

RFID Training for Property Coordinators

What is RFID

Radio Frequency Identification is a wireless use of electromagnetic fields to transfer data, for the purposes of automatically identifying and tracking tags attached to objects.

What are the benefits of RFID?

- Ability to take inventory without having to search for barcodes.
- Collect inventory status more easily and efficiently.
- Ability to add physical data to an existing asset.

What are RFID tags?

RFID tags are barcode tags that have a radio frequency identification chip which has physical data collected for assets. The tags have radio waves to identify an object.

All GT equipment > 3k will have to receive a new barcode tag.

GT is converting to 4 styles of RFID Tags.

Barcode Tag — *(standard barcodes w/o radio frequencies)*



Use for the following:

- Assets with lasers or sensitive information
- Room number assignments



RFID Hang tag



Use for the following:

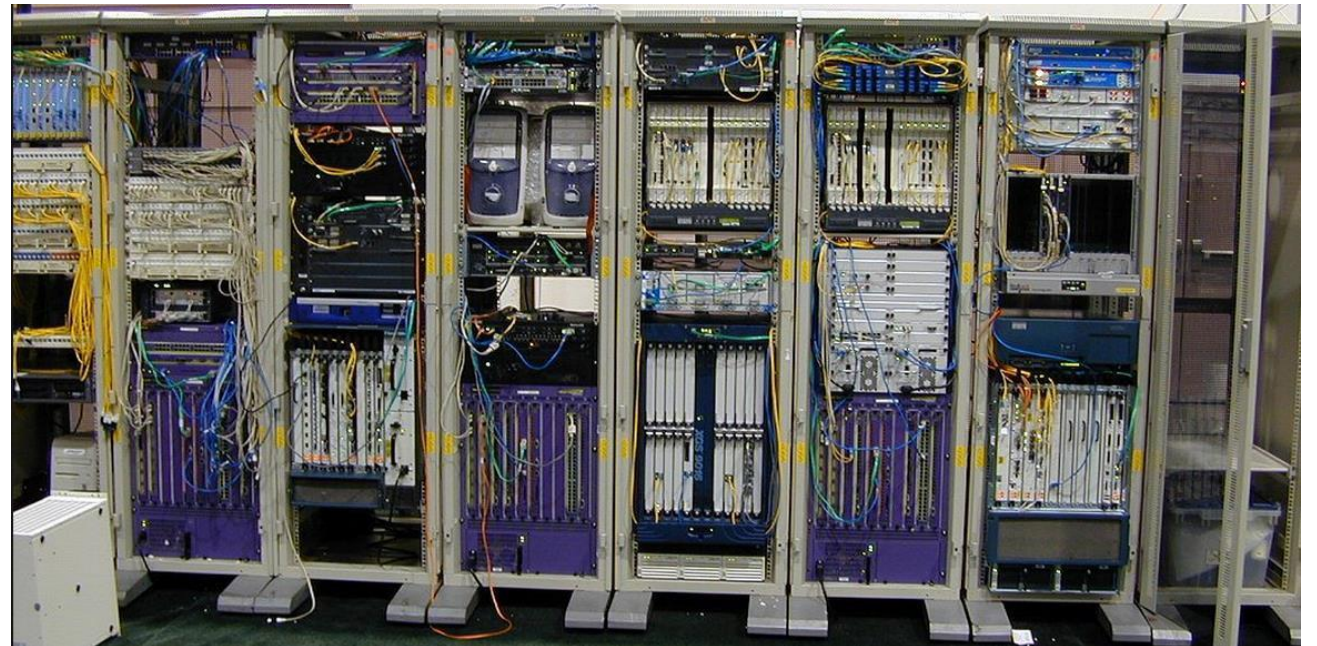
- Equipment that does not have a space for a decal.



RFID Tab Tag



Use for the following:
➤ Equipment in racks



RFID Universal Tag



Use for the following:
➤ All other types of equipment.




Zebra MC3300R Handheld Scanner

Features for the user

- Android 7.0 (Nougat) AOSP
- Both 1D Laser and 2D Imager Scan Engines Available
- Qualcomm 8056 1.8 GHZ hexa-core 64bit
- 3” Color 320 x 320 Display
- Withstands Multiple 5ft drops to concrete
- Wi-Fi ,Entire inventory population can be loaded into scanner



VPN Connection

If you plan on using any other Wi-Fi besides Gatech Eduroam you will have to connect to the VPN. Select the Cisco white ball icon  You can find more details on using the VPN at the attached URL.

<https://faq.oit.gatech.edu/content/how-do-i-get-started-campus-vpn>

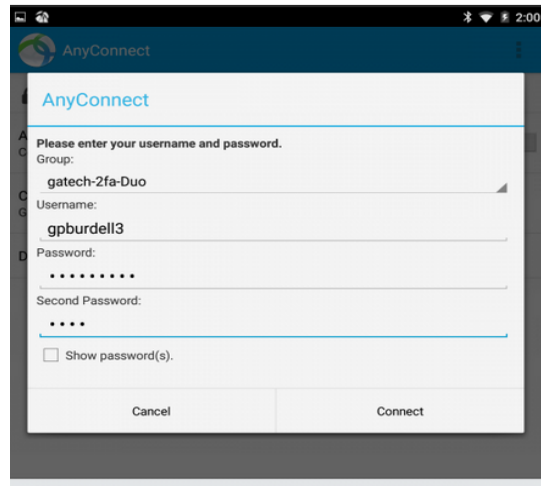
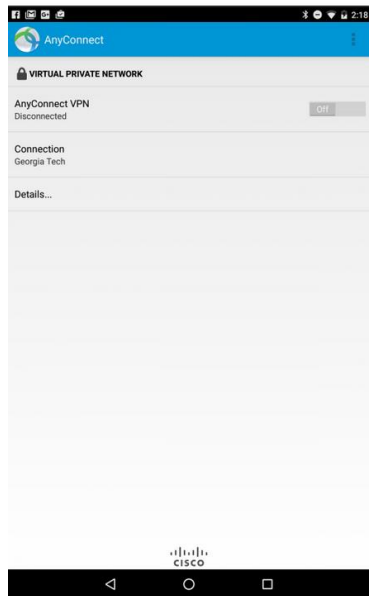
Recommend you stay on Eduroam or go Off-Line mode

1. The following **Authentication** screen will appear, select **"gatech-2fa-Duo"** in **"group"** and enter your GI credentials. In the **"Second Password"** text entry, please enter one of the following **(without the quotes)** :

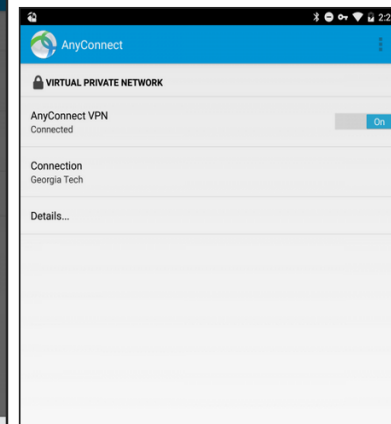
- **The code generated by the Duo Mobile app.** This is the code that you get by hitting the **"key"** on the **upper right** side of the app.
- **"push"**
- **"phone", "phone2", "phone3"..... "phoneN".**
- **Note:** There is no **"phone1"** since **"phone"** and **"phone1"** both reference the first phone number you entered into the system. The phone number list is directly related to the order in which you setup your various phones in the Duo system. **"phone"** will call your 1st phone (likely your cell) and **"phone2"** will call your office or which ever secondary phone number you entered at the time your Duo Account was configured etc.



1. Press the "AnyConnect VPN" toggle button to activate VPN



6. After confirming the sign in on duo, the following screen will appear to signify that you are connected to VPN. The Cisco AnyConnect logo overlaid with the symbol of a lock will display in the top left corner of your screen next to your cellular and WiFi connection widgets.

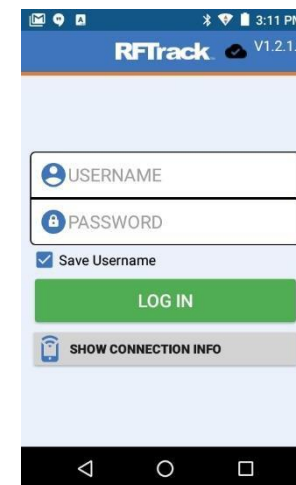
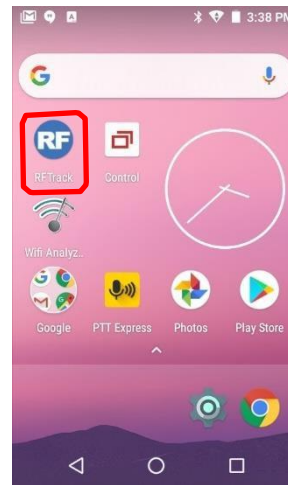


1. Introduction

RFTTrack Mobile for Android
app icon and Login screen

Unlike the Motorola MC9100 Windows ver. the new Android Zebra MC3300 operates with your wi-fi. **(upload and download) no longer required.** It is capable of operating independent when need. Instruction on how to will be covered later. This User Guide provides detailed instructions for using the RFTTrack Mobile for Android app.

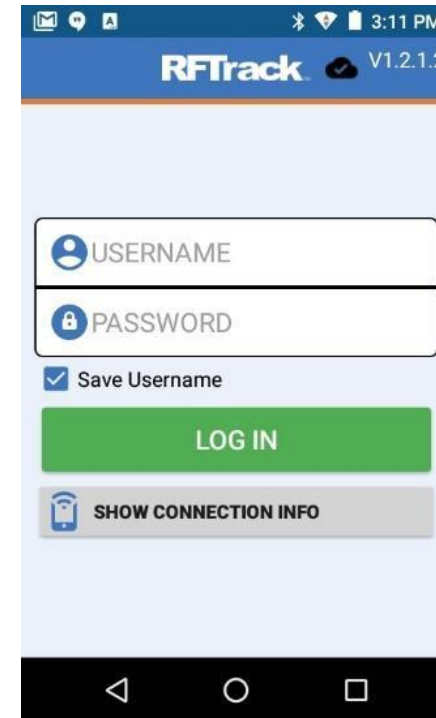
To launch RFTTrack Mobile for Android, locate the **RFTTrack** icon on your device's home screen.



Username – This will normally be the same as your Gatech user ID, field is not case sensitive.

Password – This is your 9 digit GT Buzzcard number including the "GT" number field is case sensitive.
(gt xxxxxx)


The user name and password is not saved. Reccomend that you select the "Save Username" box. This will save you having to enter your username everytime you have to sign in. Once you have completed your inventory you can uncheck the box.

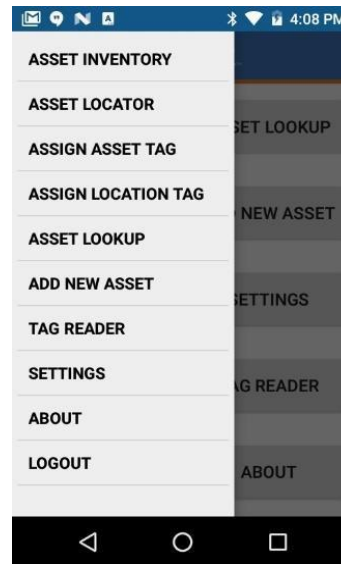
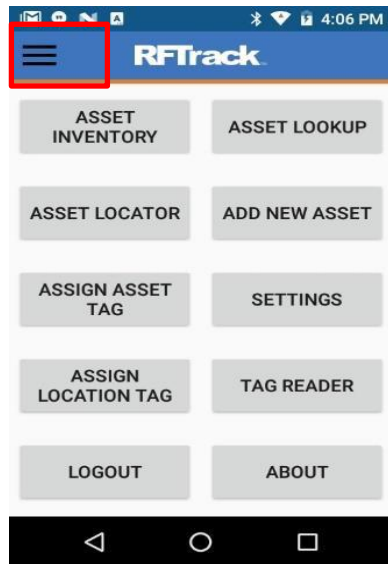


Navigation

There are 2 navigation options for accessing features in RFTrack Mobile.

Main screen - the Main screen displays buttons to access the different features. Use the back button on your device to return to this screen after accessing a feature.

Sliding menu – the Sliding menu is accessed using the “hamburger” menu icon  on the top left.



Scan Mode

The Scan Mode switcher on the top right of most screens, allows you to switch between Barcode and RFID scanning modes.



Line Modes

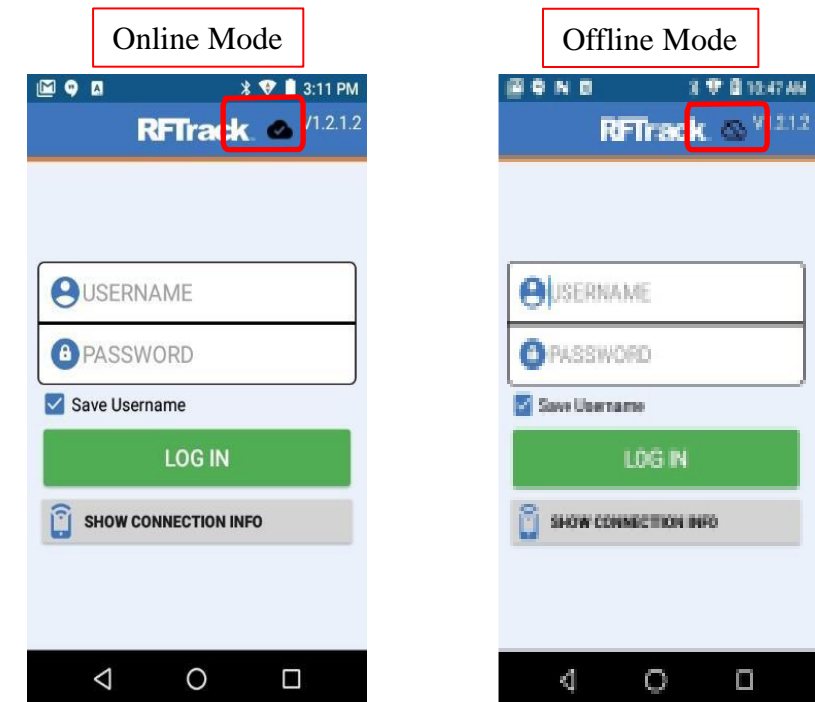
RFTrack Mobile for Android supports two modes of operation: Online and Offline

Online Mode

Online mode is the default mode and requires a constant Wi-Fi or cellular connection to the server. All activity is saved to the RFTrack Server in real-time. Working in Online mode while connected to the server is recommended whenever possible. This allows all of your work to not only be saved to the server in real-time, but also allows other users to have immediate visibility to your work. If you have areas that don't have a good Wi-Fi connection to your RFTrack Server, we recommend that you consider trying a mobile hotspot or cellphone paired to your handheld. Using a mobile hotspot or cellphone will require that your RFTrack Server be accessible over the Internet. If RFTrack Server is installed on a private network, you will likely need to utilize a VPN in conjunction with your hotspot or cellphone connection.

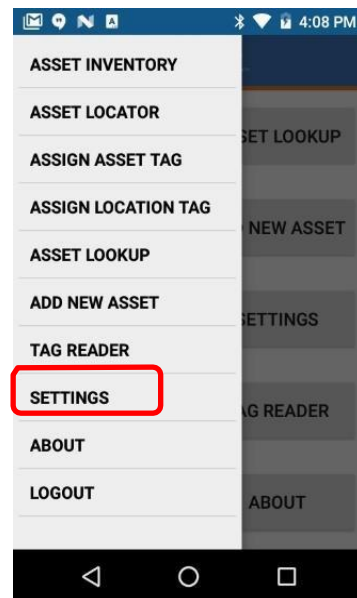
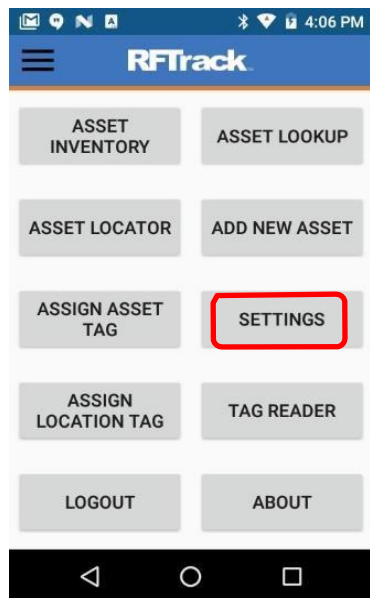
Offline Mode

Offline mode allows RFTrack Mobile to operate completely disconnected from a network and the RFTrack Server. The database is copied locally to the handheld, and the user can perform activities in a batch mode that can be uploaded to the server when a network connection is available. This is helpful in areas where good Wi-Fi is not available. Scan Mode switcher on the top right of most screens, allows you to switch between Barcode and RFID scanning modes.



Switching Between Online and Offline Mode

RFTrack Mobile defaults to Online mode. You should remain in Online mode whenever possible so that all of your activity is saved to RFTrack Server in real-time. When you find it necessary to use Offline mode because you are in an area without network connectivity, go to the SETTINGS screen. You can access the SETTINGS screen from the Main screen or the Sliding menu.



Switching Between Online and Offline Mode

The selected ONLINE/OFFLINE button will indicate the current state. If the ONLINE button is selected (blue), then you are currently in Online mode. Select the OFFLINE button to switch to Offline mode. If the OFFLINE button is selected, select the ONLINE button to switch back to Online mode.

Online Mode

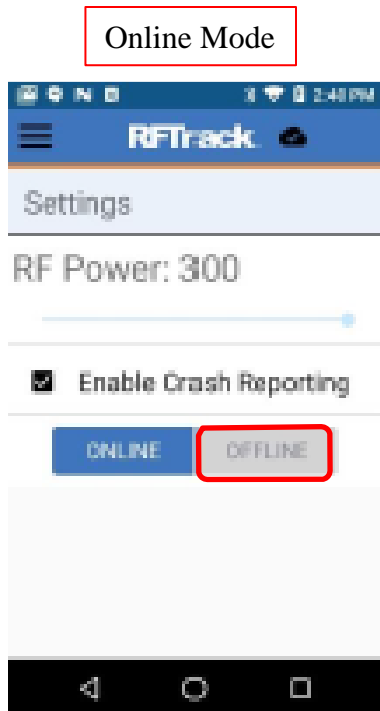


Offline Mode



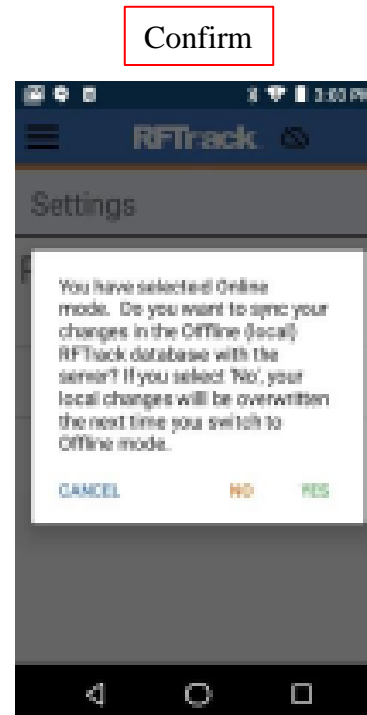
Switching Between Online and Offline Mode

When you select the OFFLINE button to switch to Offline mode, you will be prompted to confirm whether you really want to go Offline. If you select YES, a copy of the RFTrack database will be copied from RFTrack Server to your local handheld. Depending upon how many assets you have and how many asset images are in your database, it can take anywhere from 5 seconds to several minutes to switch to Offline mode.



Switching Between Online and Offline Mode

When you are done working in Offline mode, return to the SETTINGS screen and select the ONLINE button. You will be prompted to confirm that you want to switch to Online mode. If you want to remain in Offline mode and not sync your changes with RFTrack Server, select CANCEL. If you do want to switch to Online mode, but don't want to upload your local changes for some reason, select NO. If you want to switch to Online mode and upload your changes to RFTrack Server, select YES.



Switching Between Online and Offline Mode

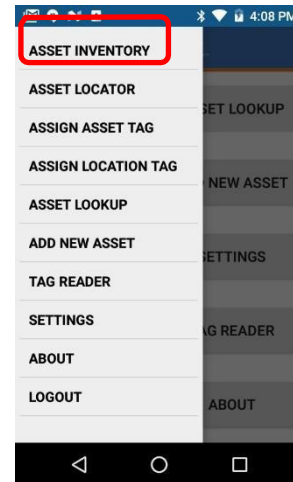
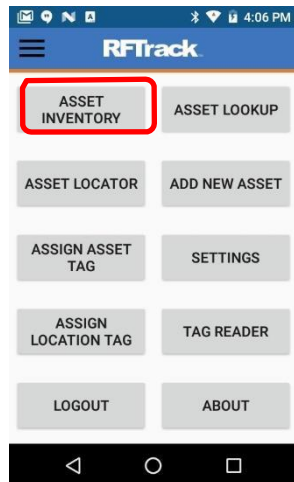
If your local changes are successfully synced with RFTrack Server, you will be notified that the file uploaded successfully.

If any errors occurred, some or all of your local changes may not have successfully synced with the server. If any errors occurred, you can also view the errors by accessing the Event Log in the RFTrack Server web application.



Asset Inventory

The Asset Inventory feature can be accessed from the Main screen or Sliding menu. It allows you to perform a physical inventory by reconciling the assets in each location in real-time.



STEP 1: Select Location

Select the Location you want to inventory. First select the parent location (Example: Building) using the dropdown list at the top of the screen. This will display a list of child locations (Example: Rooms) for the selected parent location. The **Last Inventoried** column indicates the date the location was last inventoried. If the **Last Inventoried** date is prior to the configured **Inventory Start Date**, the date will be red to indicate that it hasn't been inventoried yet for the current inventory period. If the **Last Inventoried** date is after the configured **Inventory Start Date**, the date will be green.

Select parent location first



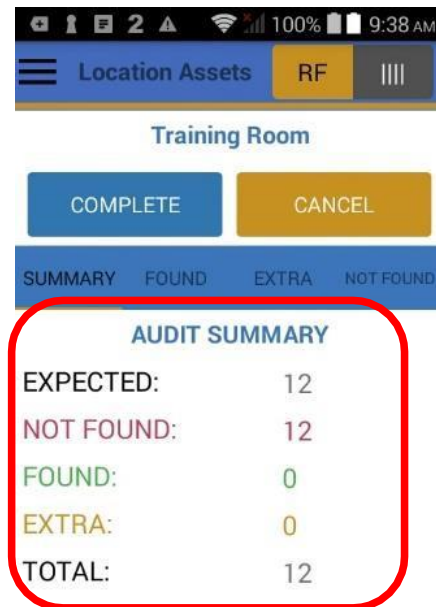
Room	Last Audited
60	5/17/2018...
800-2-1	5/17/2018...
800-3-1	1/9/2018...
Check-In	NEVER
Demo Room 1	11/6/2017...
Demo Room 2	8/25/2011...
Front Entrance	NEVER
Metal Mount Test	NEVER
Performance Demo	9/5/2014 4:23:2...
Performance Test	NEVER
ReAssign Test	8/14/2014...
RFID Lab	8/4/2018 3:36:4...
Room 1	8/15/2014...
Room 6	1/12/2018...

Then select the child location (Example: Room) from the list. Either tap on the location you want to inventory, or scan the location tag (if you've assigned Location tags).



STEP 2: Inventory Summary

After selecting a child location (Example: Room) an Inventory Summary tab will be displayed indicating how many assets are expected to be in the selected location. By default, all assets are considered "Not Found" until each tag is scanned.



STEP 3: Set Power Level

While performing an inventory you may need to adjust the RF power if the scanner is reading assets in other rooms (through walls). Use the **POWER LEVEL** setting on the bottom of the **SUMMARY** tab to select an appropriate power level for your current Location. If your **POWER LEVEL** dropdown list is empty or you need to modify the Power Levels, please refer to the Mobile Power Levels section in the RFTTrack Administration User Guide.

The selected Power Level will be saved for current Location when you click **COMPLETE**, and will automatically adjust to that level the next time someone inventories that same Location.



STEP 4: Start Reconciling

Pull the trigger and start scanning around the location. The scanner will beep as it finds tagged assets, and the counts on the Inventory Summary tab will refresh allowing you to see the reconciliation process in real-time. After a tagged asset has been processed it won't continue to beep. When the beeping subsides, all assets in that area have been scanned. Continue scanning all areas of the location until no more beeping is heard.

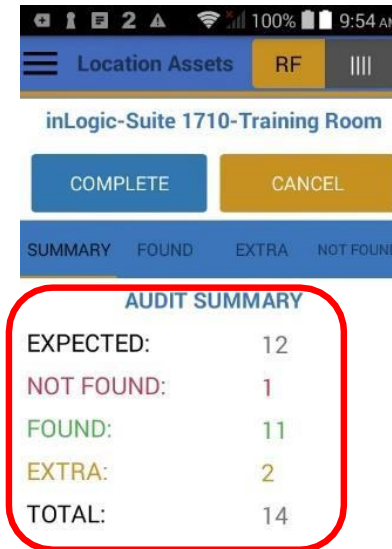
Tab Descriptions:

SUMMARY – this tab displays a summary of the Expected, Not Found, Found, and Extra assets.

FOUND – this tab displays a datagrid listing Assets that have been found.

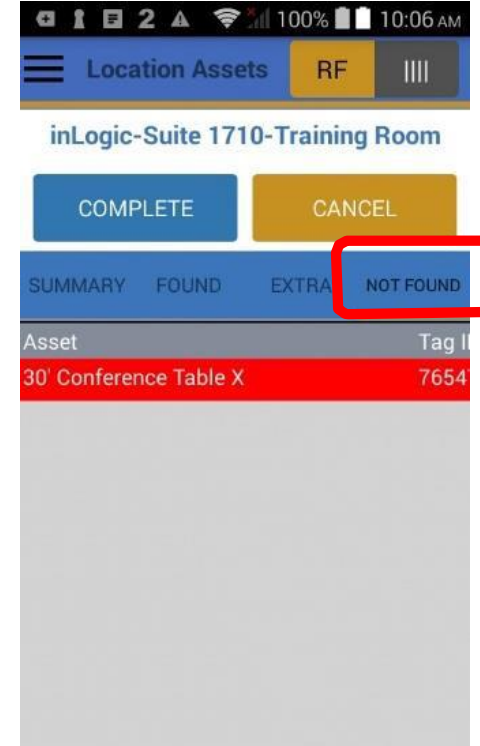
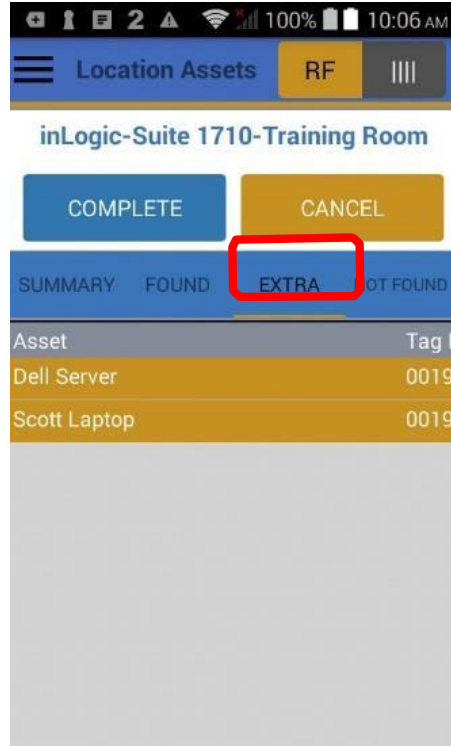
EXTRA – this tab displays a datagrid listing Extra Assets that weren't expected to be in the location.

NOT FOUND – this tab displays a datagrid listing Assets that were expected, but not found.

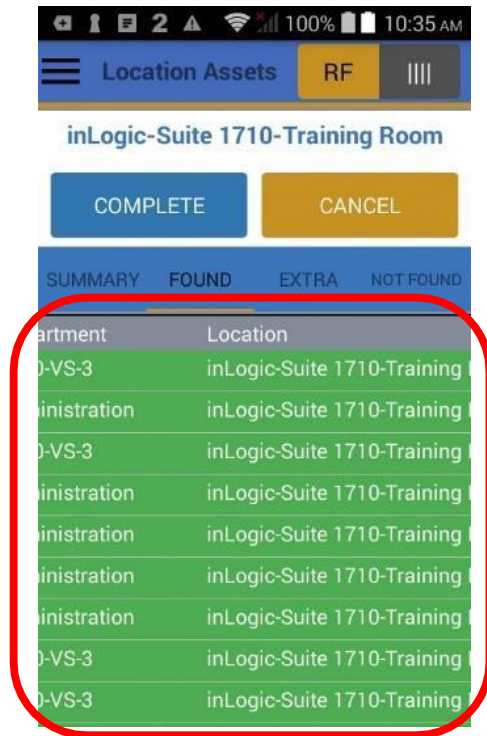


Tab Descriptions:

Click on the FOUND, EXTRA, NOT FOUND tabs to view assets for each status. Tags can also be scanned while on these tabs.



Swipe Left - swipe to the left on the Found, Extra, and Not Found asset records to see more data columns.

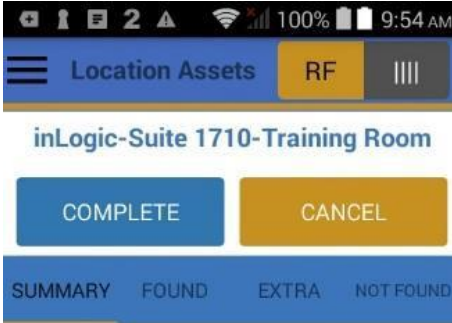


STEP 5: Resolve Exceptions

There are 2 types of Exceptions:

NOT FOUND - Assets that the system is expecting to be in the location

EXTRA - Assets that were scanned in the current location, but are assigned to a different location.



The screenshot shows a mobile application interface for an audit. At the top, there is a status bar with icons for notifications, signal strength, and battery level (100%), along with the time 9:54 AM. Below the status bar is a navigation bar with a hamburger menu icon, the text 'Location Assets', a yellow button labeled 'RF', and a three-line menu icon. The main content area displays the location name 'inLogic-Suite 1710-Training Room' in blue text. Below this are two buttons: a blue 'COMPLETE' button and a yellow 'CANCEL' button. A blue bar contains four tabs: 'SUMMARY' (selected), 'FOUND', 'EXTRA', and 'NOT FOUND'. Below the tabs is the heading 'AUDIT SUMMARY' in blue. The summary table lists the following data:

EXPECTED:	12
NOT FOUND:	1
FOUND:	11
EXTRA:	2
TOTAL:	14

Press and hold – press and hold an asset detail record on the Found, Extra, or Not Found tab for about 1 second to display a menu of actions you can perform on the selected asset. The actions will vary depending upon the tab you are on.

FOUND tab actions:

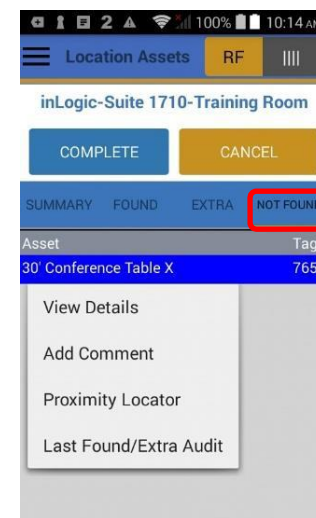
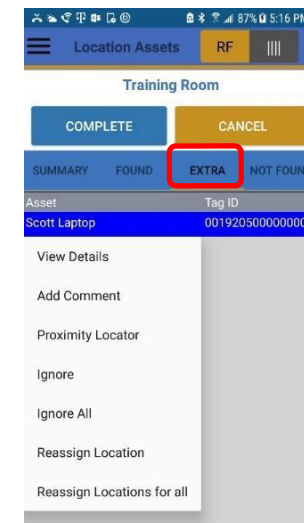
- View Details - displays Asset Detail screen
- Add Comment – allows inventory specific comments to be entered for the selected Asset
- Proximity Locator – displays Proximity Locator screen for the selected Asset

EXTRA tab actions:

- View Details – displays Asset Detail screen
- Add Comment – allows inventory specific comments to be entered for the selected Asset
- Proximity Locator – displays Proximity Locator screen for the selected Asset
- Ignore – Ignores the selected Asset and removes it from the EXTRA list.
- Ignore All – Ignores all Extra Assets and removes them from the EXTRA list.
- Reassign Location – transfers the selected Asset to the Location being inventoried.
- Reassign Locations for all – transfers all Extra assets to the Location being inventoried.

NOT FOUND tab actions:

- View Details – displays Asset Detail screen
- Add Comment – allows inventory specific comments to be entered for the selected Asset
- Proximity Locator – displays Proximity Locator screen for the selected Asset
- Last Found/Extra Inventory – displays most recent Found/Extra inventory record for the selected Asset.



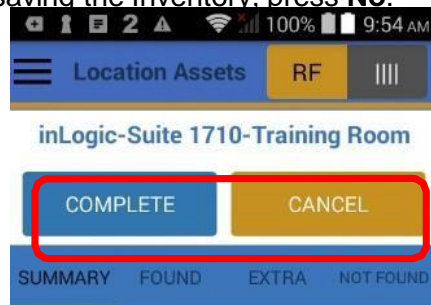
STEP 6: Complete the Inventory

There are 2 options when you are ready to leave this screen:

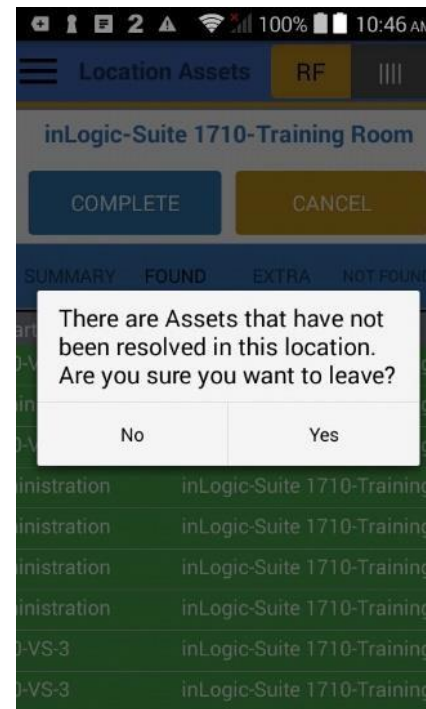
COMPLETE - this button saves the location inventory when you are done scanning.

CANCEL - this button cancels the location inventory if you don't want to save it.

If there are any **NOT FOUND** or **EXTRA** assets when you press **COMPLETE**, you will be prompted to confirm that you are done with the location and want to leave. If you would like to resolve the **NOT FOUND** or **EXTRA** assets before saving the Inventory, press **No**.

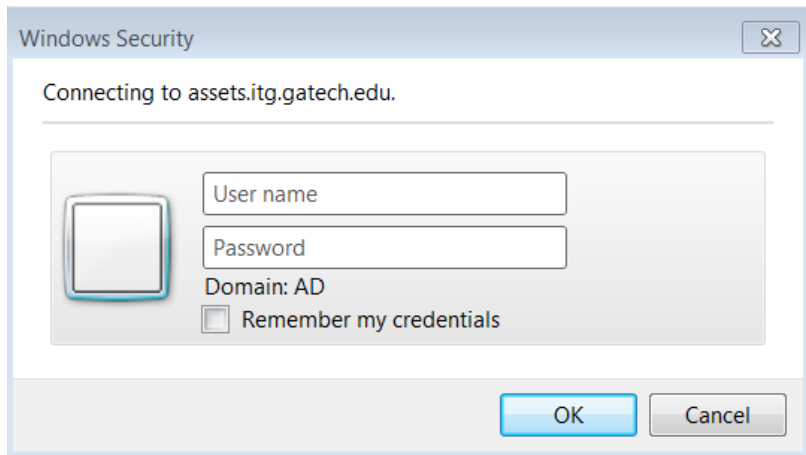


AUDIT SUMMARY	
EXPECTED:	12
NOT FOUND:	1
FOUND:	11
EXTRA:	2
TOTAL:	14



RFTrack Log in Screen

Step 1. Log into the RFTrack.net system (URL: <https://assets.itg.gatech.edu/>)



Username: Computer id number

Password: Computer password

Producing Property Report

The screenshot shows the RfTrack web application interface. At the top, there is a navigation bar with the 'RF' logo and 'HOME' text. Below this is a 'RFTRACK' header. A yellow box highlights a user icon in the top right corner with the text 'Select the Icon that looks like a page.' Below the header, there is a green update notification: 'UPDATE: A new version of the RfTrack web application is available. INSTRUCTIONS: Please notify your RfTrack system administrator to run the RfTrack Update application on the server to install these updates.' The main content area is a dark blue sidebar menu. A yellow box highlights the 'REPORTS' section with the text 'Select Asset by Coordinating Cost Center under the "Custom Column"'. The 'REPORTS' menu is divided into three columns: 'MAIN', 'INVENTORY', and 'CUSTOM'. The 'CUSTOM' column contains the option 'Assets by Coordinating Cost Center', which is highlighted with a yellow box and an arrow pointing to it. Below the menu, there is a pie chart titled 'Assets by Inventory Pro...' with a legend showing 'Extra', 'Not Invented', 'Found', and 'Missing'. A context menu is open over the pie chart, listing options like 'View Image', 'Copy Image', etc. The browser's address bar shows 'https://assets.itg.gatech.edu/#'.

Producing Property Report

Report Assets By Coordinating Cost Center - Report Criteria

Coordinating Cost Center [ALL]

Tagged Date [ALL]

CC000001

CC000002

CC000003

CC000009

CC000011

CC000012

CC000013

CC000014

CC000015

CC000027

CC000029

CC000031

CC000032

CC000033

CC000035

CC000037

CC000038

CC000042

ASSETS BY COORDINATING COST CENTER/LOCATION REPORT

Coord Cost Center	Location	Asset Name	Manufacturer	Model	Serial Number	Custodian	Audit Location	Audit Date	Status
050: COLLEGE OF	050: COLLEGE OF	Relion XE2142 Server	Penguin Computing	XE2142	FZ100207738	Allen Mercer, David	050: COLLEGE OF COMPUTING-247	7/15/2020 12:37:11 PM	Found
051D: RICH COM	051D: RICH COM	Catalyst 9300 48-port of 5Gbps Network Essentials	Osco	C9300-48UNE	FJC2331U0GA	A Miller, Thomas	051D: RICH COMPUTER CENTER-109	6/18/2020 12:00:00 AM	Found
085: Blake R. Van	085: Blake R. Van	Synergy H1	BIOTEK		1908213	J Santangelo, Philip	195: Roger A. and Helen B. Krone Engineered B-4110C	7/17/2020 9:29:04 AM	ExtraAsset
103: BOGGS CHE	103: BOGGS CHE	Packard 5003 Cobra II automated gamma counter	Packard	D-5003	401684	Lewis Grimm Steven	103: BOGGS CHEMISTRY-3 62	3/31/2020 5:51:03 PM	Found
129: Paper Trice	129: Paper Trice	Nicolet iS20 Mid Infrared FT-IR Spectrometer w/MCT	Thermo Fisher Scientific		BOA2010037	Sievers, Carsten			
135: MANUFACTU	135: MANUFACTU	#835 Club Car	Club Car Inc	NMN	AQ0406-367013	T Ogletree, Cary	UNKNOWN-UNASSIGNED	7/7/2020 12:00:00 AM	Found
146: Petit, Parker H.	146: Petit, Parker H.	pE-4000 universal fluorescence	Cool LED PE-340 Fura		NSN	Yang, Bo	146: Petit, Parker H.	7/15/2020 2:20:43 PM	Found

Producing Property Report

The screenshot shows a web browser displaying a report titled "ASSETS BY COORDINATION REPORT". The browser address bar shows the URL: https://assets.itg.gatech.edu/reports/custom/GATech_RptAssetsByDepartment.aspx. The report interface includes a sidebar on the left for selecting a "Cost Center", a main table of assets, and a right-hand panel for report options.

Cost Center Selection: The sidebar on the left has a dropdown menu for "Cost Center" with "CC000003" selected. A yellow callout box points to this dropdown with the text: "The Cost Center you select will be located at the left edge. CC000003 Cost Center".

Report Options: The right-hand panel has a "Print" icon and a "Format" dropdown menu. The "Format" menu is open, showing options for "Excel", "PDF", and "Word". A yellow callout box points to the "PDF" option with the text: "You have several format to print your report. We request you submit a PDF format. You can create the report in an Excel format in order to manipulate the information to assist your I selected CC000003 as my Cost Center".

Asset Table: The main table lists assets with columns for Coord, Cost Center, Location, Tag ID, Asset Name, Manufacturer, Model, Serial, Location, Audit Date, and Status. The table contains multiple rows of asset data, including items like "PowerEdge R730x d", "AE Nexus 9300 Switch", "4U Rackmount Server", "Dell Computer Cluster", "AcePower 486132 System", "PC CLUSTER", "PowerEdge R720 Intel Xeon E-2", "Microway Computer Cluster", "PowerVault TL2000 w/ Drive", "IBM Computer Cluster", "Toshiba 170 HPC Chassis", "Apple Server", "Computer Cluster", "Seagate Barracuda w/ Hard Drive", and "ThinkStation P700".

Questions & Answers

