

Wisemo remote control of Zebra scanner and mobile devices

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1.0 Overview

A Zebra device running Android 5.0 or newer can be remotely viewed but it requires additional configuration for full remote control where also keyboard and touch events can be emulated.

The configuration can be done via Zebra StageNow on the device, via EMM/MDM solutions or often in combination of the two. This document primarily describes how to configure the device via StageNow and gives a general description on how to configure it with an EMM/MDM tool.

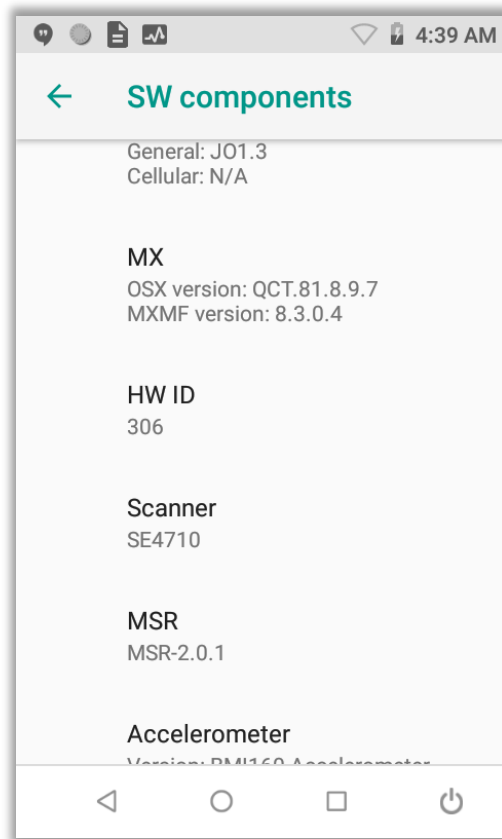
1.1 Prerequisites

Emulation of keyboard and touch events are only supported on platforms that support (Mobility Extensions) MX 8.3 or greater and StageNow versions 3.2 or greater. In addition, a WiseMo Host for Android version 18 or later should be used.

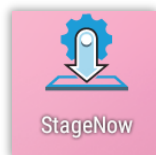
1.1.1 MX and StageNow versions on the Android device

On the device select Settings->System->About Phone->Software Components. Under this you should see “MX” it should be at least version 8.3

Screen Shoot from PS20J:



To see the StageNow client version touch the StageNow icon and select "View Client Info"

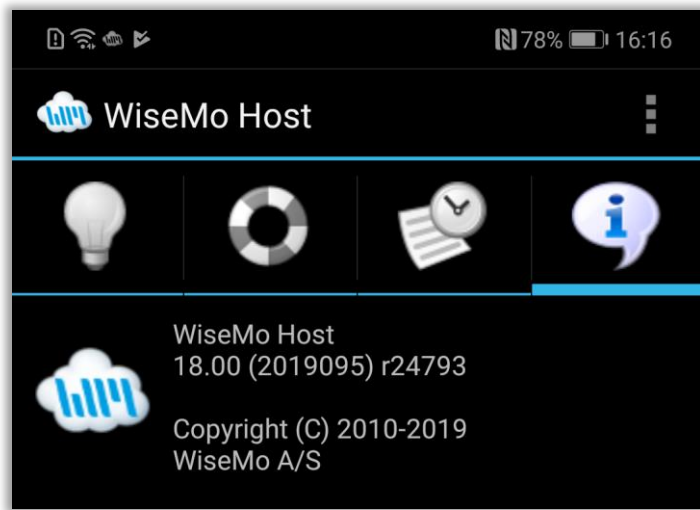
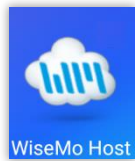


This StageNow version is 3.2.1.0 (minimal version should be 3.2) and MX version is 8.3.0.4 (minimal version should be 8.3).

Note the MX version is also shown on this screen.

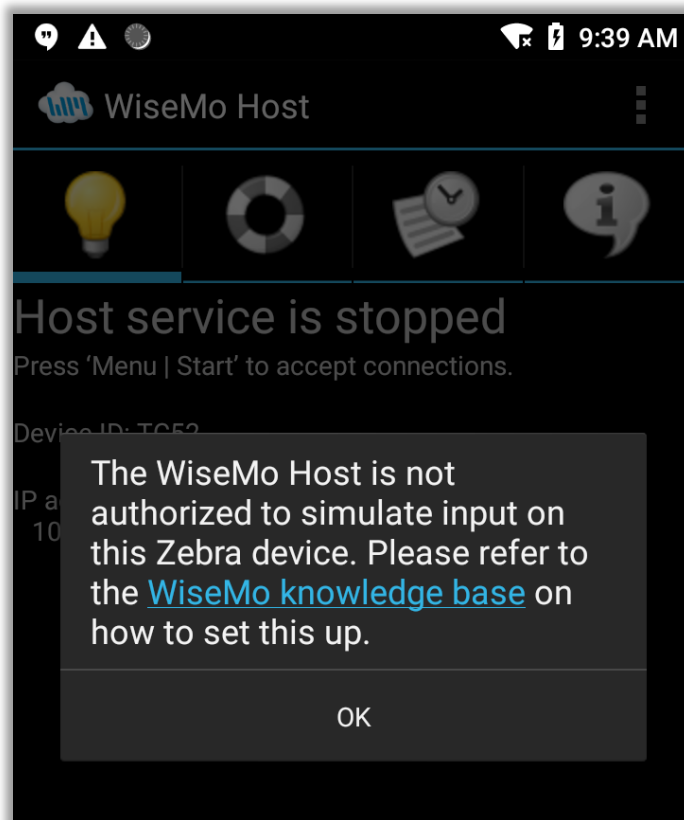
1.1.2 WiseMo Host

Full remote control of Zebra devices requires WiseMo Host for Android version 18.0 or greater. Open the WiseMo Host by clicking the WiseMo Host icon and select the Info tab:



This Host is version 18.00 build 2019095. Minimal version is 18.00.

If you run the Host without being configured it will show the following message:



2.0 Steps required to allow full remote control

The Zebra device must be provisioned to allow the WiseMo Host to simulate input. This can be done via StageNow on the Zebra device or for mass deployment on Managed devices, via EMM/MDM tools.

Starting with Android 10, the Host app prompts Android to request screen-capture permission each time the app is launched, or remote control is initiated. However, the provisioning is used to suppress this dialog and automatically grant the required permission.

As newer Android versions have required more and more permissions that must be accepted by the local user, Zebra has made it possible to configure that these permissions are auto-granted without involving the local user. Therefore, it is recommended to use latest WiseMo provided staging files that corresponds to the Zebra MX version on the device. Please note that it is the MX version that is important rather than Android version even though the MX version usually is provided with specific Android versions.

A Zebra device can be provisioned manually in two ways:

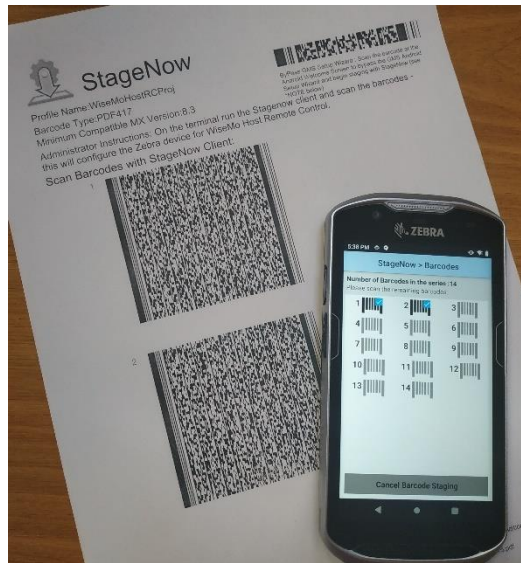
1. Barcode provisioning – by scanning a series of barcodes provided in a PDF file.
2. File-based provisioning – by copying a .bin file to the device and loading it through the StageNow app on the device.

If the Android device is Managed (enrolled in Android Enterprise with an EMM/MDM tool), you might want to read this WiseMo article, [Intune Deployment and Configuration of the WiseMo Android Host](#), with a general description of deployment of the WiseMo Host with Microsoft Intune. There's also general information about EMM solutions, Android Managed Configuration and a dedicated paragraph for deployment to Zebra devices.

You might also find important information in this article from Zebra, [The Android Setup Wizard and How to Bypass It](#), or in the general guidelines from Google, [Provision devices](#).

2.1.1 Provisioning via StageNow (Barcode staging)

WiseMo delivers the necessary configuration as a PDF file containing a set of barcodes, see picture below.



The table below provides links to PDF files for various Zebra MX versions. Always use the latest PDF file that matches the MX version installed on your device.

	Android 8 - 9	Android 10-11	Android 11-12	Android 13	Android 14+
MX version required	MX version 8.3+	MX version 10+	MX version 11.3+	MX version 14.0+	MX version 14.2+
PDF file	Download file	Download file	Download file	Download file	Download file

Please note that if you have Android 11, use the MX version 11.3 file download, it's much smaller.

Android Google Mobile Services (GMS) devices present a setup wizard to the user when the device is first started or after a factory or enterprise reset. If you see the setup wizard, scan the barcode in the upper right corner of the PDF document:



StageNow

Profile Name:WiseMoHostRC

Barcode Type:PDF417

Minimum Compatible MX Version:8.3

Administrator Instructions: On the terminal run the Stagenow client and scan the barcodes – this will configure the Zebra device for WiseMo Host Remote Control.

Scan Barcodes with StageNow Client:

1



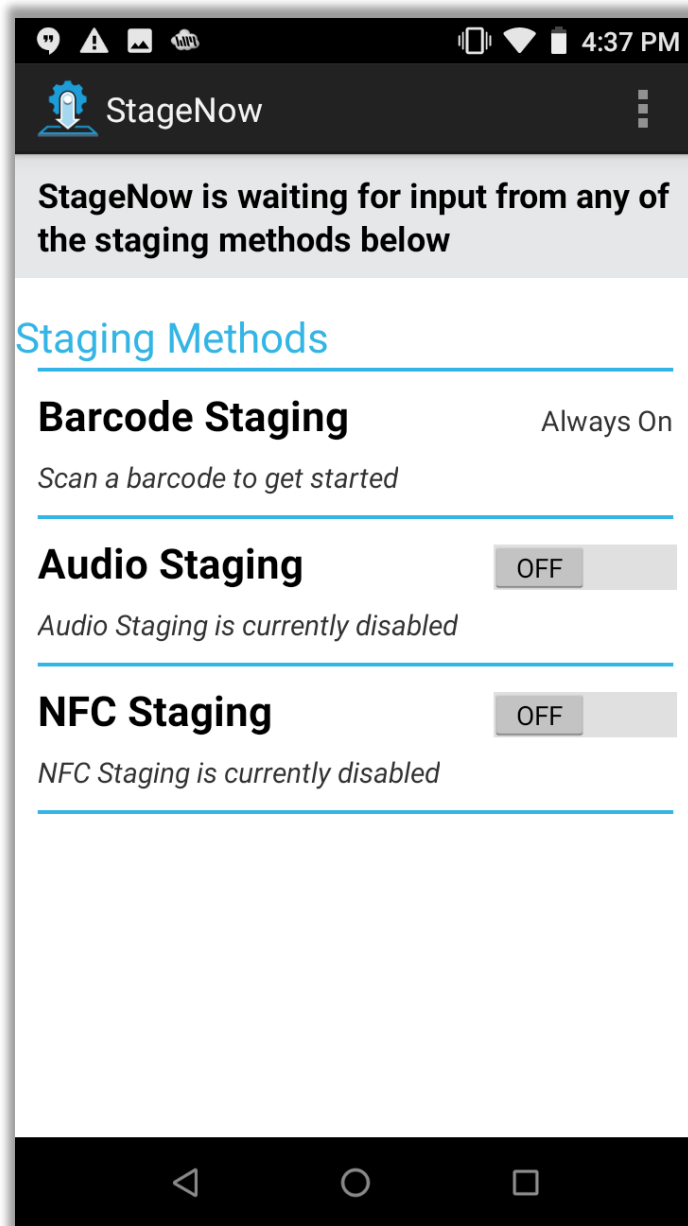


ByPass GMS Setup Wizard : Scan the barcode at the Android Welcome Screen to bypass the GMS Android Setup Wizard and begin staging with StageNow (see *NOTE below)

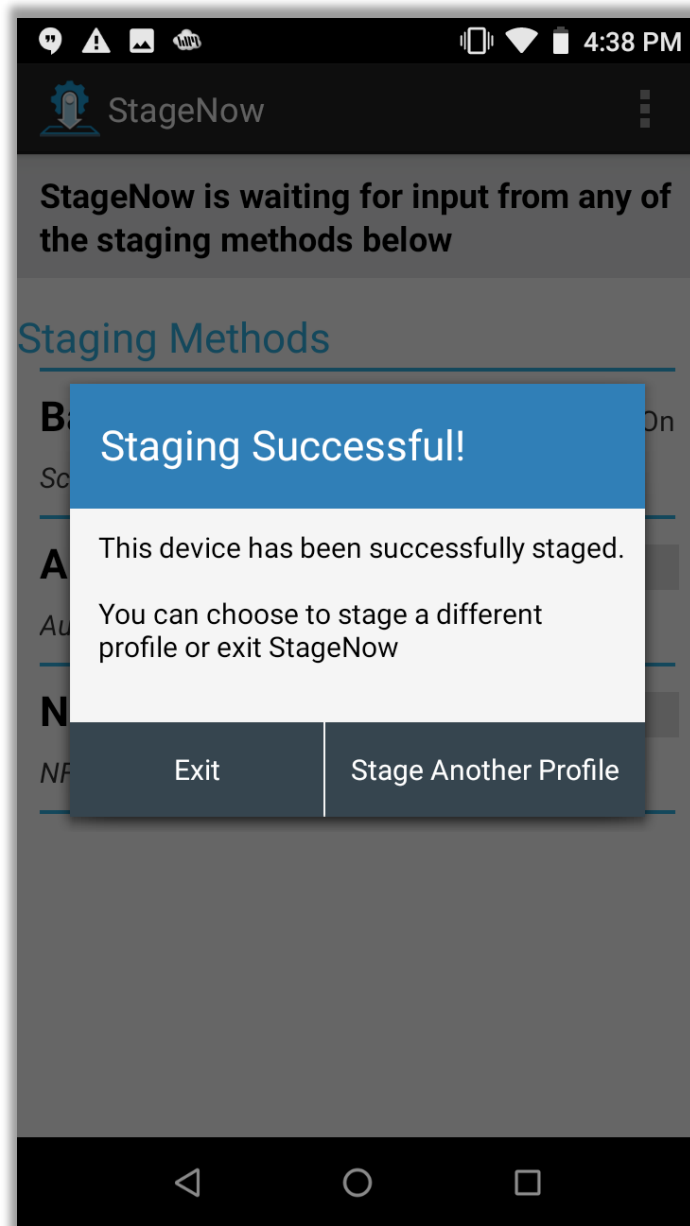
This will bypass the setup wizard and launch StageNow.

Otherwise, just open the StageNow client on the device by tapping the StageNow icon.





StageNow is now ready to receive the configuration by scanning the bar codes. Point the device to the barcode with number **1** (in red) and simply press the scan button on the device. Continue to scan the remaining barcodes one by one in the order shown. When completed, the following screen will be shown, and the device is ready for remote control.



2.1.2 Provisioning via StageNow (Local File Staging)

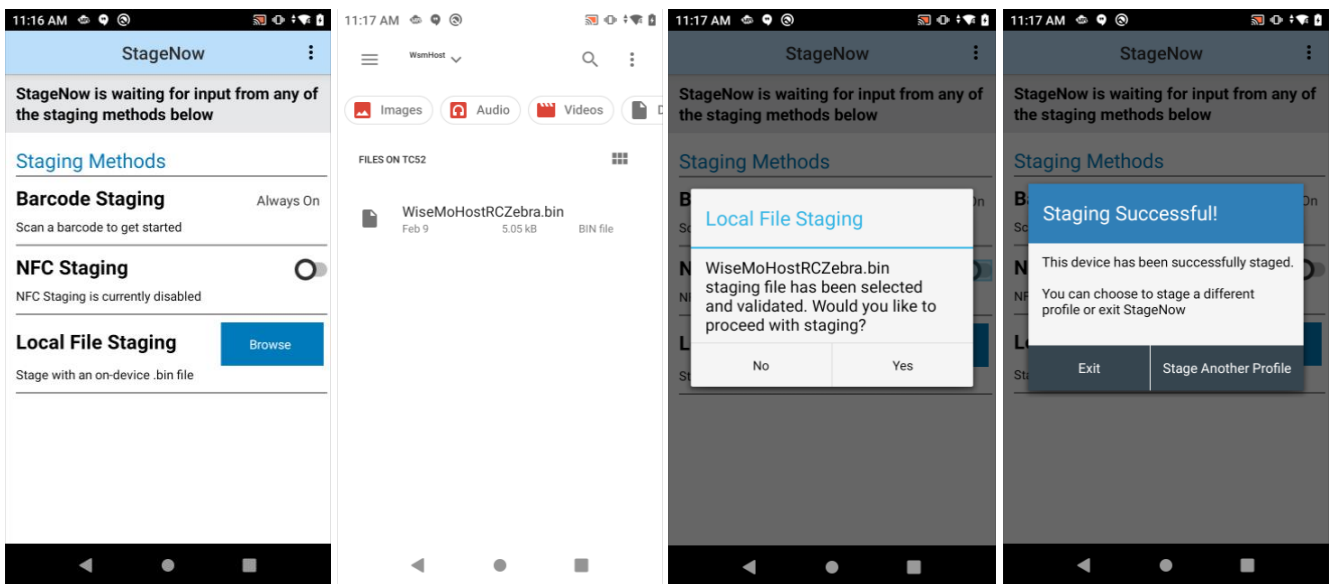
As an alternative to scanning barcodes, StageNow can deploy settings using a .bin file.

The table below provides links to .bin files for various Zebra MX versions. Always use the latest .bin file that matches the MX version installed on your device. Please note that the MX version is what determines compatibility — not the Android version — although each MX release is typically bundled with specific Android versions.

	Android 8 - 9	Android 10-11	Android 11-12	Android 13	Android 14+
MX version required	MX version 8.3+	MX version 10+	MX version 11.3+	MX version 14.0+	MX version 14.2+
.bin file	Download file	Download file	Download file	Download file	Download file

Save the file on the device’s local file system.

Run the StageNow client and press the “Browse” button in the Local File Staging section. Locate and select the saved .bin-file and click **Yes** in the following screen, see pictures below.



Note: Be careful if you downloaded the .bin file to the “Download” folder. StageNow has a peculiar (initial) problem as it might lead you to select your downloaded .bin file from a folder called “Downloads” (with an ‘s’). The “Downloads” folder is a mirror folder of the "Download" folder (no 's') that only Android’s built-in “Files” app has permissions to. StageNow allows the user to access the “Downloads” folder, see and select files from it but the StageNow app doesn't have permissions to access the files and you will receive an error like “Please check if the StageNow file is valid and accessible for Staging. Could not get the file extension”. So, be sure that you select the .bin file from the “Download” folder or alternatively copy it to another folder and access it from there.

2.2 Provisioning via MDM tools

WiseMo has prepared provisioning files for MDM tools that you will need to configure the Host automatically and avoid the manual configuration via StageNow.

Depending on MDM tool and Android version you will need either the one of the JSON or XML files below.

	Android 8 - 9	Android 10-11	Android 11-12	Android 13	Android 14+
MX version required	MX version 8.3+	MX version 10+	MX version 11.3+	MX version 14.0+	MX version 14.2+
Zebra OEM Config app	Legacy Zebra OEMConfig	Legacy Zebra OEMConfig	Zebra OEMConfig Powered by MX	Zebra OEMConfig Powered by MX	Zebra OEMConfig Powered by MX
JSON format configuration	Download file	Download file	Download file	Download file	Download file
XML format configuration	Download file	Download file	Download file	Download file	Download file

Please note that there are two different Zebra OEMConfig apps for JSON configuration. A legacy app for Android 8-11 and new app for Android 11 and newer. For Android 11 both apps can be used with the corresponding JSON file.

2.2.1 Provisioning with Microsoft Intune

Please refer to the [Intune Deployment and Configuration of the WiseMo Android Host](#) for using Microsoft Intune. The document handles deployment to Zebra devices in details.