and settings on all your Link-OS printers that are connected via Bluetooth to your Android devices. Bluetooth Printer Management consists of the Bluetooth Connector and Connection Manager applications. Together, these applications on your Android device create a gateway between the Bluetooth connected printer and either Zebra's Printer Profile Manager Enterprise or SOTI MobiControl\*, providing real-time visibility and management. As a result, you can update, monitor, and troubleshoot all from a remote central location.

\* Zebra's SOTI MobiControl Connector is required for use with SOTI MobiControl.

Figure 1 provides a view of the Bluetooth Printer Management system.

**Figure 1** System Diagram

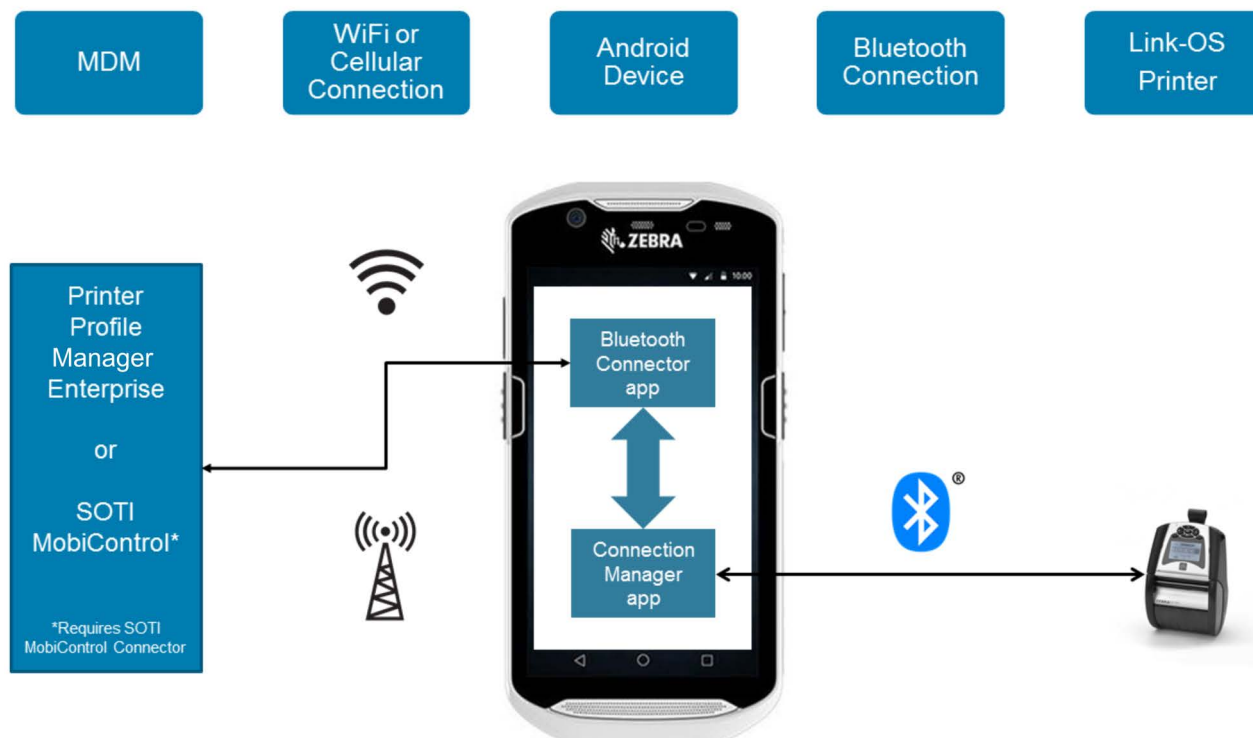
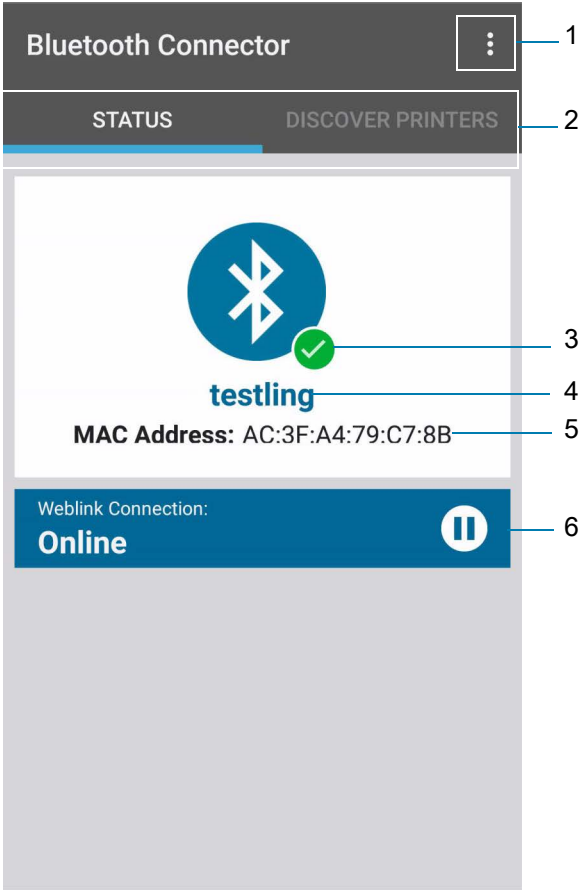


Figure 2 shows the Home screen. In this example, it indicates a successful end-to-end connection from the Mobile Device Management (MDM) application through the Android device to the Bluetooth connected printer.

Figure 2 Home Screen



1	Overflow icon	4	Friendly name of the printer
2	Status and Discover Printers tabs	5	MAC Address of the printer
3	Connected icon	6	Weblink Connection bar

# System Requirements

The following sections will assist you in setting up your Android device.

## Minimum Requirements

You will need to have one from each of the categories below.

### Software and Servers

- On-premise instance of Printer Profile Manager Enterprise v2.0.6353 or later
- On-premise or cloud instance of SOTI MobiControl v13.3.0.3064 or later and Zebra's SOTI MobiControl Connector v1.06 or later
- The Bluetooth Connector app requires the use of the Basic Printer Connection (SHA-1 certificate) option in Printer Profile Manager Enterprise 3.x versions.

### Android Devices

Devices supported include:

- MC40 & MC40 HC
- TC51 & TC55
- TC70 & TC75
- TC8000
- ET50
- ET55
- MC9200
- Nexus 4
- Nexus 5X
- Nexus 6P
- Nexus 7
- Google Pixel C
- Samsung Galaxy S6

### Connectivity

- WiFi or cellular data connection to the MDM server

### Android OS Versions

- 4.4
- 5.1
- 6.0
- 6.01

- 7.0
- 7.1

### Link-OS Printers

Your Zebra printers must be running firmware version x.19.13Z or higher and must be one of the following models:

- QLn series (See [Appendix on page 45](#) for important information on specific models supported.)
- ZD400 series
- ZD500 series
- ZQ300 series
- ZQ500 series
- ZR600 series

### Before you start


You will need the following additional information to get started.

1. Company specific network information, if required
  - Your company's Proxy Server URL
  - Any authentication credentials for Internet or network access
2. Zebra Bluetooth printer
  - Zebra recommends using the simple tap and pair method to connect the printer. In cases where that may not be possible, the printer's friendly name and MAC address should be known, so it can be manually entered or identified in the list of discovered printers.
3. The Weblink server URL for either Printer Profile Manager Enterprise or SOTI MobiControl Connector. Your IT administrator will need to provide this information.
  - How to Obtain the Printer Profile Manager Enterprise Weblink server URL  
The Weblink URL can be obtained from the Configuration section in Printer Profile Manager Enterprise.  
The Weblink URL is the URL shown in the Whole URL field. See [Figure 3 on page 11](#).
  - How to obtain the SOTI MobiControl Connector Weblink server URL.  
Consult your IT administrator to get the Fully Qualified Domain Name (FQDN) of the Printer Administration Server (PAS) where the SOTI MobiControl Connector is installed.  
The Weblink URL will be: **`https://FQDN/zebra/weblink/`**

where **FQDN** is the Fully Qualified Domain Name of the Printer Administration Server (PAS) on which the SOTI MobiControl Connector is installed.

**Figure 3** Printer Profile Manager Enterprise Weblink URL

PROFILES
NETWORKS
PROVISIONING
TAGS
RESOURCES


**Weblink Settings for Printer Configuration**

These settings are used when a printer is added to the server. They must match the values when used during server setup. If they are v

**DNS Name**

**Port**

**Whole URL**

**Proxy**

**Authentication**

### Android Device Installation

Download and install the Bluetooth Connector and Connection Manager apps on your Android device. The apps can be downloaded from the link below:

- [Google Play Store](#)

To deploy both applications from SOTI MobiControl, download the APK's from Zebra's web site.

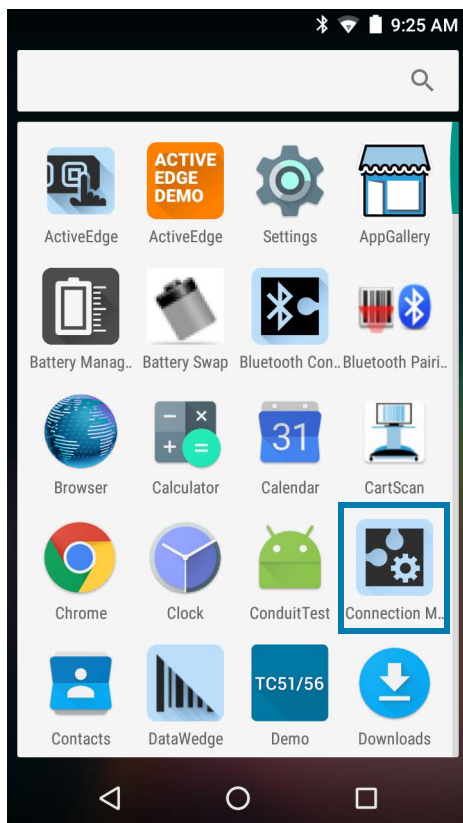
- [zebra.com/bluetoothprintermanagement](http://zebra.com/bluetoothprintermanagement)

### Connection Manager Setup

**To setup Connection Manager, perform the following steps:**

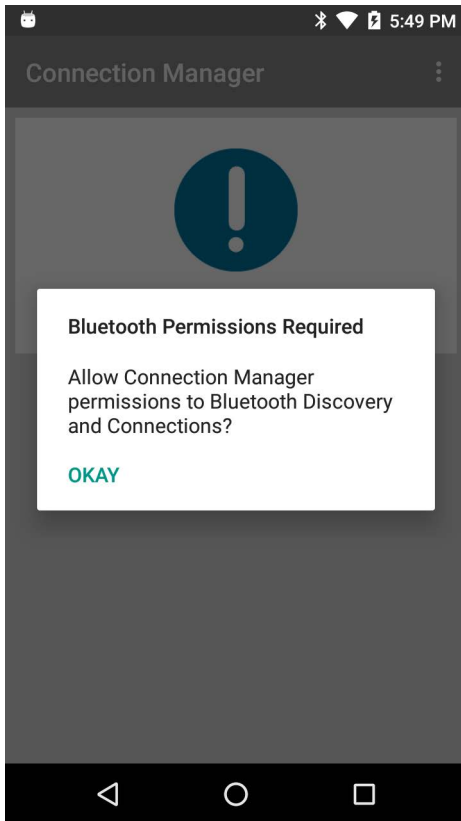
1. Turn on Bluetooth for your Android device.  
(Refer to your Android device documentation for instructions on configuring settings.)
2. Once you have installed the Connection Manager app, open it on your Android device.

**Figure 4** Android Device Apps




3. See [Figure 5](#). At the time of the first use only, you must enable Bluetooth Discovery and Connections.

**Figure 5** Bluetooth Permissions Required Screen



4. Tap **OKAY** to enable permissions and close the dialog box.  
For permission issues, see [Application Permissions on page 37](#).

5. See [Figure 6](#). You may also change other **General Settings** at this time.

- a. Tap the **Overflow icon** , and tap **Settings**.
- b. Tap **Printer Status Polling Interval**, and enter the new interval. (Default is 60 seconds, and the minimum value is 15 seconds.)

The lower the value the quicker the alerts appear in the MDM console. However, this means increased activity over the Bluetooth connection.

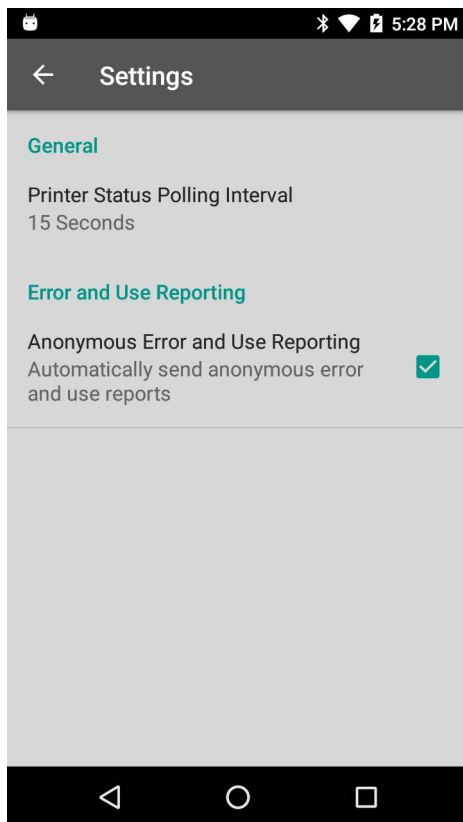
Tap **OK** to save your change or **Cancel** to exit.

- c. Tap **Anonymous Error and Use Reporting** to uncheck the box and disable sending error reports. (Checked by default.)  
Tap **Dismiss** to close the dialog box.



**NOTE:** You must restart the app for your error reporting change to take effect.

**Figure 6** Connection Manager Settings Menu

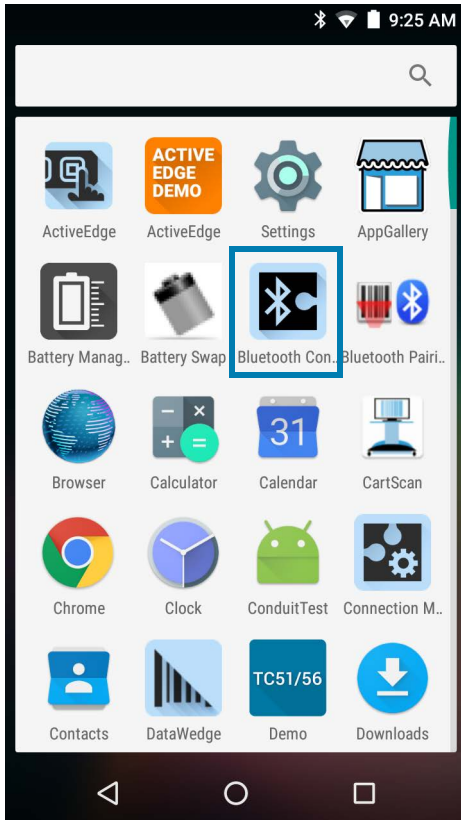


## Bluetooth Connector Setup

To setup Bluetooth Connector, perform the following steps:

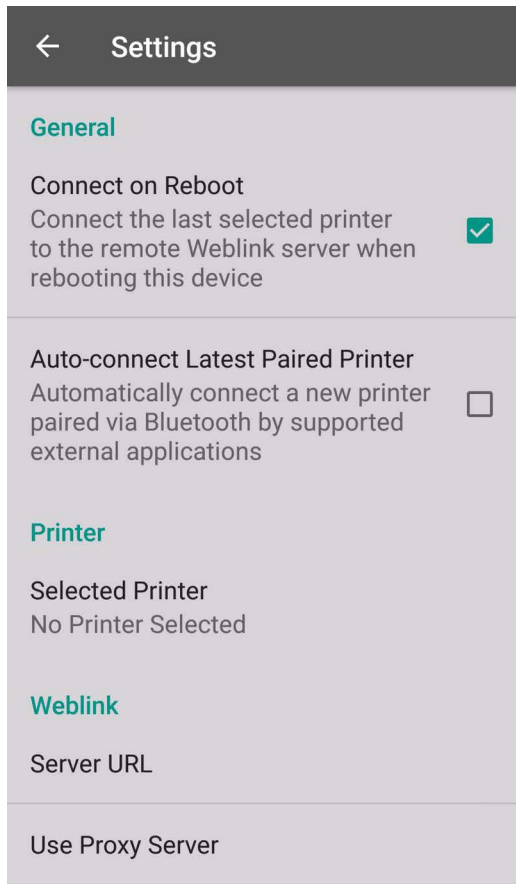
1. Turn on Bluetooth for your Android device.  
(Refer to your Android device documentation for instructions on configuring settings.)
2. See [Figure 7](#). Open Bluetooth Connector app on your Android device.  
For permission issues, see [Application Permissions on page 37](#).

**Figure 7** Android Device Apps



3. In Bluetooth Connector, tap the **Overflow icon** , and tap **Settings**.

**Figure 8** Bluetooth Connector Settings Menu



- See [Figure 8](#). Tap **Weblink URL** and use one of the following methods to configure the Weblink URL.
  - **Method 1:** Type in the **Weblink URL**.
  - Tap **OK**.



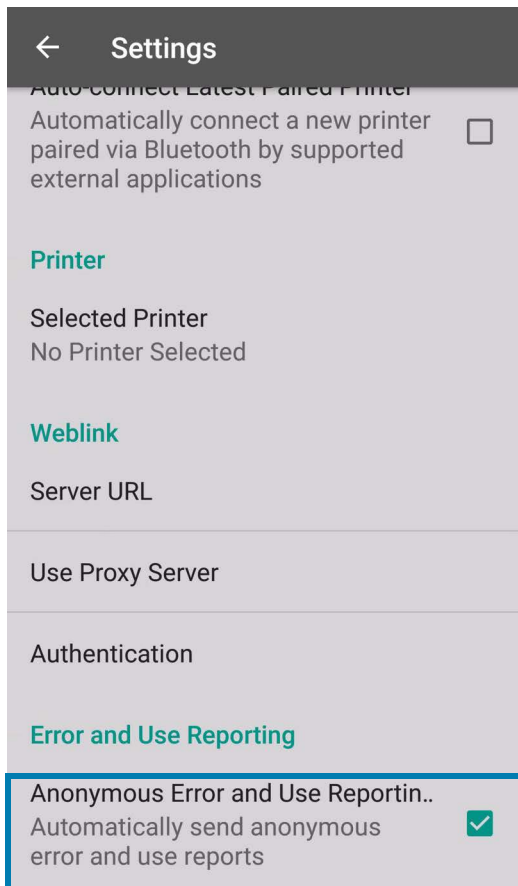
**NOTE:** Spaces are not permitted in the URL fields. You may convert spaces to percent encoding.

- **Method 2:** Tap **Scan a Server QR Code** to launch the device camera and scan a QR code containing the server URL.
  - If you do not have a QR code, see [Create a QR Code on page 27](#) to create a QR code.
- Tap and fill in the **Use Proxy Server** URL field, if needed.
  - Tap and fill in the **Authentication** URL field, if needed. (Default is disabled.)

4. Review the desired **General Settings** options.
  - a. **Connect on Reboot:** Automatically reconnects your previously selected printer to your MDM. (Checked by default.)
  - b. **Auto-connect Latest Paired Printer:** If selected printer changes from outside of Bluetooth Connector (such as an external app), automatically reconnects this latest printer to Bluetooth Connector and your MDM.
5. See [Figure 9](#). Uncheck the **Anonymous Error and Use Reporting** box, if desired. (Checked by default.)

You must scroll down to see this field on the Settings menu.

**Figure 9** Bluetooth Connector Settings Menu



## Connect a Printer to your Android Device

There are three different methods to connect to a printer:

- Discover a printer
- Manually add a printer
- Tap and Pair with a printer via NFC

### Discover a Printer

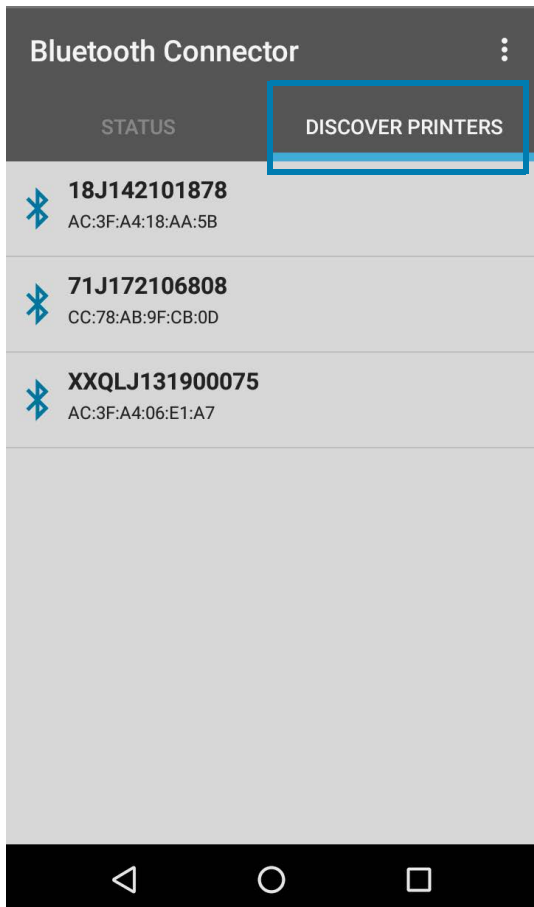
To discover a printer, perform the following steps:

1. See [Figure 10](#). Tap the **Discover Printers** tab.



**NOTE:** Swipe downward within the **Discover Printers** tab to perform another printer discovery.

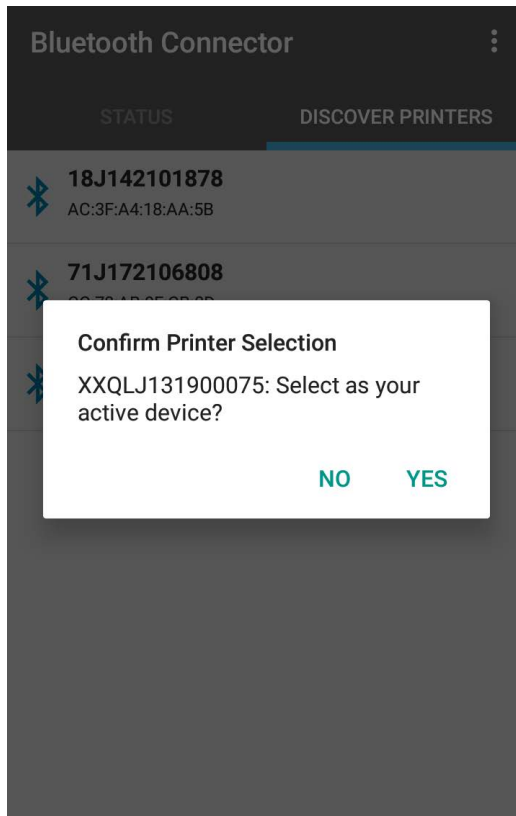
Figure 10 Discover Printers Tab



2. Select your printer from the list.

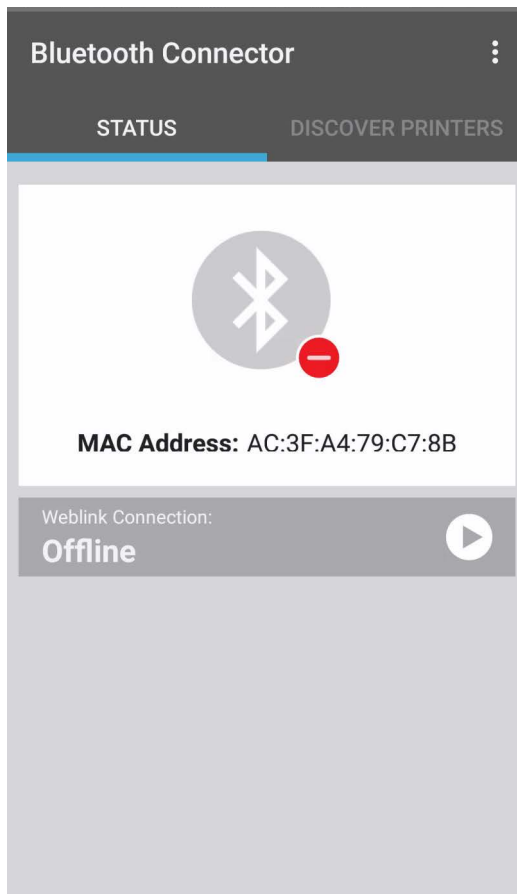
3. See [Figure 11](#). Complete the pairing request, if required, and confirm your printer selection.

**Figure 11** Confirm Printer Selection




4. See [Figure 12](#). Upon a successful connection, your printer's Bluetooth MAC address will be displayed on the Status tab.

**Figure 12** Status Tab




## Manually Add a Printer

To manually add a printer, perform the following steps:

1. On your Android device, turn on **Bluetooth**, if it's not already on.  
(Refer to your Android device documentation for instructions on configuring settings.)
2. In Bluetooth Connector app, tap the **Overflow icon** , and tap **Settings**.
3. See [Figure 8 on page 16](#). Tap **Selected Printer**.
4. Fill in the **Bluetooth MAC Address** using the following format:  
`xx.xx.xx.xx.xx.xx`  
The Bluetooth MAC Address is listed on a label on your printer.
5. Tap **OK**.
6. See [Figure 12 on page 20](#). Upon a successful connection, your printer's Bluetooth MAC address will be displayed on the Status tab.

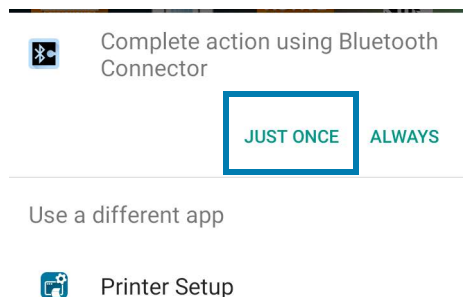
## Tap and Pair with a Printer

To Tap and Pair with a printer, perform the following steps:

1. On your Android device, turn on **NFC**.  
(Refer to your Android device documentation for instructions on configuring settings.)
2. Bump your Android device to the NFC icon  on the printer.

See [Figure 13](#). The **Complete action using** screen will appear.

**Figure 13** Complete Action Using Screen



3. Tap **Just Once** to use Bluetooth Connector to tap and pair with the printer.



If you select **Always**, you will set the Android NFC default application to Bluetooth Connector.

4. A Bluetooth pairing request will appear on the Android device with a pairing code displayed. The printer will either show the pairing security code (passkey) on its display or print it on a label when no display is present.

5. See [Figure 14](#). On the printer, confirm that the passkey matches what is displayed on the Android device.


Tap **Accept** on the printer.

**Figure 14** Printer Passkey

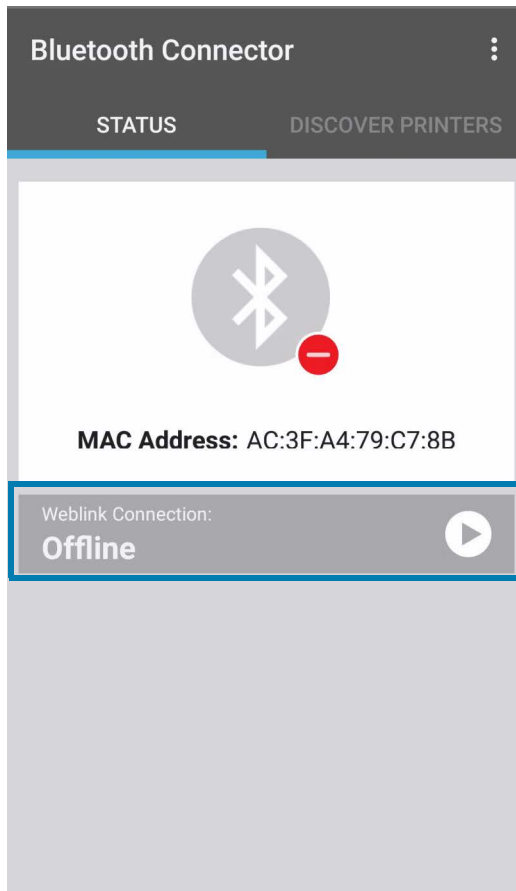



6. On the Bluetooth pairing request screen (on the Android device), tap **OK** (or **Pair**).  
The **Connected to Printer** screen will appear.
7. Tap **Dismiss** to close the dialog box and return to the Home Screen of Bluetooth Connector.
8. See [Figure 12 on page 20](#). Upon a successful connection, your printer's Bluetooth MAC address will be displayed on the Status tab.

## Connect to Your MDM

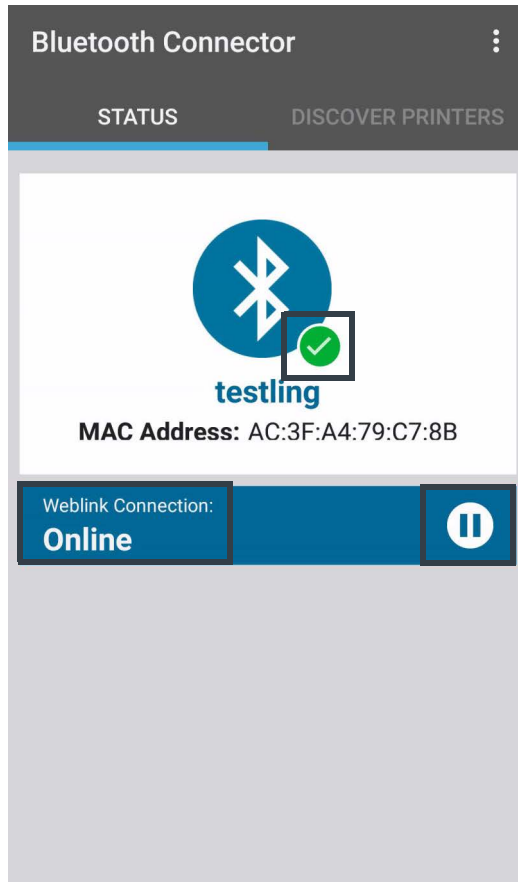
1. See [Figure 15](#). Tap the **Play icon**  on the Weblink Connection bar (current status is shown on the bar) to connect to your MDM.

**Figure 15** Home Screen



2. See [Figure 16](#). When the connection is successful, you will see the following:
- The Weblink Connection bar will read: Online.
  - The button appears as a Pause button .
  - A green checkmark visually confirms a successful connection from the MDM to the printer.

**Figure 16** Bluetooth Connector Status



- See [Figure 17](#) for Printer Profile Manager Enterprise and [Figure 18 on page 26](#) for SOTI MobiControl. From the MDM, verify that your printer appears as Online or Connected.

**EXAMPLE •** From Printer Profile Manager Enterprise, click on the **Printers** tab to verify that your printer is listed as **Online**.

If your printer does not appear in the Printer Profile Manager Enterprise or SOTI MobiControl console, see [Server Connection Issues on page 39](#).

**Figure 17** Printer Profile Manager Enterprise Printers

Connected: 27/7000  
Total: 90

SEARCH: Search for a printer...

Status	Friendly Name	IP Address
Error	ZT230_Healthcare	10.11.18.114
Error	ZD420_Plant_Floor	10.11.18.108
Error	ZD420_Healthcare	10.11.18.115
Error	VOICE_PRINTER84	10.184.36.50
Online	Qln420-3	10.184.44.77
Online	QLN320xyz	0.0.0.0
Online	XXXXJ132201655	10.0.1.228
Online	JTM028412	10.80.126.61
Online	ZT410-1	10.42.12.25
Online	U330BC	10.52.16.79
Online	18J134600897	10.80.126.37

**Figure 18** SOTI MobiControl Printers

The screenshot displays the SOTI MobiControl interface for managing printers. The top navigation bar includes icons for various device types. The left sidebar shows a file tree with folders like 'Zebra', 'Firmware', 'SolutionCenter', 'ZebraPrinters', and 'ZSolutionCenter'. The main area features a table of connected printers with columns for 'Icon', 'Device Name', and 'Available Memory'. A tooltip 'Connected' is visible over one of the printer icons. The bottom navigation bar has tabs for 'Devices', 'Profiles', 'Rules', 'Packages', and 'Reports'.

Icon	Device Name	Available Memory
	ZT610 - 172.18.3.141	29 KB / 32 MB
	QLn220 -XXQPJ124800513	23 KB / 8 MB
	QLn220 -XXQPJ161603228	23 KB / 8 MB
	QLn320 -XXQLJ143003533	23 KB / 8 MB
	QLn320 -XXQLJ142701807 -172.16.10...	24 KB / 8 MB
	900075	23 KB / 8 MB
	QLn320 -XXQLJ142701807 -192.168.1.5	23 KB / 8 MB
	ZQ510 -XXRAJ150500044 -172.16.26...	24 KB / 8 MB
	ZQ520 -XXRBJ163400939	23 KB / 8 MB
	IMZ220 -XXXXJ132201688	22 KB / 4 MB
	QLn420 -XXQVJ131100375 -10.6.22.32	23 KB / 8 MB

## Create a QR Code

This procedure will guide you through the steps to create a QR code containing the Weblink URL of your MDM, which can then be scanned in the Bluetooth Connector app.

There are many websites available that provide the ability to create a QR code at no cost. Zebra recommends an Internet search of the term “QR code generator” to find an appropriate site.

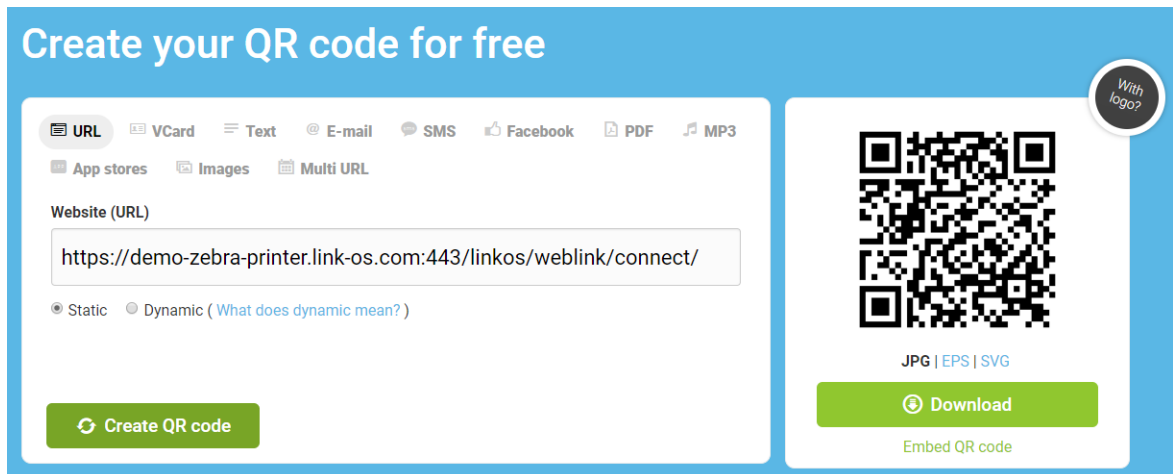
**To generate a QR Code, perform the following steps:**

1. See [Figure 19](#). In your browser, visit a QR code generator website.
2. To create the QR code, enter or copy the MDM Weblink server URL into the URL field on the QR code generator web page.
  - For Printer Profile Manager Enterprise, the Weblink URL can be found via the menu at: **Admin > Configuration > Whole URL**
  - For SOTI MobiControl, enter the following:  
`https://FQDN:443/zebra/weblink/`  
 where FQDN is your SOTI MobiControl Connector server name.



**NOTE:** Spaces are not permitted in the URL fields. You may convert spaces to percent encoding.

**Figure 19** QR Code Generator Web Page (Example)



# App Use

This section details other screens and functions for Bluetooth Connector and Connection Manager apps.

## Connection Manager Screens and Functions

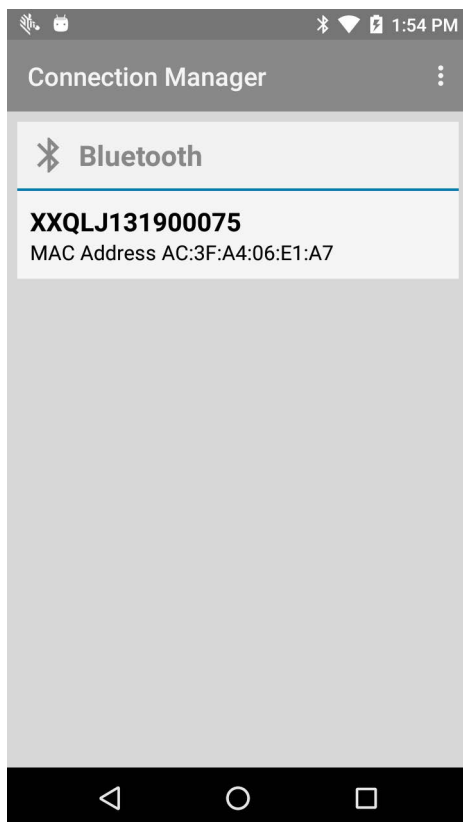
### Connection Manager Main Screen

See [Figure 20](#). This screen shows the currently connected printer.



**NOTE:** The information on this screen is not updated when the application is running in the background.

**Figure 20** Connection Manager Main Screen



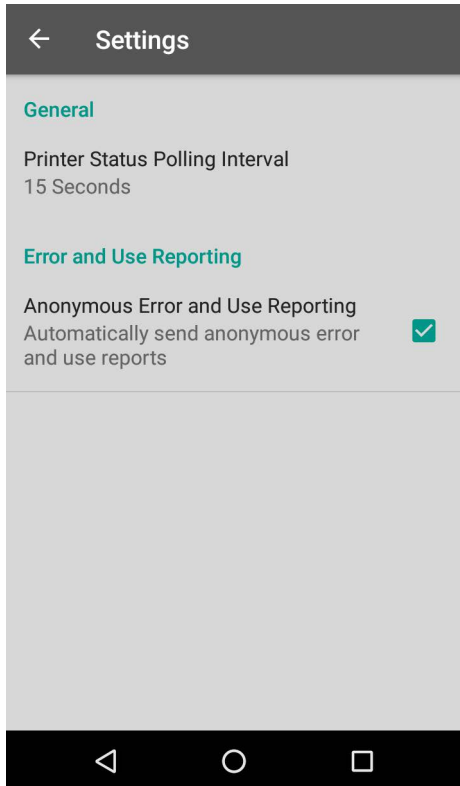
## Connection Manager Settings

These settings are used to configure the how frequently the printer status is checked, and whether error and use reports are enabled or disabled.

To view the **Settings** menu, perform the following steps:

1. See [Figure 21](#). Tap the **Overflow icon** , and tap **Settings**.

**Figure 21** Connection Manager Settings Menu




2. For more detailed information about specific settings, see [Connection Manager Setup on page 12](#).

## Connection Manager Log

The Connection Manager log will provide the following data:

- Connection Manager exceptions and errors
- Printer connections and disconnections

To view the log, perform the following steps:

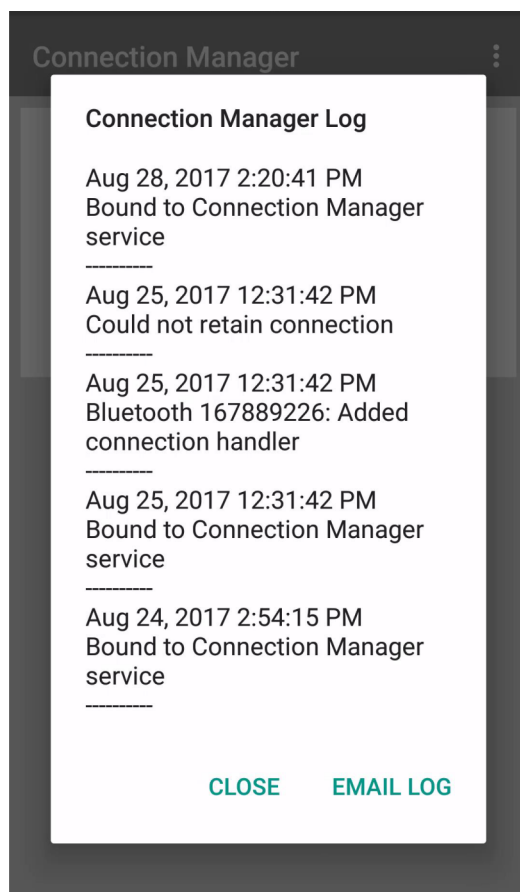
1. From Connection Manager, tap the **Overflow icon** , and tap **Settings**.
2. See [Figure 22](#). Tap **View Log**.

If this is your first time using the app, the log will not display any data.



**NOTE:** The Log will only contain a maximum of 1000 entries. (The oldest entries will be deleted automatically.)

**Figure 22** Connection Manager Log




3. Tap **Email Log** to send your log to Technical Support via email.
4. Tap **Close** to close the log.

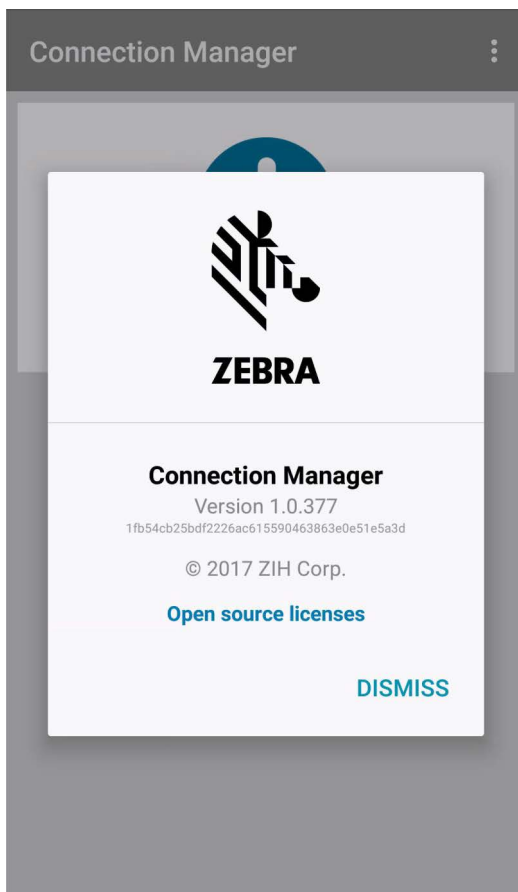
## Connection Manager About

The Connection Manager About screen displays the version and provides a link to open the source licenses.

To open the About screen, perform the following steps:

1. From Connection Manager, tap the **Overflow icon** , and tap **Settings**.
2. Tap **About**.
3. See [Figure 23](#). Tap **Open source licenses** link to view the licenses.
4. Tap **Dismiss** to close the About screen.

**Figure 23** Connection Manager About Screen



## Bluetooth Connector Screens and Functions

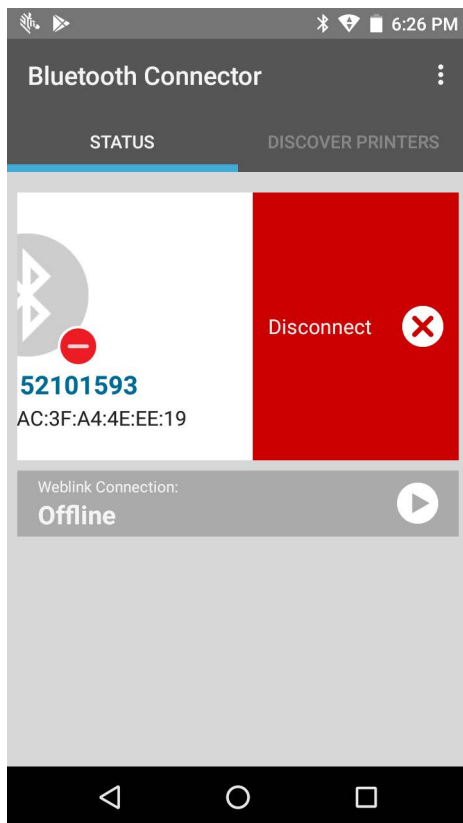
### Bluetooth Connector Main Screen

This screen shows the currently selected printer.

To deselect a printer, perform the following step:

1. See [Figure 24](#). From the area containing the Blue tooth icon, swipe left to reveal the Disconnect button.
2. Tap Disconnect button to deselect the printer.

**Figure 24** Bluetooth Connector Main Screen



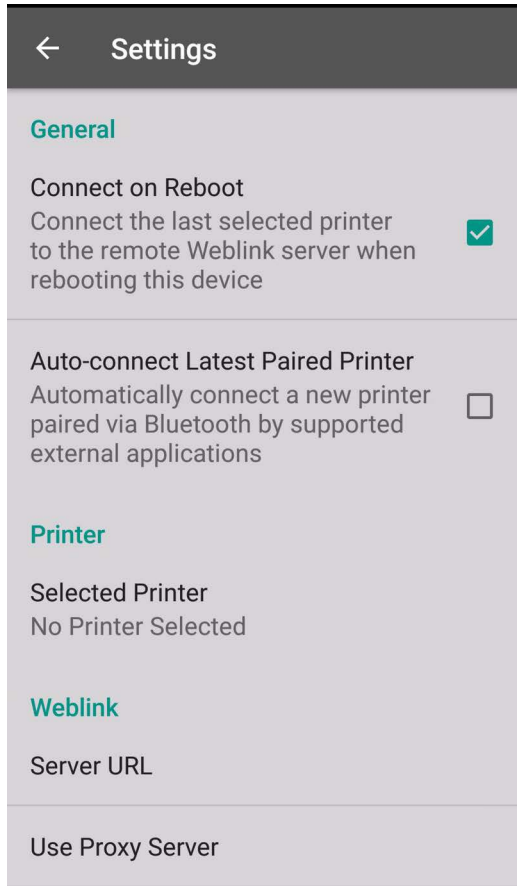
## Bluetooth Connector Settings

These settings are used to configure the Weblink Server URL, proxy URL, authentication, and several general connection choices.

To view the **Settings** menu, perform the following step:

1. See [Figure 25](#). Tap the **Overflow icon** , and tap **Settings**.

**Figure 25** Bluetooth Connector Settings Menu




2. For more detailed information about specific settings, see [Bluetooth Connector Setup on page 15](#).

## Bluetooth Connector Log

The Bluetooth Connector log will provide the following data:

- Bluetooth Connector exceptions and errors
- Weblink connection information

To view the log, perform the following steps:

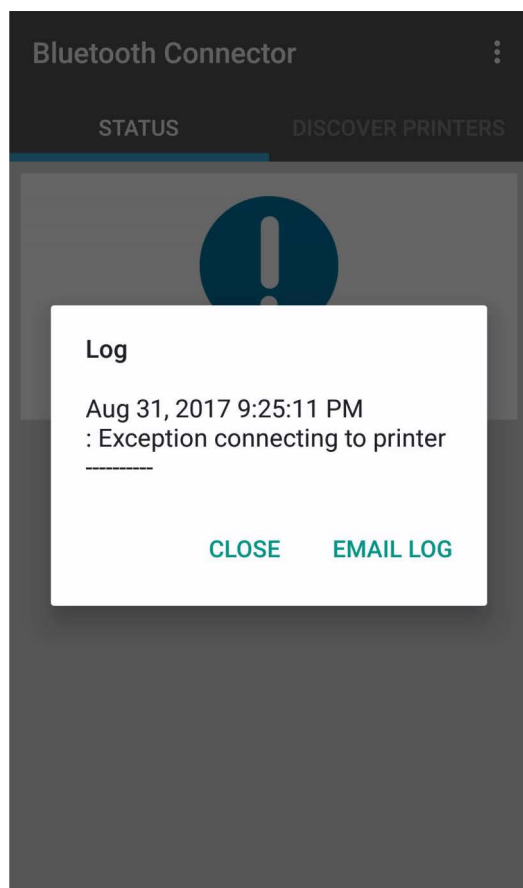
1. From Bluetooth Connector, tap the **Overflow icon** , and tap **Settings**.
2. See [Figure 26](#). Tap **View Log**.

If you have not connected to the MDM, the log will not display any data.



**NOTE:** The Log will only contain a maximum of 1000 entries. (The oldest entries will be deleted automatically.)

**Figure 26** Bluetooth Connector Log




3. Tap **Email Log** to send your log to Technical Support via email.
4. Tap **Close** to close the log.

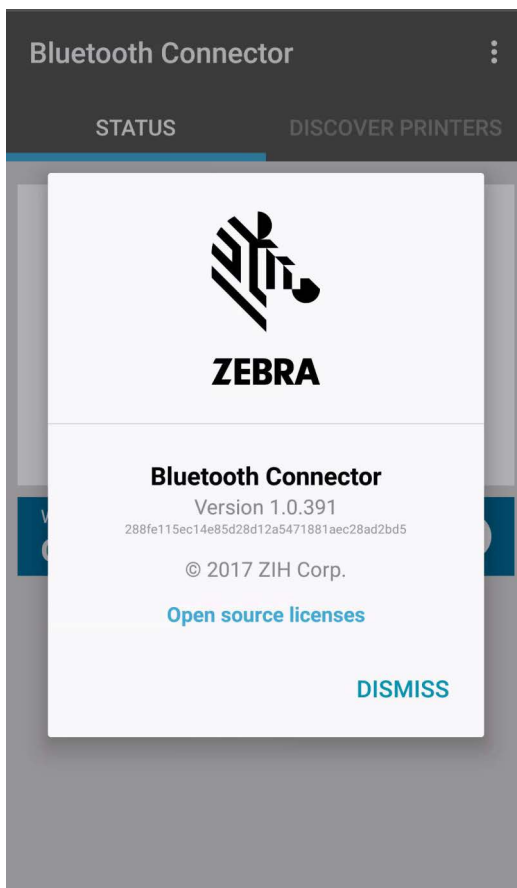
## Bluetooth Connector About

The Bluetooth Connector About screen displays the version and provides a link to open the source licenses.

To open the About screen, perform the following steps:

1. From Bluetooth Connector, tap the **Overflow icon** , and tap **Settings**.
2. Tap **About**.
3. See [Figure 27](#). Tap **Open source licenses** link to view the licenses.
4. Tap **Dismiss** to close the About screen.

**Figure 27** Bluetooth Connector About Screen



# Troubleshooting

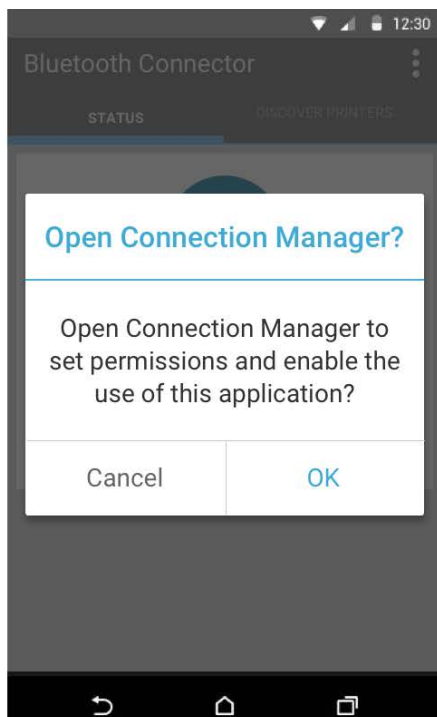
This section will assist you with troubleshooting issues.

## Installation Issues

### Initial Installation

- You must download and install [both](#) apps, Bluetooth Connector and Connection Manager.
- Verify the operating system is one supported. (See [Android OS Versions on page 9.](#))
- Check app permissions. In Android version 6 and later, permissions must be enabled at runtime, not at installation time as in previous Android versions. Appropriate permissions must be set in order for the apps to work correctly. If you open Bluetooth Connector app before granting the permissions for Connection Manager, you will be prompted to do so. (See [Figure 28.](#))

**Figure 28** Set Permissions for Connection Manager



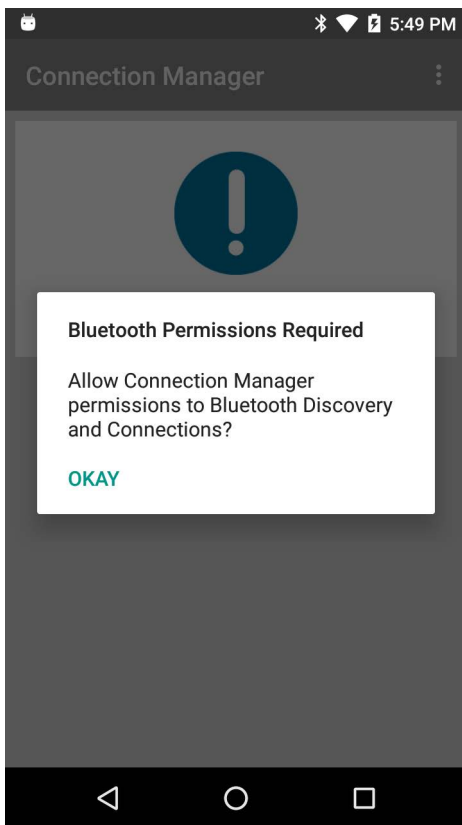
## Printer Discovery

### Application Permissions

If you are unable to discover printers, check that the Connection Manager permissions have been accepted. (This applies to Android version 6 and later.)

1. Open the Connection Manager app.
2. See [Figure 29](#). The app prompts you for the permissions.
3. Click **OKAY** to grant the requested permissions.

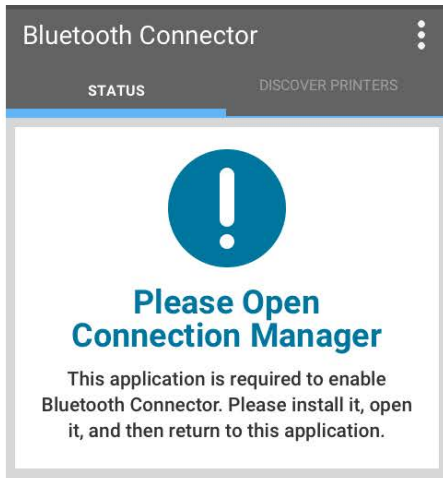
**Figure 29** Open Connection ManagerScreen



## Manually Set Permissions

If, for any reason, the permissions for both applications are changed, you will see [Figure 30](#) in Bluetooth Connector. This indicates that permissions must be granted again before either of the applications will work.

**Figure 30** Bluetooth ConnectorPermission Notice



- Open Connection Manager and grant the requested permissions. (Applies to Android version 6 or later.)

To manually fix permissions for both applications, perform the following steps:

1. From your Android device, go to **Settings > Apps** (or **Application manager**) > **Bluetooth Connector** or **Connection Manager** > **Permissions**.
2. Set all permissions listed to **ON**.
3. Restart both applications for the permission changes to take effect.

## Check Bluetooth is Enabled on the Printer

Check your printer configuration label to determine whether your bluetooth setting is enabled.

Refer to your printer's user guide for information about how to print a configuration label.

## Connection Issues

### Server Connection Issues

#### Weblink Server URL

If Bluetooth Connector cannot connect to your MDM, check the Weblink server URL in the Bluetooth Connector settings.

- Verify with your system administrator that you have the correct server URL.
- There should not be any spaces in the server URL.

#### WiFi and Cellular Connectivity

- Check that you have access to your MDM through your WiFi and/or cellular data connection. You may need to contact your system administrator for information on any requirements or rules that exist which permit connections to the address and port specified in **Settings** menu of the Bluetooth Connector app.
- If the **Keep WiFi on During Sleep** setting on your Android device is set to **Never**, you will lose your connection to the MDM when your Android device goes to sleep. Check this option in the WiFi settings on your Android device.

#### Printer Periodically Disconnects from MDM

Some printers have a sleep mode function to conserve battery life. If your printer has sleep mode enabled and it goes to sleep, it will cause the printer to disconnect from the MDM.

The sleep mode function includes a **“Wake on Bluetooth”** feature, which means the printer will automatically wake upon receiving data. Once awake, the printer should automatically reconnect to the MDM.

To avoid these periodic disconnects, disable the sleep mode function on your printer.

Sleep mode can be disabled by issuing the following Set-Get-Do command:

```
! U1 setvar "power.sleep.enable" "off"
```

### Printer Connection Issues

#### What do I do if I lose my printer connection?

Verify the following:

- Your Android device must remain within 30 ft. of the printer to maintain a connection.
- Bluetooth setting must remain on for both the Android device and the printer.

### Miscellaneous

#### Why do I see printer commands on my label?

Some printers ship with Line Print Mode as the default print mode. In this mode, the printer prints text directly without requiring extra formatting commands. If you perform functions from either Printer Profile Manager Enterprise or SOTI MobiControl and you see the printer commands on the label, this indicates that your printer is in Line Mode.

The Print Mode may be changed using the device.languages Set-Get-Do command. For more specific information about this command, see the Zebra Programming Guide.

### Contact Zebra Support

For further assistance with Bluetooth Printer Management, contact Zebra Support at [zebra.com/support](https://zebra.com/support).

# Key Considerations

This section provides things to consider and important dependencies.

## Bluetooth Connection Overview

Link-OS printers with firmware version x.19.10Z and later support both a printing channel and status channel over the Bluetooth connection.

These two channels allow for monitoring the printer status through the status channel while the printing channel is being used for printing and/or printer configuration operations.

Connection Manager supports using these two channels.

Only one connection from any application can be made to the printer's status channel at any one time. If an application using Connection Manager tries to open a connection to a printer's status channel which is already in use, an error value will be returned. (Error responses will be documented in the SDK documentation)

An application using Connection Manager can open a printer's status channel even if another application has opened the printer's printing channel. This allows one application to be printing while another application is getting printer status.

The status channel only supports JSON formatted commands. It does not support commands such as Set Get Do, formatting commands or other commands that require the ZPL parser. Firmware downloads are not supported via this channel.

(JSON formatted commands are documented in the programmer's manual.)

## Printing Channel

- If an application has the printing channel open when Bluetooth Connector tries to connect to a printer, Bluetooth Connector will only establish a connection with the printer's status channel.
- If Bluetooth Connector has established a connection with a printer's printing channel and/or status channel, it can establish a connection with Printer Profile Manager Enterprise or SOTI MobiControl. Once the connection is established, the printer will appear as online by either Printer Profile Manager Enterprise or SOTI MobiControl.
- Printer Profile Manager Enterprise performs most of its operations through the status channel. If Printer Profile Manager Enterprise tries to perform an operation that requires the printing channel, it will display failed operation.
- SOTI MobiControl relies mostly on the printing channel for printer management, configuration, alerts and status monitoring.

### Status Channel

- Printer Profile Manager Enterprise uses this status channel for operations other than firmware downloads, sending profiles, and files.
- SOTI MobiControl does not primarily use the status channel.

### General Information

- Once the Android device has connected to the wireless internal network, any time the Android device is within range of the internal network, it will automatically connect to that network. When the Android device is out of range of the secured network, it will automatically connect to the cellular network and the data plan.
- Remote transfer speeds will be dependent on the cellular data plan's bandwidths and connection signal strength.
- Care should be taken when doing firmware or large data downloads. Consider signal strength, a consistent connection, and your data plan limits.
- There is no functional difference between Bluetooth Connector using a Wi-Fi network or a cellular network.
- If the connection to a printer is dropped, the connection to the MDM is also dropped.
- Bluetooth Connector will automatically try to reconnect to the MDM if the connection is dropped.

### Other Considerations

#### Firmware Downloads

For SOTI MobiControl, a firmware download process is treated as a general file download. However, the printer connection must be maintained during the file download. For additional details, refer to [Dependencies for Bluetooth-Only Printers](#).

#### Dependencies for Bluetooth-Only Printers

If you must download firmware to a Bluetooth-only printer, consider the following before you proceed:

- Before starting a firmware download, be sure the battery is fully charged.
- The printer and phone must be within 30 ft. of each other for the entire duration of the download.
- The Bluetooth printer must remain powered on during the download.
  - Do not perform ANY function with the printer during the process. You must not print, turn it off, or query for status.
- Must maintain a network connection between the Android device and the MDM (Printer Profile Manager Enterprise or SOTI MobiControl).
- Must limit other app usage during the download.
- Do not turn off Bluetooth on the Android device (no Airplane mode).
- Do not force quit either the Bluetooth Connector or Connection Manager apps.

### Using Bluetooth Connections

Bluetooth Connector receives status and alert information via the status channel. Operations such as firmware and font downloads are performed via the printing channel. If Bluetooth Connector sees that the printing channel is in use, it will only use the status channel.

The present version of Printer Setup for Android can be active while Bluetooth Connector and Connection Manager are active. Printer Setup for Android only establishes a connection (mainly via the printing channel) to the printer when there is a request or operation to perform.

### Printer Profile Manager Enterprise

- The primary channel Bluetooth Connector uses is the status channel. Printer Setup for Android and 3rd party applications will primarily use the printing channel, so there is a minimal chance of conflicts.
- When Bluetooth Connector does require the printing channel, if the channel is in use, Bluetooth Connector will inform Printer Profile Manager Enterprise that the printer is not available for the operation requiring the printing channel.
- Printer Profile Manager Enterprise uses the printing channel for:
  - Firmware downloads, send resources, or send files byte-by-byte
  - All other requests and operations are done via the status channel
- If Bluetooth Connector has a valid Weblink URL to Printer Profile Manager Enterprise and it can connect to a printer through either of the channels, Printer Profile Manager Enterprise will indicate that the printer is online.

### SOTI MobiControl Connector

- The primary channel SOTI MobiControl Connector uses is the Weblink printing channel to communicate with Bluetooth Connector.
- If Printer Setup for Android or a 3rd party application requests the printing channel to a printer and Connection Manager has established a connection to the printer, this connection is severed, and Printer Setup for Android or the 3rd party app is now connected to the printer.
- Even though the connection between Connection Manager and the printer has been severed, the Weblink connection between SOTI MobiControl Connector and Bluetooth Connector is still active.
- If Printer Setup for Android or a 3rd party application has released its connection to the printer, when SOTI MobiControl Connector tries to communicate with the printer again, Connection Manager will re-establish connection to the printer and SOTI MobiControl Connector functions as normal. If Printer Setup for Android or 3rd party application has not released its connection, SOTI MobiControl Connector will indicate the operation has failed because the printer is offline.

### Functional differences when using Printer Profile Manager Enterprise

Some functions in Printer Profile Manager Enterprise are affected when using Bluetooth Connector:

- The printer may not have an IP (0.0.0.0) in the printer listing or landing page.
- Printer Profile Manager Enterprise will not have access to a printer's IP address.
- Any activity that requires a direct TCP connection will not work. They are as follows:
  - Printer Web Page
  - Adding and discovering a printer via Bluetooth Connector
  - The Weblink Info tab on the Printer Landing page

### Managing Printers over Bluetooth vs. Network Connections

- The only way for an MDM (Printer Profile Manager Enterprise or SOTI MobiControl) to manage a Bluetooth printer is via Bluetooth Connector.
- Bluetooth Connector requires a connection to both the MDM and the Bluetooth printer to communicate status or perform operations.
- A Bluetooth connection may not be as reliable as a network connection and as such requires periodic reconnections that need to be planned into the management process and process recovery.
- Printer status
  - Unlike a network connection, printer status needs to be requested over the Bluetooth connection.
  - Bluetooth Connector checks printer status at defined intervals to reduce battery drain.

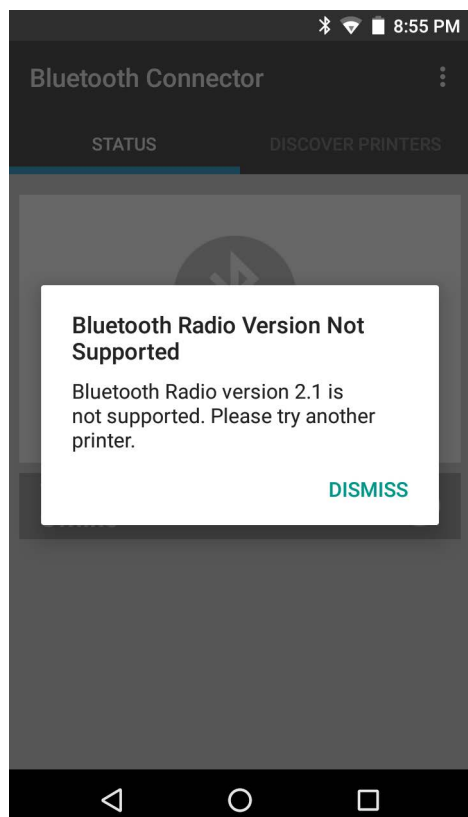
# Appendix

This section provides a list of unsupported printers.

## QLn Printer Support

Bluetooth Connector does not support some QLn printer models. If you try to connect a model that is not supported, [Figure 31](#) will appear.

**Figure 31** Unsupported Bluetooth Radio Screen



**Table 1** is a list of the unsupported printer models. If your model number appears in column 1, and the serial number is between the first and last serial number (inclusive), your printer is not supported.

**Table 1** Unsupported QLn Printer Models

Model Number	First Serial Number	Last Serial Number
QN2-AUBA0000-00	XXQPJ133801044	XXQPJ141700794
QN2-AUBA00B0-00	XXQPJ132500001	XXQPJ132500060
QN2-AUBA0E00-00	XXQPJ130600164	XXQPJ141900370
QN2-AUBA0E00-01	XXQPJ133801603	XXQPJ141300009
QN2-AUBAE010-00	XXQPJ130100001	XXQPJ131100030
QN2-AUBAEE10-00	XXQPJ130100011	XXQPJ141700680
QN3-AUBA0000-00	XXQLJ112700607	XXQLJ141400040
QN3-AUBA00B0-00	XXQLJ132300001	XXQLJ133700829
QN3-AUBA0E00-00	XXQLJ120900571	XXQLJ133900105
QN3-AUBA0E01-00	XXQLJ130900916	XXQLJ130900925
QN3-AUBA0EB0-43	SYQLJ131400461	SYQLJ140202171
QN3-AUBAEE11-00	XXQLJ131600001	XXQLJ141103288

