

ASSET TRACKER LITE

Version 1.3



ZEBRA

User Guide for Android

Copyright

© 2018 ZIH Corp. and/or its affiliates. All rights reserved. ZEBRA and the stylized Zebra head are trademarks of ZIH Corp., registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners.

COPYRIGHTS & TRADEMARKS: For complete copyright and trademark information, go to www.zebra.com/copyright.

WARRANTY: For complete warranty information, go to www.zebra.com/warranty.

END USER LICENSE AGREEMENT: For complete EULA information, go to www.zebra.com/eula.

Terms of Use

- Proprietary Statement

This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries (“Zebra Technologies”). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.

- Product Improvements

Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.

- Liability Disclaimer

Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.

- Limitation of Liability

In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Revision History

Changes to the original guide are listed below:

Change	Date	Description
-01 Rev A	4/2017	Initial Release

Table of Contents

Copyright	2
Terms of Use	2
Revision History	2
Table of Contents.....	3
About This Guide	
Introduction	5
Asset Tracker Lite	5
Chapter Descriptions	5
Application Version Number	5
License Agreement	6
Notational Conventions	6
Service Information	6
Provide Documentation Feedback	6
Installation	
Using Install ATL Application	7
Asset Tracker Lite Upgrade Procedure	10
Downloading and Installing Using USB	10
Download the Application Package	10
Installing the Application Package	11
Operation	
Tracking a Asset	13
Adding an Item	14
Removing an Item	14
Adding a Item to the Database	14

Uploading Data

Modifying the Database

Adding an Item to the Database	17
Modifying an Item in the Database	17
Deleting an Item in the Database	18

Configuration

Settings	19
Application Settings	20
Adding Area List Item	20
Deleting Area List Item	20
File Options	21
Importing a Product Database File	21
Exporting a Product Database File	22
Changing the File Format	22
Settings XML Files	23
Copy Settings XML File From Device	23
Editing the XML Settings File	23
Copy Settings XML File to Device	25
CSV File Format	25
XML File Format	26

About This Guide

Introduction

This guide provides information about installing, using, and configuring the Asset Tracker Lite application.



NOTE Screens and windows pictured in this guide are samples and can differ from actual screens.

Asset Tracker Lite

Asset Tracker Lite is an introductory asset tracking application designed for small business. It is a simple, license free application for Zebra Android mobile computers and is the first step in improving asset visibility. Employees simply walk through a facility and scan the barcodes on the assets. It helps increase the value of Zebra mobile computers.

Asset tracking is fast, easy, and accurate, and so cost-effective you can take asset inventory as often as business needs dictate.

Asset Tracker Lite improves asset visibility, ensuring that workers can locate the assets they need to get the job done. It also improves worker productivity, asset utilization and asset value.

Chapter Descriptions

Topics covered in this guide are as follows:

- [Installation](#) provides information on installing the Asset Tracker application.
- [Operation](#) provides information on using the Asset Tracker Lite application.
- [Uploading Data](#) provides information on uploading data to a server.
- [Modifying the Database](#) provides information on modifying data in the Asset Tracker Lite database.
- [Configuration](#) provides information on configuring the Asset Tracker Lite application.

Application Version Number

To view the current application version number, touch **⋮ > About**.

License Agreement

To view the application End User License Agreement touch **☰** > **License Agreement**.

Notational Conventions

The following conventions are used in this document:

- **Bold** text is used to highlight the following:
 - Dialog box, window and screen names
 - Drop-down list and list box names
 - Check box and radio button names
 - Icons on a screen
 - Key names on a keypad
 - Button names on a screen.
- Bullets (•) indicate:
 - Action items
 - Lists of alternatives
 - Lists of required steps that are not necessarily sequential.
- Sequential lists (e.g., those that describe step-by-step procedures) appear as numbered lists.

Service Information

Asset Tracker Light (ATL) support is provided when your device is under warranty or within a Zebra OneCare support contract. If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at: zebra.com/support.

When contacting support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software type and version number.

Zebra responds to calls by telephone, email or via on line case notes within the time limits set forth in support agreements. If your problem cannot be solved by a Zebra Customer Support, remotely, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty. If you purchased your Zebra business product from a Zebra business partner, contact them for additional logistic support in case required.

Provide Documentation Feedback

If you have comments, questions, or suggestions about this guide, send an email to EVM-Techdocs@zebra.com.

Installation

Install the **Asset Tracker Lite for Android** application using the **Install ALT** application on the device, or from the Zebra Support and Downloads site.

Using Install ATL Application



NOTE: To download **Asset Tracker Lite** from the Zebra Support and Downloads site a Wi-Fi or WAN network connection is required.

The TC20 and TC25 contains an icon that allows a user to download the **Asset Tracker Lite for Android** application from the Zebra Support site. Once the user selects icon, the user is presented with a number of screens and required to accept a license agreement and grant access permissions to download, install and launch Asset Tracker Lite application.

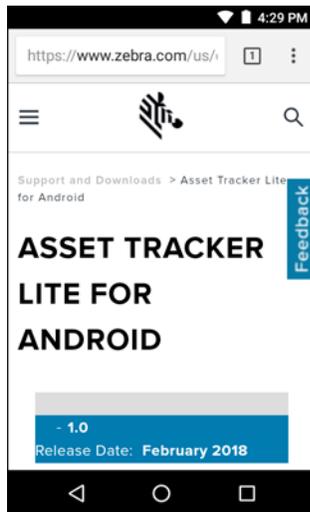
To download the application:

1. Swipe up from the bottom of the screen and touch . The browser opens to the Zebra Asset Tracker Lite download page.



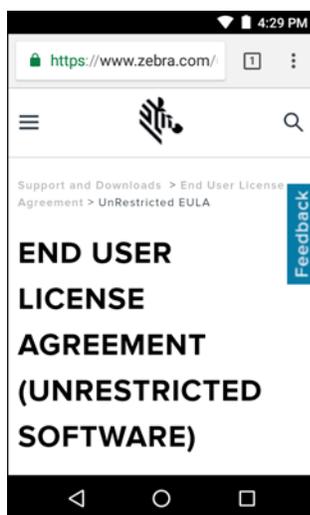
NOTE: The user may be required to grant permissions for the browser to access folders on the device.

Figure 1 Asset Tracker Lite for Android Download Page



2. Scroll down to the **Software** section.
3. Under **Asset Tracker Lite.apk**, touch **Download**. The End User License Agreement screen appears.

Figure 2 EULA Page

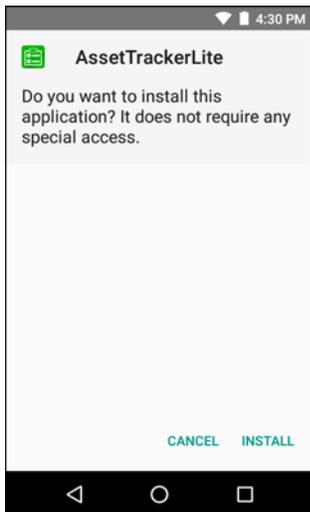


4. Read the EULA and then touch **ACCEPT AND BEGIN DOWNLAOD NOW**.
5. Swipe down from the Status bar.

Figure 3 Notification Shade

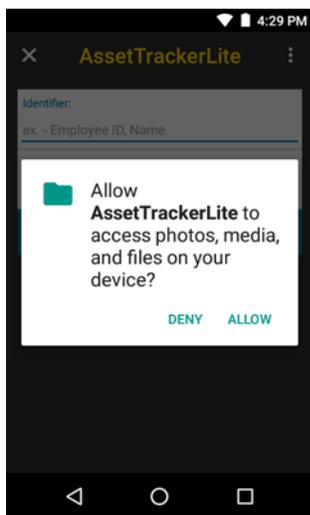
- 6.
7. Select the browser notification for **AssetTrackerLite.apk Download Complete**.
8. The **AssetTrackerLite** screen appears.

Figure 4 Installation Screen

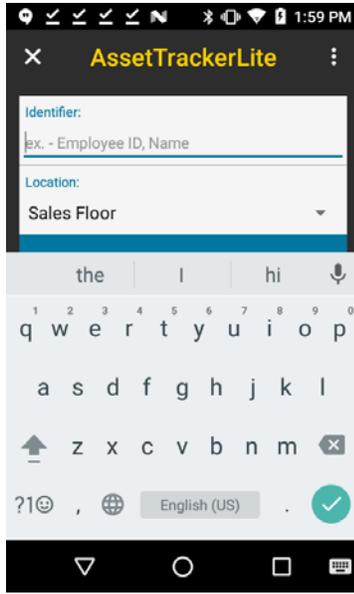


9. Touch **Install**. The device installs the application.
10. After installation, touch **Done** to close the installation or **Open** to launch the application.

Figure 5 Allow Message



11. Touch **Allow** to allow **Asset Tracker Lite** to access the file system. This is required to run the application. Without this permission, **Asset Tracker Lite** will not run since it will not be able to store results.
The Asset Tracker Lite application opens.



Asset Tracker Lite Upgrade Procedure

To upgrade to the latest version of Asset Tracker Lite follow the Installation procedure. A new version will be installed on the device. Configuration and database files are preserved during an upgrade.

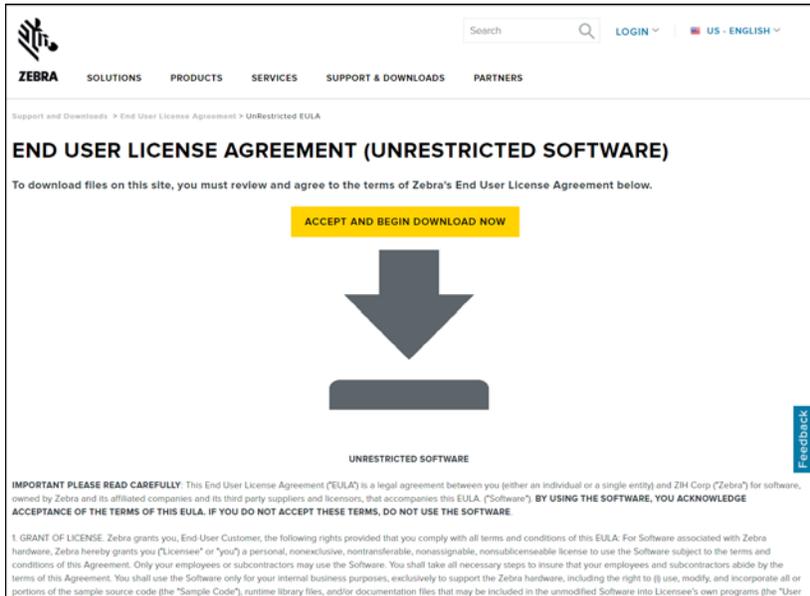
Downloading and Installing Using USB

Download the Application Package

Download the Asset Tracker Lite package:

1. Go to the Asset Tracker Lite for Android Zebra Support & Downloads web site, <https://www.zebra.com/us/en/support-downloads/software/productivity-apps/asset-tracker-lite-android.html>.
2. Scroll down to the **Software** section.
3. Under **Asset Tracker Lite.apk**, touch **Download**. The End User License Agreement screen appears.

Figure 6 EULA Page



4. Read the EULA and then touch **ACCEPT AND BEGIN DOWNLAOD NOW**.
5. Save the file to a folder on the host computer.

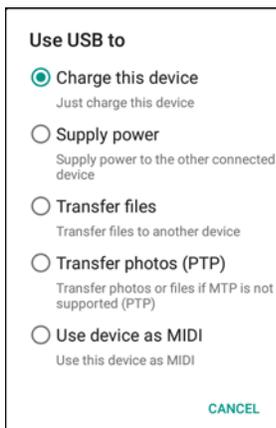
Installing the Application Package



CAUTION When connecting the device to a host computer and mounting its microSD card, follow the host computer's instructions for connecting and disconnecting USB devices, to avoid damaging or corrupting files.

1. Connect the device to a host computer using the USB-C cable.
2. Pull down the Notification panel and touch **USB charging this device**.

Figure 7 Use USB Dialog Box



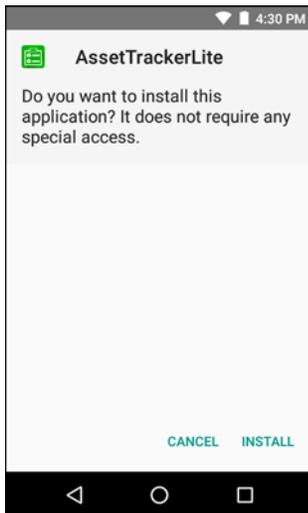
3. Touch **Transfer files**.
4. On the host computer, open a file explorer application.
5. On the host computer, copy the application **AssetTrackerLite.apk** file from the host computer to the device.



CAUTION Carefully follow the host computer's instructions to unmount the microSD card and disconnect USB devices correctly to avoid losing information.

6. Disconnect the device from the host computer.
7. Swipe down from the status bar and then touch .
8. Touch  **Security**.
9. Slide the **Unknown sources** switch to the **ON** position.
10. Touch **OK**.
11. Touch .
12. Swipe up from the bottom of the screen and touch  to view files on the microSD card or Internal Storage.
13. Locate the application AssetTrackerLite.apk file.
14. Touch the application file to begin the installation process.

Figure 8 Accept Installation Screen



15. To confirm installation and accept what the application affects, touch **Install** otherwise touch **Cancel**.
16. Touch **Open** to open the application or **DONE** to exit the installation process. The application appears in the App list.

Operation

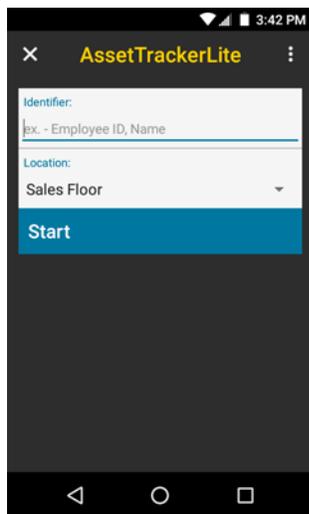
This section provides information on using the Asset Tracker Lite application.

Tracking a Asset

To begin tracking assets:

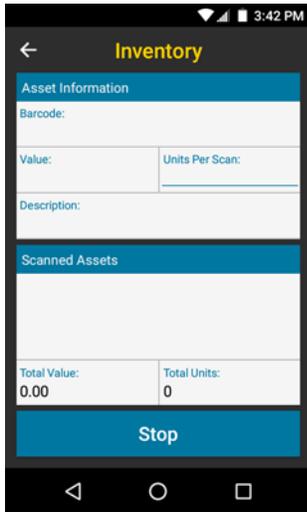
1. Swipe up from the bottom of the Home screen and touch .

Figure 9 Asset Tracker Lite Home Screen



2. In the **Identifier** text box, enter employee name or ID.
3. From the **Location** drop-down, select an area.
4. Touch **Start**. The **Inventory** screen appears.

Figure 10 Inventory Screen



Adding an Item

To add an item:



IMPORTANT

If the user enters 0 in the **Units Per Scan** text box, the scanned item is not added to the **Scanned Assets** section.

If the **Units Per Scan** text box is empty, a message appears notifying the user to enter a value in the text box.

1. Point the device at the barcode and press the scan button. The device captures the data and populates the **Barcode**, **Value**, and **Description** fields.
If the item is not in the database, the **Alert! New Item Found** dialog box appears. See [Adding a Item to the Database on page 14](#).
2. In the **Units Per Scan** text box, enter the quantity of the item. When the user scans the next item, the item is added to the **Scanned Assets** section and the **Total Value** and **Total Units** fields are incremented.
3. Repeat for all items.
4. Touch **Stop** when finished with the session count.
5. Touch **Yes** to save the data.
6. Touch **OK**.

Removing an Item

To remove an item that was previously scanned:

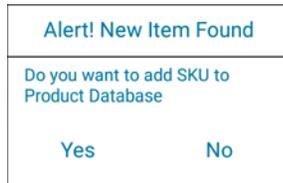
1. Point the device at the barcode and press the scan button. The device captures the data and populates the **Barcode**, **Value**, and **Description** fields.
2. In the **Units Per Scan** text box, enter a negative number for the item to remove. When the user scans the next item, the item is added to the **Scanned Assets** section with a negative number in the **Price** and **Qty** fields and the **Total Value** and **Total Units** fields are decremented.

Adding a Item to the Database

If the user scans an item that is not in the database, the user can add it to the database:

1. When the user scans a barcode and the item is not in the database, an alert dialog box appears.

Figure 11 Alert Dialog Box



2. Touch **Yes** to add the item to the database or **No** to skip the item.
3. In the **Value** field, enter the value of the item.
4. In the **Description** field, enter a description for the item.
5. Touch  to hide the on-screen keyboard.
6. Touch **Save**.
7. Touch .

Uploading Data

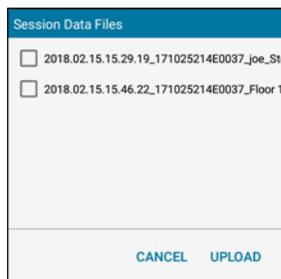


IMPORTANT: Ensure the FTP connection information is configured prior to uploading data.

To upload the session data to an FTP server:

1. Touch **☰** > **Upload Data**. The **Session Data Files** dialog box appears.

Figure 12 Session Data Files Dialog Box



2. Select the files to upload.
3. Touch **Upload**.

Upon successful upload, an Upload Complete message appears. The application renames the files with a prefix, (**up1oaded**), and the file no longer appears in the **Session Data Files** dialog box.

If the upload is unsuccessful, an error message appears. the file name is unchanged and is available in the **Session Data Files** dialog box for another upload attempt. Contact the system administrator.

Modifying the Database

Users can add or modify an item in the product database on the device.



IMPORTANT: Anytime during the process, touch  to cancel the modifying process.

Adding an Item to the Database

To add a new item to the database:

1. Touch  > **Add/Modify SKU**.
2. Scan a barcode or touch the **Barcode** field to manually enter an item number.
3. In the **Value** field, enter the value of the item.
4. In the **Description** field, enter a description for the item.
5. Touch  to hide the on-screen keyboard.
6. Touch **Save**.
7. Repeat for all additional items.
8. After entering all the new SKUs, touch .

Modifying an Item in the Database

To modify an existing item in the database:

1. Touch  > **Add/Modify SKU**.
2. Scan a barcode or touch the **Barcode** field to manually enter an item number.
3. In the **Value** field, change the value of the item.
4. In the **Description** field, change the description for the item.
5. Touch  to hide the on-screen keyboard.
6. Touch **Save**.
7. After modifying item, touch .

Deleting an Item in the Database

To delete an existing item in the database:

1. Touch  > **Add/Modify SKU**.
2. Scan a barcode or touch the **Barcode** field to manually enter an item number.
3. Touch  to hide the on-screen keyboard, if required.
4. Touch **Delete**.
5. After deleting item, touch .

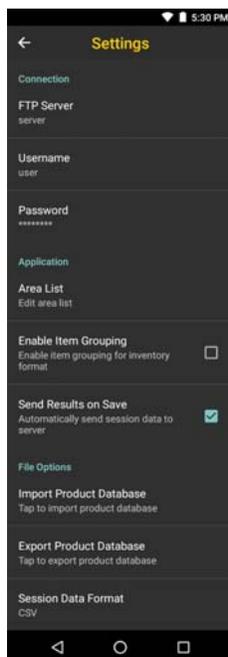
Configuration

Use the **Settings** to configure the Asset Tracker Lite application. The settings can also be configured using an XML file.

Settings

1. To access the Settings screen, touch **☰** > **Settings**.

Figure 13 Asset Tracker Lite Settings



- **Connection** - Set-up a connection to a server if sending session data. Enter a name to label the server. Enter the server address, either IP or DNS name. Choose to automatically send results to this server. Enter Protocol, User, and Password.
 - **FTP Server** - address of the FTP server
 - **Username** - username for the server.
 - **Password** - password for the server.

- **Application** - Control how the application behaves.
 - **Area List** - Use to create a list of areas. See [Adding Area List Item on page 20](#).
 - **Enable Item Grouping** - When Grouping is enabled, Asset Tracker Lite combines the number of items per SKU into a single row in the output inventory file. When Grouping is disabled, the output file may contain multiple entries with the same SKU.
 - **Send Results on Save** - Enable to send data to the server as soon as it is saved.
- **File Options** - Use to import and export data files and set data file format.

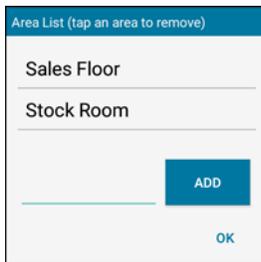
Application Settings

Adding Area List Item

To add an area name to the Area List:

1. Touch **☰** > **Settings**.
2. In the **Application** section, touch **Area List**.

Figure 14 Area List Dialog Box



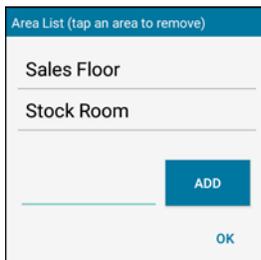
3. **Enter a new area name.**
4. Touch **Add**.
5. Touch **OK**.
6. Touch **◀**.

Deleting Area List Item

To remove an item to the Area List:

1. Touch **☰** > **Settings**.
2. In the **Application** section, touch **Area List**.

Figure 15 Area List Dialog Box



3. Touch an area name to delete. The area name displays from the list.
4. Touch **OK**.
5. Touch .

File Options

Importing a Product Database File

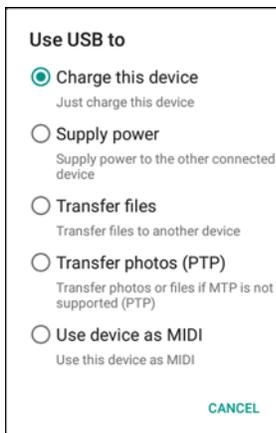


IMPORTANT Asset Tracker Lite only imports CSV file types.
The Product Database file must have the filename **inventory.csv**.

To import a product database file onto the device:

1. Connect the USB-C Cable to the device.
2. Pull down the Notification panel and touch **USB charging this device**.

Figure 16 Use USB Dialog Box



3. Touch **Transfer files**.
4. On the host computer, open a file explorer application.
5. Locate the **DEVICE** as a portable device.
6. Open the **Internal shared storage/AssetTrackerLite** folder.
7. Open another file explorer window and navigate to the **inventory.csv** file.
8. Copy the database file from the host computer to **Internal shared storage/AssetTrackerLite** folder.



CAUTION Carefully follow the host computer's instructions to unmount the microSD card and disconnect USB devices correctly to avoid losing information.

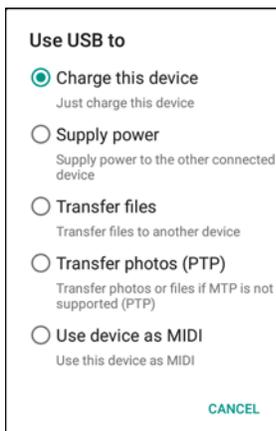
9. On the host computer, unmount the device.
10. Remove the USB-C Cable from the device.
11. Touch **⋮ > Settings**.
12. In the **File Options** section, touch **Import Product Database**. The device loads the new database file.

Exporting a Product Database File

To export a product database file:

1. Touch **☰** > **Settings**.
2. In the **File Options** section, touch **Export Product Database**.
The device saves the database file to: `/sdcard/AssetTrackerLite/OutputFiles`.
The exported filename format: `YYYY.MM.DD.HH.MM.SS.ProductDataBase.csv` (or xml).
Where:
 - YYYY - Year
 - MM - Month
 - HH - Hour
 - MM - Minutes
 - SS - Seconds
 - ProductDataBase - Database name.
3. Connect the USB-C Cable to the device.
4. Pull down the Notification panel and touch **USB charging this device**.

Figure 17 Use USB Dialog Box



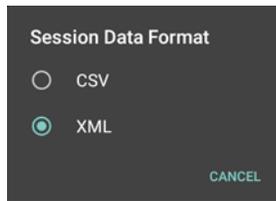
5. Touch **Transfer files**.
6. On the host computer, open a file explorer application.
7. Locate the **DEVICE** as a portable device.
8. Open the `Internal storage/AssetTrackerLite/OutputFiles` folder.
9. Copy the database file to a folder on the host computer.

Changing the File Format

The product database file can be in Comma Separated Values (CSV) (default) or Extensible Markup Language (XML) format.

To change the file format:

1. Touch **☰** > **Settings**.
2. In the **File Options** section, touch **Session Data Format**.

Figure 18 Session Data Format

3. Touch either **CSV** or **XML**.

Settings XML Files

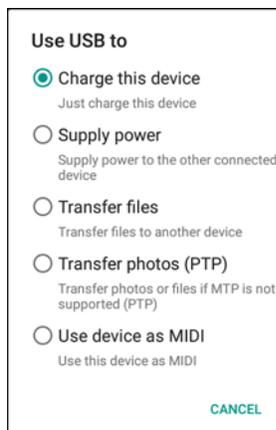
A system administrator can change the Asset Tracker Lite setting using an XML file instead on the application settings screen.

The XML file example is shown below. After making

Copy Settings XML File From Device

To copy the Settings file from the device:

1. Connect the USB-C Cable to the device.
2. Pull down the Notification panel and touch **USB charging this device**.

Figure 19 Use USB Dialog Box

3. Touch **Transfer files**.
4. On the host computer, open a file explorer application.
5. Locate the **DEVICE** as a portable device.
6. Open the **Internal storage/AssetTrackerLite** folder.
7. Copy the **settings.xml** file to a folder on the host computer.

Editing the XML Settings File

To edit the settings file, open the XML file in a text editor.

Change any of the options within the `<option>` and `</option>` brackets.

Save the xml file.

```

<?xml version="1.0" encoding="utf-8"?>
<Settings>
  <Connection>
    <Server>server</Server>
    <AutomaticSendResults>True</AutomaticSendResults>
    <User>user</User>
    <Password>password</Password>
  </Connection>
  <Application>
    <AreaList>
      <Item>Sales Floor</Item>
      <Item>Stock Room</Item>
    </AreaList>
    <ItemGrouping>False</ItemGrouping>
  </Application>
  <Options>
    <OutputDirectory>/AssetTrackerLite/OutputFiles/</OutputDirectory>
    <SelectedOutput>CSV</SelectedOutput>
    <AllowDBUpdates>True</AllowDBUpdates>
  </Options>
</Settings>

```

- Connection section
 - <Server> </Server> - Address of the FTP server.
 - <AutomaticSendResults> </AutomaticSendResults> - Send data to the server as soon as it is saved. Options: True (default) or False.
 - <User> </User> - Username to access the FTP server.
 - <Password> </Password> - Password to access the FTP server.
- Application section
 - Area List
 - <Item> </Item> - Area Names that appear in the Location identifier. Examples:
 - <Item>Sales Floor</Item>
 - <Item>Stock Room</Item>
 - <Item>Warehouse</Item>
 - <ItemGrouping> </ItemGrouping> - Create a Group in database file and increment the scan count when user scans the same product. Options: True or False (default).

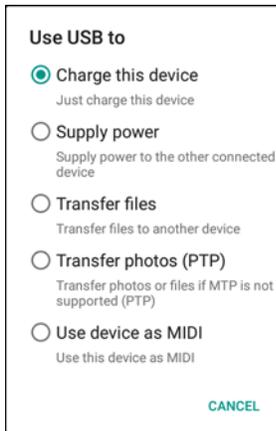
- Options section
 - `<OutputDirectory> </OutputDirectory>` - set the location where output files are stored on the device. Caution: do not set the output folder. The application will not write to a restricted partition.
 - `<SelectedOutput> </SelectedOutput>` - set the type of output file. Options: CSV (default) or XML.
 - `<AllowDBUpdates> </AllowDBUpdates>` - Allow user to update database. Options: True (default) or False.

Copy Settings XML File to Device

To copy the Settings file to the device:

1. Connect the USB-C Cable to the device.
2. Pull down the Notification panel and touch **USB charging this device**.

Figure 20 Use USB Dialog Box



3. Touch **Transfer files**.
4. On the host computer, open a file explorer application.
5. Locate the **DEVICE** as a portable device.
6. Open the **Internal storage/AssetTrackerLite** folder.
7. Open another file explorer window and navigate to the **settings.xml** file.
8. Copy the settings file from the host computer to **Internal shared storage/AssetTrackerLite** folder.



CAUTION Carefully follow the host computer's instructions to unmount the microSD card and disconnect USB devices correctly to avoid losing information.

9. On the host computer, unmount the device.
10. Remove the USB-C Cable from the device.
11. The next time the user opens the Open the Asset Tracker Lite application, the new settings are used.

CSV File Format

The CSV file format is comma separated data file where each row contains:

- barcode,price,description

```

000001,1.00,candy
000002,2.00,bread
000003,3.00,milk
000004,8.00,paper
000005,25.00,beer
000006,0.00,cup of water
000007,10.00,diaper
000008,4.45,chocolate
000009,12366.67,ink

```

XML File Format

The XML file format is as follows:

```

<?xml version="1.0" encoding="utf-8" ?>
<ZebraRetail>
  <Application exeVersion="1.1" />
  <Device serialNumber="14139523020521" />
  <License key="987654312" />
  <MasterFile location="/Program Files/InventoryApp/MasterFile.sdf" />
  <Login identifier="Stock Worker 1" date="2015-03-24T21:38:04-04:00" />
  <Inventory area="Stock Room" startDate="2015-03-24T21:34:09-04:00"
  endDate="2015-03-24T21:38:04-04:00" totalUnits="10001" totalValue="1049.93">
    <Item enteredValue="1234567890123" units="9999" value="999.99" description="Little
    Red Wagon" symbology="UPCA"/>
    <Item enteredValue="9876543210987" units="1" value="29.95" description="Big Blue
    Wagon" symbology="UPC-A" />
    <Item enteredValue="45678932" units="1" value="19.99" description="Yellow Scooter"
    symbology="UPC-A" />
  </Inventory>
</ZebraRetail>

```

