

Device Tracker 4.0

Release Notes - December 2020

About Device Tracker

Device Tracker 4.0 is a cloud-based scalable solution that easily tracks Zebra Android mobile devices, finds missing devices and helps prevent device inventory shrinkage. Misplaced or lost devices within a facility are tracked by leveraging existing Wi-Fi network infrastructure and utilizing Bluetooth technology and audio chirping to locate devices. When locating a device, Device Tracker identifies the general area where the device is located based on the Access Point (AP) it is connected to within the facility. The visual proximity indicator relies on Bluetooth beacon transmissions to determine the approximate location of the device. Audio can be played on the misplaced device to further pinpoint its location.

Features

Device Tracker features:

- Cloud-based scalable solution hosted and maintained by Zebra with support for up to 100K devices in multiple locations up to 5K sites.
- Support for central administrator, site manager, and site associate roles.
 - Device dashboard for administrator to centrally track devices across multiple sites with ability to view at site-level.
 - Device dashboard for site manager to track devices at the site-level and mark a misplaced or at-risk (e.g. low battery) device for retrieval.
 - Web portal for centralized administration of system settings and admin and site manager login credentials.
- Registration of:
 - Sites and access points with friendly names to easily identify device location.
 - Devices to assigned site with user friendly names for simple device identification.
- Simple to deploy – install and configure the mobile application using StageNow and Enterprise Mobility Management tools.
- Easily find a misplaced device with the connected AP location, the Bluetooth-based visual proximity indicator and play sound feature.
- Check-out/Check-in feature to associate users to devices for accountability. (Optional)

Device Support

Supported devices require GMS (Google Mobile Services):

Device	Android 8.x (Oreo)	Android 10
TC51	•	
TC52	•	•
TC72	•	•

Requirements

Device Requirements

Requirements for Device Tracker client:

- **Operating System:** Android Oreo or Android 10 with GMS.
- **Bluetooth** must be enabled to find devices using the visual proximity indicator. Zebra provides a tool (StageNow) for EMMs to configure the device remotely to enable Bluetooth.
- **WiFi** must be enabled and connected to the network to communicate with the server. Zebra provides a tool (StageNow) for EMMs to configure the device remotely to enable WiFi.
- **Location** services must be enabled on all devices to find devices using the Bluetooth-based proximity indicator.

Network Requirements

Network requirements for communication between the device client app and the cloud server:

- Network port 443 must be enabled to reach the Google Cloud Firebase platform. The client application sends device status and events to the server over HTTPS.
- The following URLs must be allowed through the firewall or proxy:
 - URLs accessed by device:
 - *.google.com
 - *.googleapis.com
 - http://connectivitycheck.gstatic.com (required by Google for Android to connect to a wireless network)
 - https://[ProjectID].firebaseio.com (URL accessed by the client app, where [ProjectID] is supplied by Zebra during the cloud setup process)
 - https://us-central1-[projectID].cloudfunctions.net (required for the execution of Cloud Functions for Firebase, where [ProjectID] is supplied by Zebra during the cloud setup process)
 - URL accessed by the admin on a PC:
 - Web portal URL - supplied by Zebra during the cloud setup process

If the firewall or proxy does not support wildcards, add the following URLs to the allow list:

- <https://www.googleapis.com>
- <https://firestore.googleapis.com>
- <https://cloudfunctions.googleapis.com>
- <https://firebaseinstallations.googleapis.com>
- <https://play.googleapis.com>
- <https://www.google.com>

Resolved Issues

- None

Usage Notes

- None

Known Issues

- When installing the application on a mobile device using an EMM, some EMMs do not grant all the required permissions for the application to run in the background to track the device. Alternatively, an XML file can be generated from the StageNow profile and consumed by the EMM granting all permissions. Refer to the [Device Tracker installation guide](#).
- When there are multiple pools of licenses with different expiration dates, an incorrect or negative license count is reported when the licenses expire.
- After repeatedly launching the Device Tracker application over several weeks without rebooting the device, the app may become unresponsive. If this occurs, relaunch the application to continue operation. A fix will be provided in the next release.

Important Links

- [Device Tracker Downloads & Support](#)
- [Device Tracker Installation and Setup instructions](#)
- [Device Tracker User Guide](#)