

AssetWorx! Handheld Application User Guide

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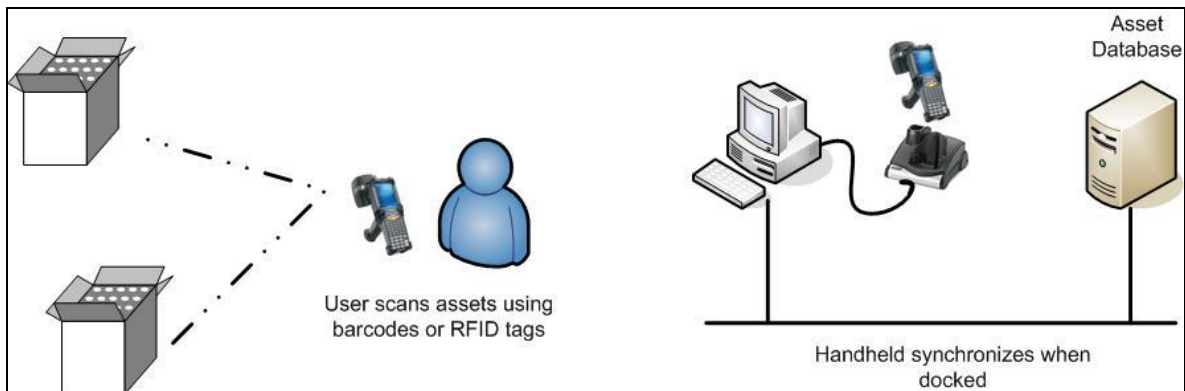
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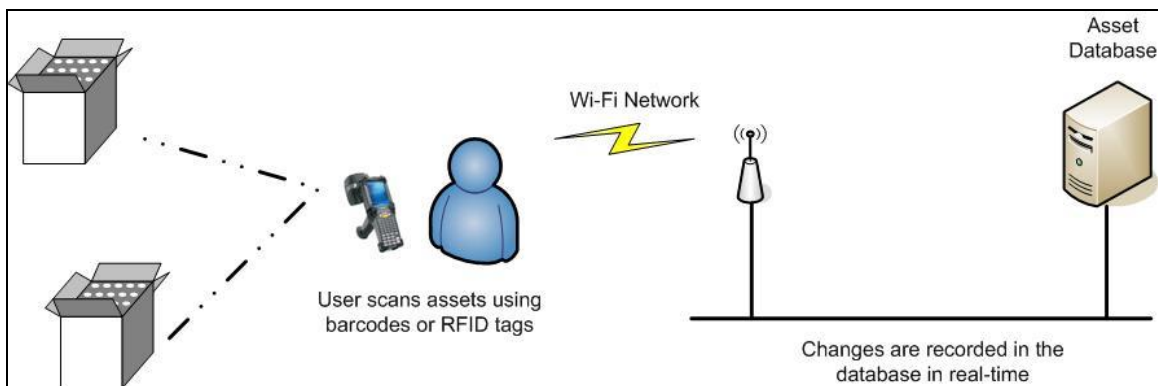
Chapter 1 AssetWorx! Handheld Application System Overview

AssetWorx! Handheld Application provides rapid scanning and inventory of assets using either barcodes or RFID tags. The advantage of RFID tags over barcodes is that tags can be read from distances up to 20 feet and line of sight is not required.

For communicating with the asset database, AssetWorx! Handheld Application may operate in either batch mode or web services connected mode. Use batch mode when Wi-Fi connectivity is not available or is not reliable.



AssetWorx! running in Batch Mode



AssetWorx! running in Wi-Fi Connected Mode

For each asset, AssetWorx! tracks:

- Name
- Location

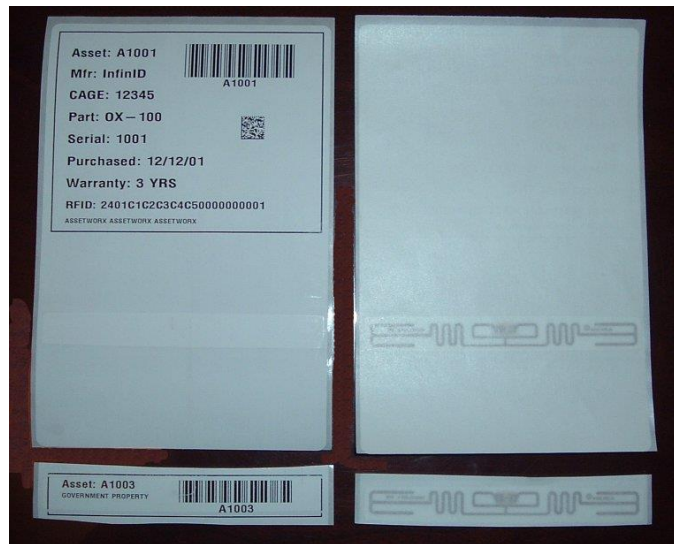
- Description
- RFID Tag
- V-Tag ID
- Status
- Supplier
- Text 1
- Text 2
- Text 3
- Text 4
- Text 5
- Text 6
- Text 7
- Text 8
- Text 9
- Text 10
- Text 11
- Text 12
- Text 13
- Text 14
- Text 15
- Date 1
- Date 2
- Date 3
- Date 4
- Date 5
- ListValue 1
- ListValue 2
- ListValue 3
- ListValue 4
- ListValue 5
- Last Observed Location
- Last Observed Time
- Picture

The Asset Name is used as a key to identify each unique asset in the database.

Chapter 2 RFID Tags

RFID Tags come in two form factors:

- Label – for placing on non-metal and non-liquids
- Metal Mount – for placing on metal or liquids



Label Tags – Note the RFID Tag Inlay on the back

The Metal Mount tags include a foam or plastic backing that increases the tag read efficiency in the vicinity of metals or liquids.



Sample Metal Mount Tags

EPCGlobal Class 1 Gen 2 tags can store 96 bits of asset identification information. Tags can be pre-programmed at the factory and bought in bulk.

Chapter 3 Using AssetWorx! on the handheld

When you first open up the AssetWorx app, the first screen you will see is the Scan Room Location screen which is used for performing periodic inventories. This is one of the primary functions of AssetWorx mobile although other features such as Asset management and locating also exist within the app.

3:02

Scan Room Location

SCAN ROOMASSETSLOCATIONSCHECKOUTMO

Barcode

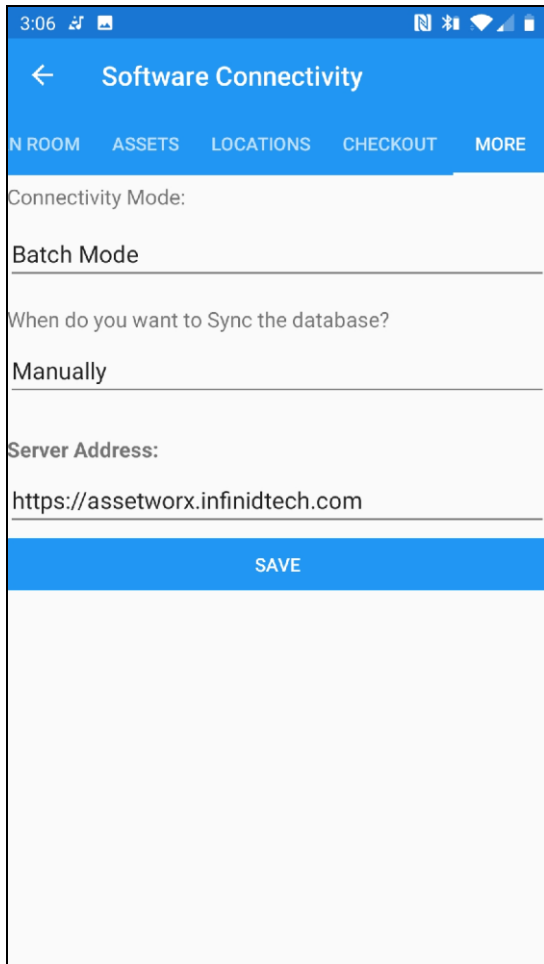
SEARCH

Name	RFID Tag	Last Inventoried
0 Shelf 170	XXXXXXXXXXXXXXXX	
1 Shelf 171	XXXXXXXXXXXXXXXX	
2 Shelf 172	XXXXXXXXXXXXXXXX	
3 Shelf 173	XXXXXXXXXXXXXXXX	
4 Shelf 174	XXXXXXXXXXXXXXXX	
Balcony	E200001D8913025813	
beep beep location		
beep beep location		

Main Site

Working in batch mode

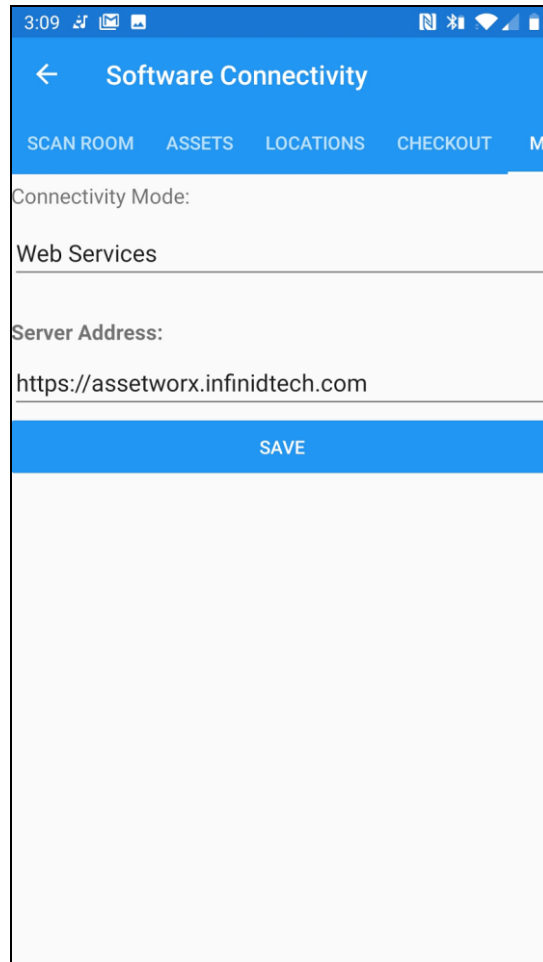
To work in Batch Mode, go to the Software Connectivity screen which can be found under the More tab. Click Batch Mode and then choose when you want to sync the database.



The screenshot shows a mobile application interface for 'Software Connectivity'. At the top, there is a blue header bar with a back arrow and the title 'Software Connectivity'. Below the header is a navigation bar with five tabs: 'IN ROOM', 'ASSETS', 'LOCATIONS', 'CHECKOUT', and 'MORE'. The 'MORE' tab is currently selected. The main content area is divided into sections. The first section is titled 'Connectivity Mode:' and contains a single option, 'Batch Mode'. The second section is titled 'When do you want to Sync the database?' and contains a single option, 'Manually'. The third section is titled 'Server Address:' and contains a text input field with the value 'https://assetworx.infinidtech.com'. At the bottom of the form is a blue button labeled 'SAVE'.

Working in Web Services Mode

To work in Web Services Mode, go to the Software Connectivity screen which can be found under the More tab. You will be asked to specify the server API address.



The screenshot shows a handheld device screen with a blue header bar. The header bar contains a back arrow icon and the text "Software Connectivity". Below the header bar is a horizontal menu with five items: "SCAN ROOM", "ASSETS", "LOCATIONS", "CHECKOUT", and "MORE". The "MORE" item is highlighted. Below the menu is a section titled "Connectivity Mode:" with a dropdown menu showing "Web Services". Below this is a section titled "Server Address:" with a text input field containing the URL "https://assetworx.infinidtech.com". Below the input field is a blue button labeled "SAVE".

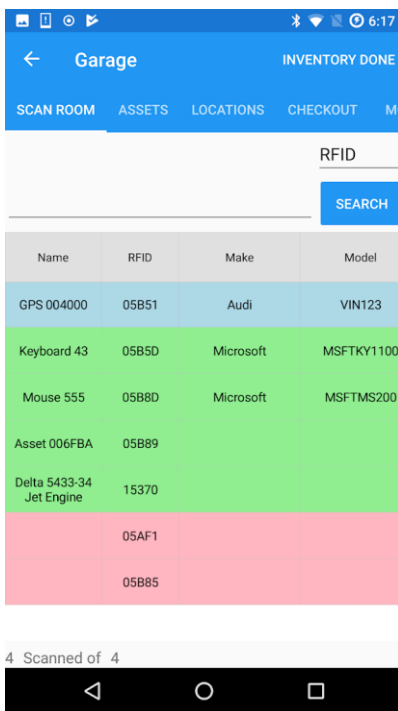
Configuring Scanning

AssetWorx works on either Android or iOS. Supported hardware includes the Zebra MC333R as well as the CSL CS-108. The CS-108 is a sled unit which lets you dock any Android or iOS device.

Scanning a room

To scan a room, go to the Scan Room tab. The initial screen will give you the option of either manually searching for the room you wish to do an inventory for, or if the Location has an RFID tag associated with it, you can scan the tag to be brought directly into the Scan Room Asset screen.

AssetWorx lets you switch between RFID and Barcode mode using the select box in the top corner. The scanned assets are color coded. Orange indicates an asset that is expected in this room but has not been scanned yet. Green indicates an asset that is expected in this room and has been scanned. Blue indicates an asset that is expected in another room but has been scanned in this room. Pink indicates an asset that is not in our database yet.



Managing Locations

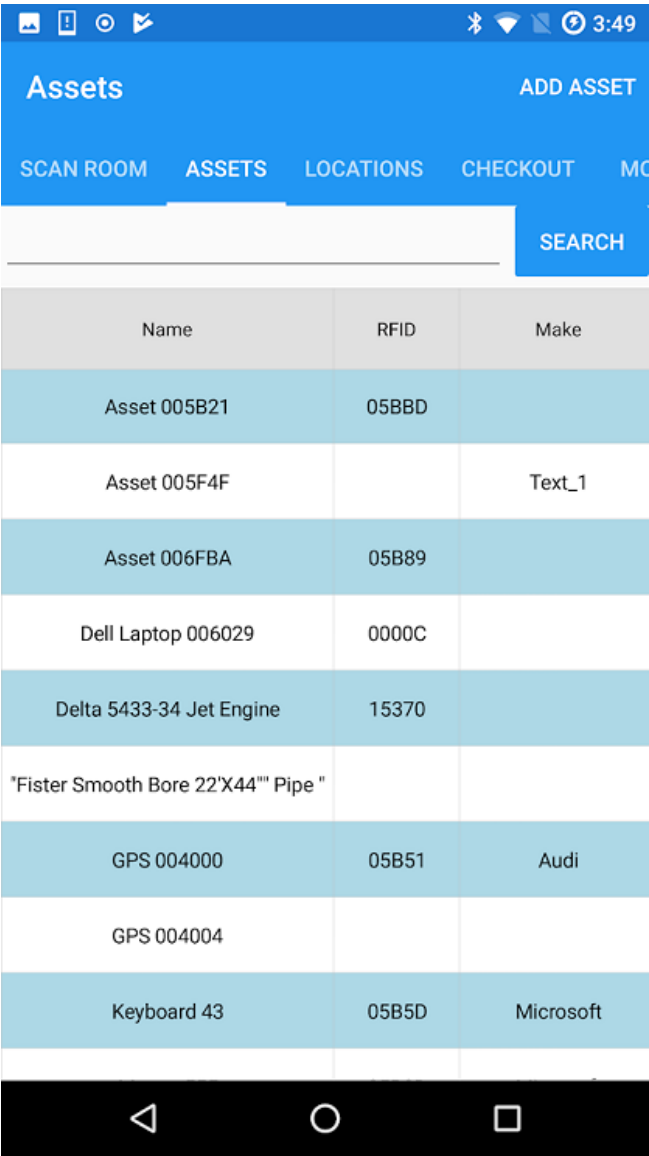
The Locations screen is used to either add or edit locations in the AssetWorx system. Click Add to add a new Location. To edit, use the Search feature to find the location you are looking for, select it and click the Edit button. Associating an RFID tag to a location will allow you to scan the RFID tag value for that location when you want to start an inventory.

The screenshot displays the 'Locations' screen in the AssetWorx system. At the top, there is a blue header bar with the title 'Locations' and an 'ADD LOCATION' button. Below the header is a navigation bar with tabs for 'CAN ROOM', 'ASSETS', 'LOCATIONS' (which is selected), 'CHECKOUT', and 'MORE'. A search bar with a 'SEARCH' button is located below the navigation bar. The main content area contains a table with the following data:

Name	RFID Tag	Site	Building
Balcony			
Garage	705B8		
Parking	705AF		
Patio			0089F7
Room 101	705C4	Main Site	
Room 102		Main Site	
Room 103		Main Site	
Room 104		Main Site	
Room 105		Main Site	

Managing Assets

The Assets screen is used to either add or edit assets in the AssetWorx system. Click Add to add a new Asset. To edit, use the Search feature to find the asset you are looking for.



Edit Asset

The Edit Asset screen is used to edit any asset within the system. This screen can be used to add new assets as well as manage fields for existing assets.

To associate an RFID tag to your asset, make sure RFID is selected in the top right corner and select the RFID Tag field. Hold down the trigger on your RFID scanner and the tag that is read will have its EPC value show up. AssetWorx uses very low power mode for RFID in this screen so you will have to get your RFID tag very close to your scanner. You can also switch to Barcode mode to associate any barcodes with asset fields of interest.

Scroll down to the bottom of this screen. Any custom fields will show up in this area. They need to be flagged to display on the handheld though. Please refer to the AssetWorx User Guide for more information on setting up custom fields.

← Edit Asset SAVE ASSET

SCAN ROOM ASSETS LOCATIONS CHECKOUT MO

RFID

Name:
Mouse 555

Asset Type:

Description:

VTag ID:

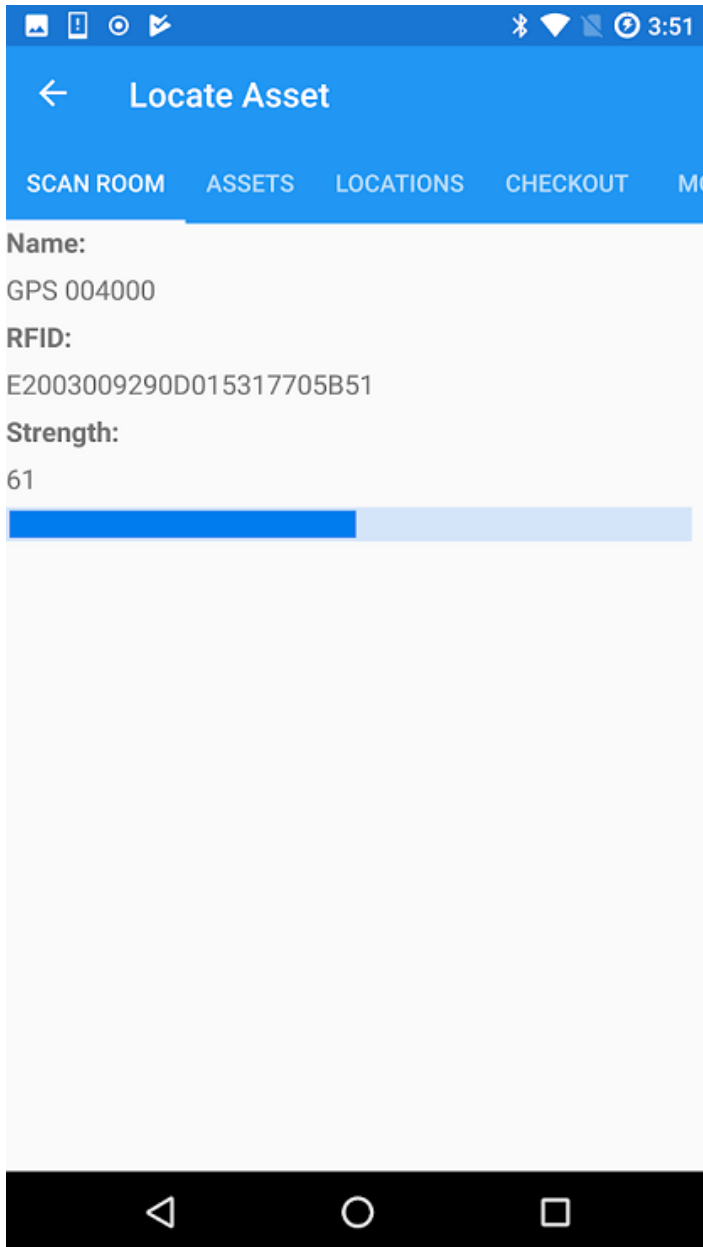
RFID Tag:
E2003009290D016817705B8D

Location:
Garage

Department Code:

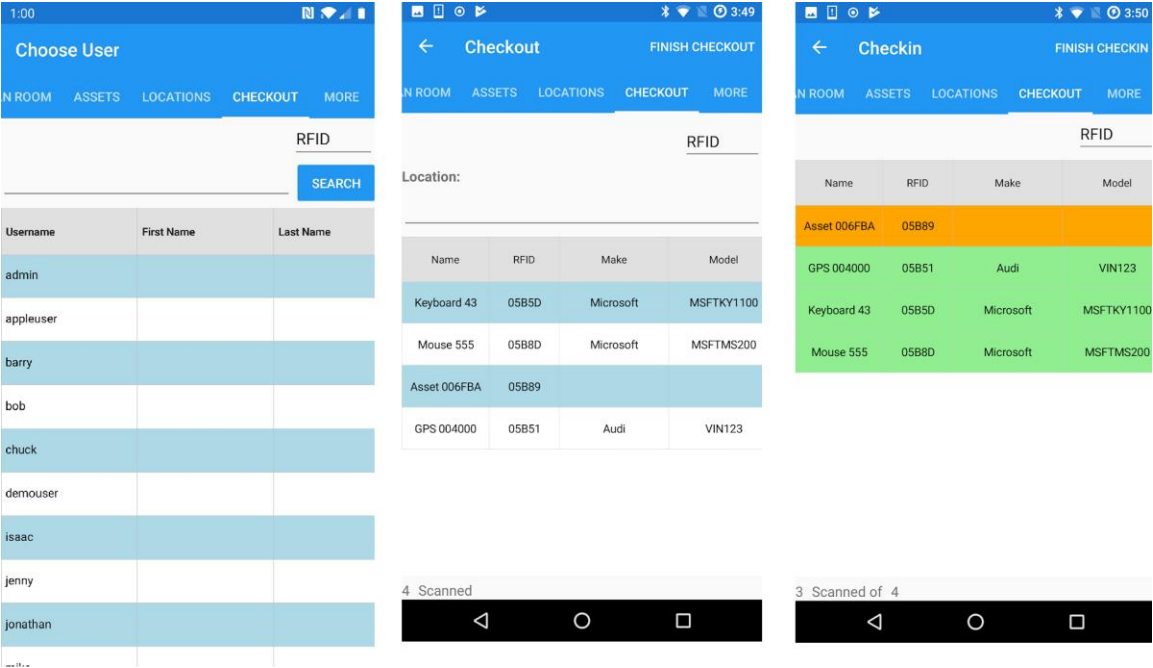
Locating an Asset

Both the Scan Room Asset screen or the Assets screen provide a link to Locate the asset in question. Hold down the trigger within this screen to get a feel for how close you are to the asset you are looking for. The closer you get, the higher the signal strength will show.



Checking In/Out Assets

These screens allow you to check in our out a group of assets using either barcode or RFID. To get started, first select the user who the assets will be checked in/out to and choose whether you will be doing a Check Out or Check In. For the Check In operation, the screen will initially show all of the assets that have been checked out to the user in orange. As assets are scanned, they will shift over to green.



Associate Asset RFID




Associate Asset RFID is used to associate an RFID tag with an Asset from the database. First start off by choosing if you want to work in RFID mode or Barcode mode


- Barcode mode lets you scan a full or partial barcode that contains the data that is encoded into the RFID tag. Setting “Initial RFID Chars” makes it so that you only have to scan a barcode that contains the last characters that are encoded into the RFID tag. You can have your RFID tag provider to put a barcode on the RFID tags that contain either the full or last few RFID tag characters. Barcode mode is useful if you have a lot of RFID tags around and you don’t want to risk accidentally associating the wrong RFID value.
- RFID mode lets you scan the RFID tag directly. The scanned RFID value will show up in the “RFID Tag” textbox.

You can get to this screen from the Assets screen.

Once the RFID Tag value is populated, click the Associate button to associate the data. When done, press the Clear button to move onto the next asset.

2:55



 Associate Asset

SCAN ROOM

ASSETS

LOCATIONS

CHECKOUT

M

RFID

Name:

A1001

Current RFID Tag:

No RFID Tag Value Assigned

RFID Prefix:

Prefix value for barcode scans

New RFID Tag:

240100000000000000000000001111

SAVE

Associate Location RFID

Associate Location RFID is used to associate an RFID tag with a Location from the database. First start off by choosing if you want to work in RFID mode or Barcode mode

- Barcode mode lets you scan a full or partial barcode that contains the data that is encoded into the RFID tag. Setting “Initial RFID Chars” makes it so that you only have to scan a barcode that contains the last characters that are encoded into the RFID tag. You can have your RFID tag provider to put a barcode on the RFID tags that contain either the full or last few RFID tag characters. Barcode mode is useful if you have a lot of RFID tags around and you don’t want to risk accidentally associating the wrong RFID value.
- RFID mode lets you scan the RFID tag directly. The scanned RFID value will show up in the “RFID Tag” textbox.

You can get to this screen from the Locations screen.

Once the RFID Tag value is populated, click the Associate button to associate the data. When done, press the Clear button to move onto the next location.

2:55

← Associate Location

CAN ROOM ASSETS LOCATIONS CHECKOUT MORE

RFID

Name:
Room 104

Current RFID Tag:

RFID Prefix:
Prefix value for barcode scans

New RFID Tag:
240200000000000000002322

SAVE

App Settings

The app settings screen lets you make application wide setting adjustments. Below are a description of each setting:

1. Inventory Duration – This is the duration in days in which a location/asset will be considered as recently inventoried. Locations that were inventoried within the last X days will warn you that they were recently inventoried and assets within that location will show up with a green check mark. You should set this to reflect how long your typical inventory takes.
2. Inventory Power Level – The power level that the handheld RFID scanner transmits at for inventories. This value defaults to maximum at 100% but can be dropped down if there are too many locations in close proximity.
3. Checkout Power Level - The power level that the handheld RFID scanner transmits at for checkout operations. This value defaults to maximum at 100% but can be dropped down if there are too many assets in close proximity.
4. Associate and Edit Power Levels - The power level that the handheld RFID scanner transmits at for edit operations. This value defaults to a very low 5% but can be increased if the RFID tags you are using don't read at 5% power.
5. Associate RFID Prefix – The associate screen lets you scan a barcode which represents the last few digits of the RFID EPC value with the assumption that the previous digits are all static. The main disadvantage to this is that you need to get all of your RFID tags commissioned with a specific serialization formula.

2:52

← App Settings SAVE

IN ROOM ASSETS LOCATIONS CHECKOUT MORE

Inventory Duration:

7

Inventory Power Level(1-100):

100

Checkout Power Level(1-100):

100

Associate and Edit Power Level(1-100):

5

Associate RFID Prefix: