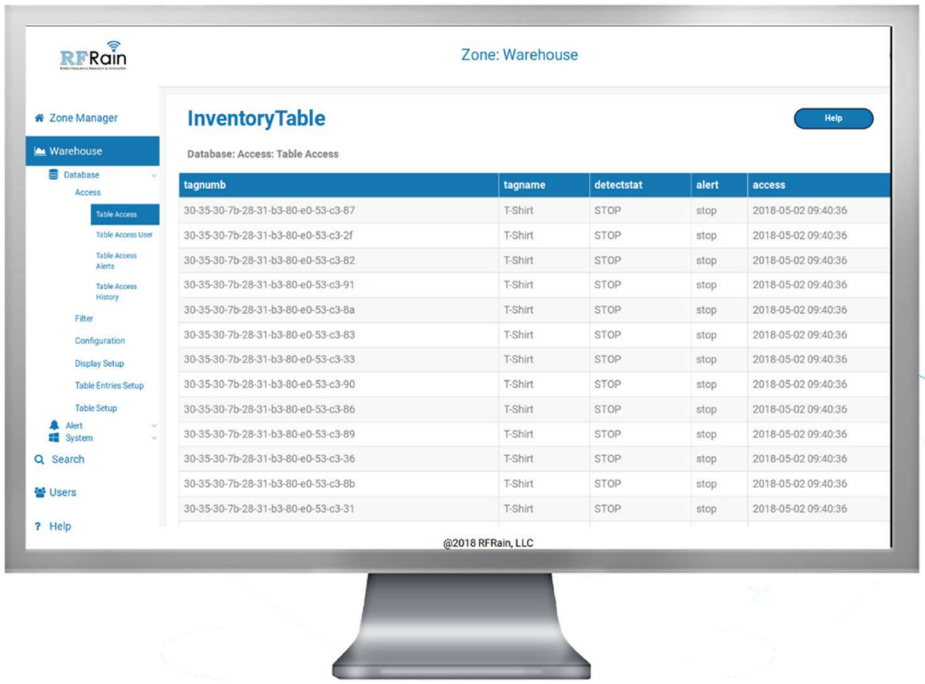


RFRain Zone Manager User Manual V7.00.14.xx

Date: 11/29/2022

Editor's Note

The purpose of this manual is to provide instruction to the user on how to configure an RFRain RFID system from scratch. To accomplish this task, the user must follow the steps in order, as they are listed.

It is possible that a customer will receive an RFID system from RFRain that has been pre-configured before delivery. If your system fits that scenario, many of the steps listed in the following sections will not be necessary because they have already been done for you. If you are not sure about the level of pre-configuration performed on your system, you will need to consult with your RFRain sales person or an RFRain technical support person to determine how much pre-configuration has been done and how much, if any, user configuration is required.

The entire staff, here at RFRain, is dedicated to you and to the quality of the RFRain product that you have purchased. It is our sole purpose to ensure that you encounter as few "bumps in the road" as possible during your setup process. We have tried very hard to create a product that is easy to configure and install, and just as important, one that will last you many, many years. We are here to offer our assistance at any time that you may require our help.

If you have any questions about the configuration and/or installation of your RFRain RFID system, please contact RFRain at the following contact options:

Phone: **1- (833) 273-7246**

Email: **sales@rfrain.com**

Table of Contents

Table of Contents

1. Preface

The intent of the document is to provide a user the ability to setup a reader from scratch without the need to be an expert in RFID or a software developer. In addition, the document is a user guide to the Zone Manager Software.

The RFRain Zone Manager is one of the key proprietary software applications, which allows a user to fully configure the system to track assets in real-time. Below is a summary of the RFRain Zone Manager user manual:

System Section: This section allows a user to configure the Reader's Network Settings to enable Wi-Fi or DHCP connectivity, set Date/Time Zone, and Reboot/Shutdown the Reader.

Reader Section: This section allows a user to configure Reader Settings, name Subzones/Antennas, choose Reader Mode and Start/Stop Reader.

Database Section: This section allows a user to manage tags or assets information. In addition, the database section allows a user to check the tag status, check the time of detection, location of the asset, assign a name for a tag, and many more options.

Features Section: This section allows a user to create alerts, Rest API tester, sync data to the cloud, track longitude and latitude coordinates of assets, perform a system cleaner of various data tables, record live motion of moving tags. The GPIO feature exclusive to the Smart Reader Advanced allows the user to implement door access control or an audible alarm notification.

Administration Section: This section allows a user to Add, Edit or Delete users. There are two modes of authentication, which include admin and user. An admin has full control of the system whereas a user has only limited access. In addition, this section gives an operator the capability to update the system's software through the user interface.

2. Getting Started

2.1 Power-up and User Communication Setup

First you have to power up the reader by plugging in the power supply provided with your shipment into the PWR barrel on the reader and wait for the ON green LED to become solid Green and the ALARM red LED is off. Next is network setup.

Note: Advanced Reder with Battery and Handheld Readers have a power button. Double press power button and wait several seconds for the unit to power on. Hold power button 6 seconds to power off.

Note: Please use the provided power supply to power up the Smart Reader or a power supply with equivalent output of 5V 6A 30W

Second, you must establish a communications link between your computer and the RFRain Smart Reader.

Perform the following steps to establish communication if connected via USB port:
Configure your computer with the static IP address 192.168.101.xx (xx can be any address except for 12). Set the subnet mask to: 255.255.255.0

Open your browser. In the address bar, type the RFRain Gateway default IP Address: **https://192.168.101.12**

2.1.1 Perform the following steps to establish communication if connected via LAN port:

Note: The IP address of this port may be altered. If unsure about the current LAN IP you should connect via USB Port as shown in section 2.1.1

- Configure your computer with the static IP address 192.168.100.xx (xx can be any address except for 24). Set the subnet mask to: 255.255.255.0

- Open your browser. In the address bar, type the RFRain Gateway default IP Address: **https://192.168.100.24**

2.2 Zone Manager Software Login

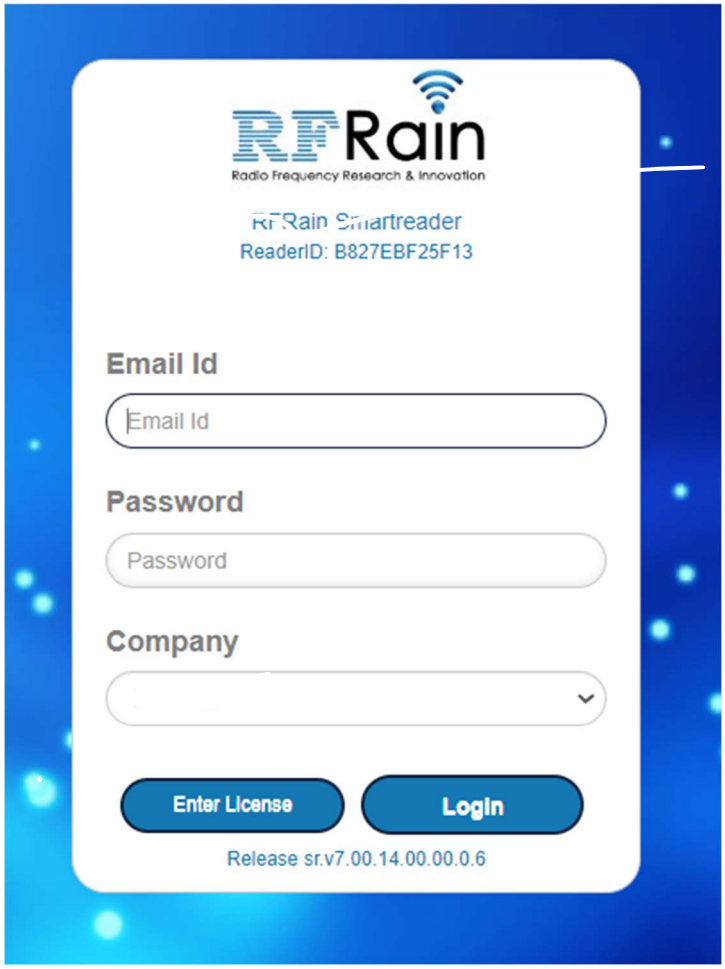
Once communication between the user's computer and the Zone Manager has been established, the user will see the Zone Manager login screen. Log into the Zone Manager software using the following credentials:

- Enter the default email ID and Password login information.

- Email ID
- Password
- Company

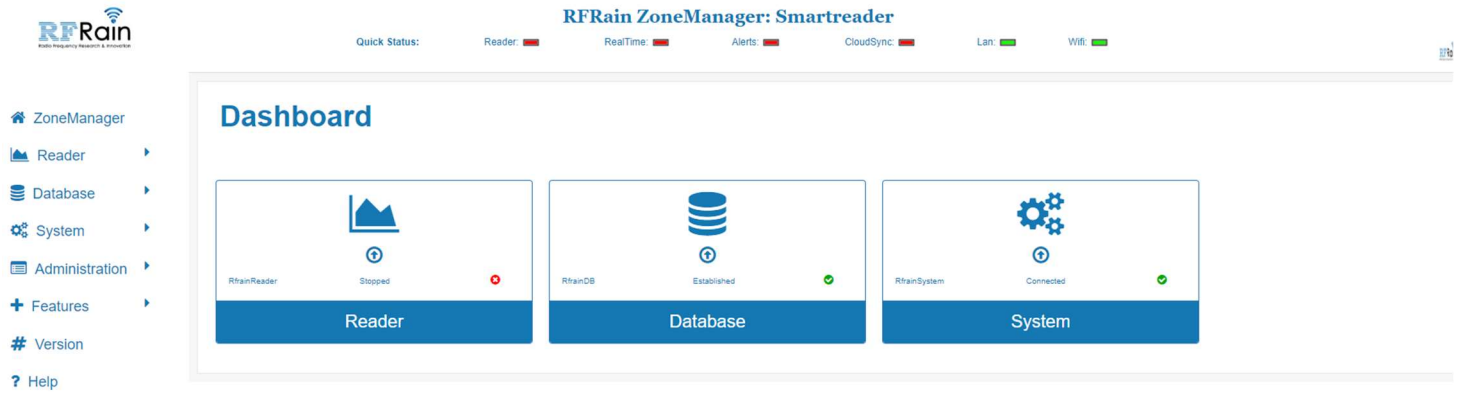
Note: Contact RFRain directly via email sales@rfrain.com to receive your email ID and password.

- Click on the Login button.



2.3 Dashboard

When you first login to the RFRain Zone Manager software, you will be taken to the Dashboard screen. On the Dashboard screen you will see the following three menu options: Reader, Database, and System.

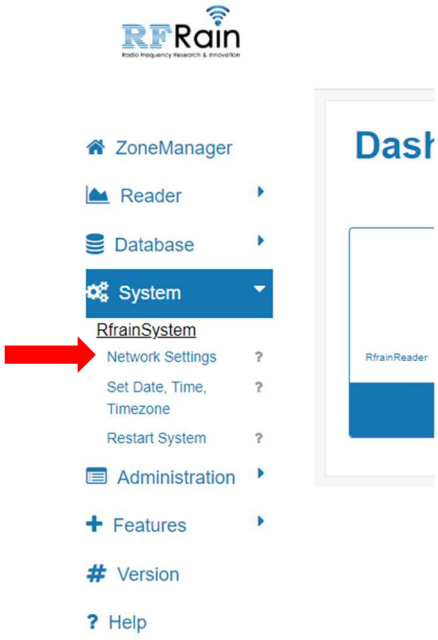


Note: If, at any time while using the Zone Manager software, you desire to return to the Dashboard screen, all you have to do is to click on the Zone Manager label at the top of the left-hand side panel.

3. System

3.1 Settings

From the Dashboard go to System > Network Settings.



3.1.1 Network

There are two ways to establish an internet connection on the Smart Reader:

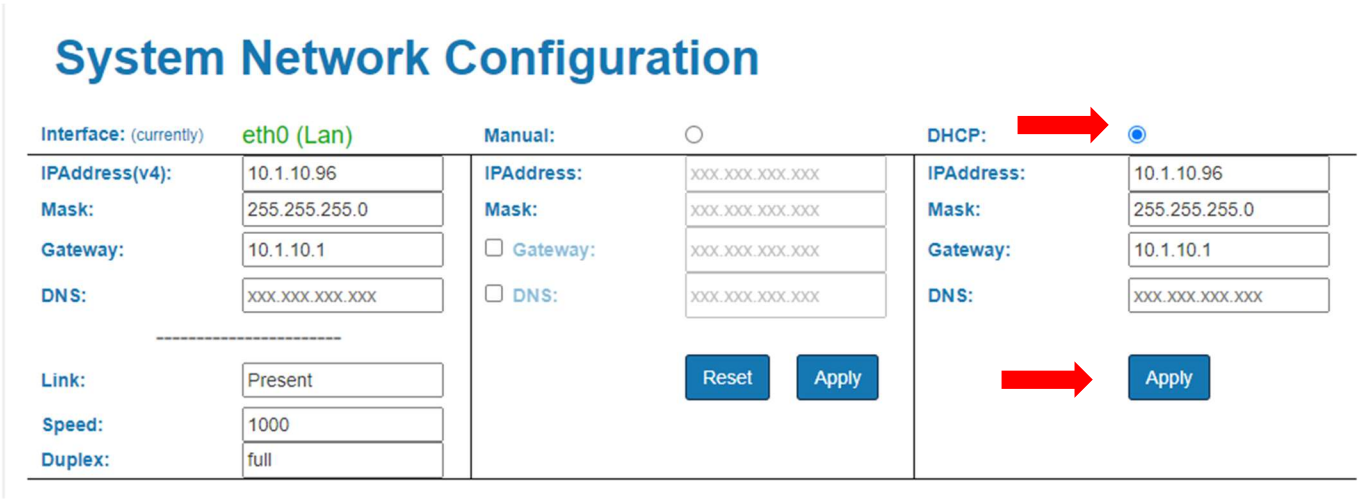
3.1.1.1 Ethernet Network (eth0):

Note: We recommend using the USB port at IP address: 192.168.101.12 to setup the reader to connect to the Ethernet network port. Please check section 2.1.1.

Here you can setup the Smart Reader for DHCP internet connection by connecting the router to the Smart Reader using a Cat-5/5e or Cat-6 Ethernet cable.

- Make sure WiFi Network (wlan0) is Disconnected.

- Next connect a Cat-5/5e or Cat-6 Ethernet cable, select DHCP and click Apply Changes to: eth0. Wait for the screen to refresh and display your newly assigned IP address and other information.

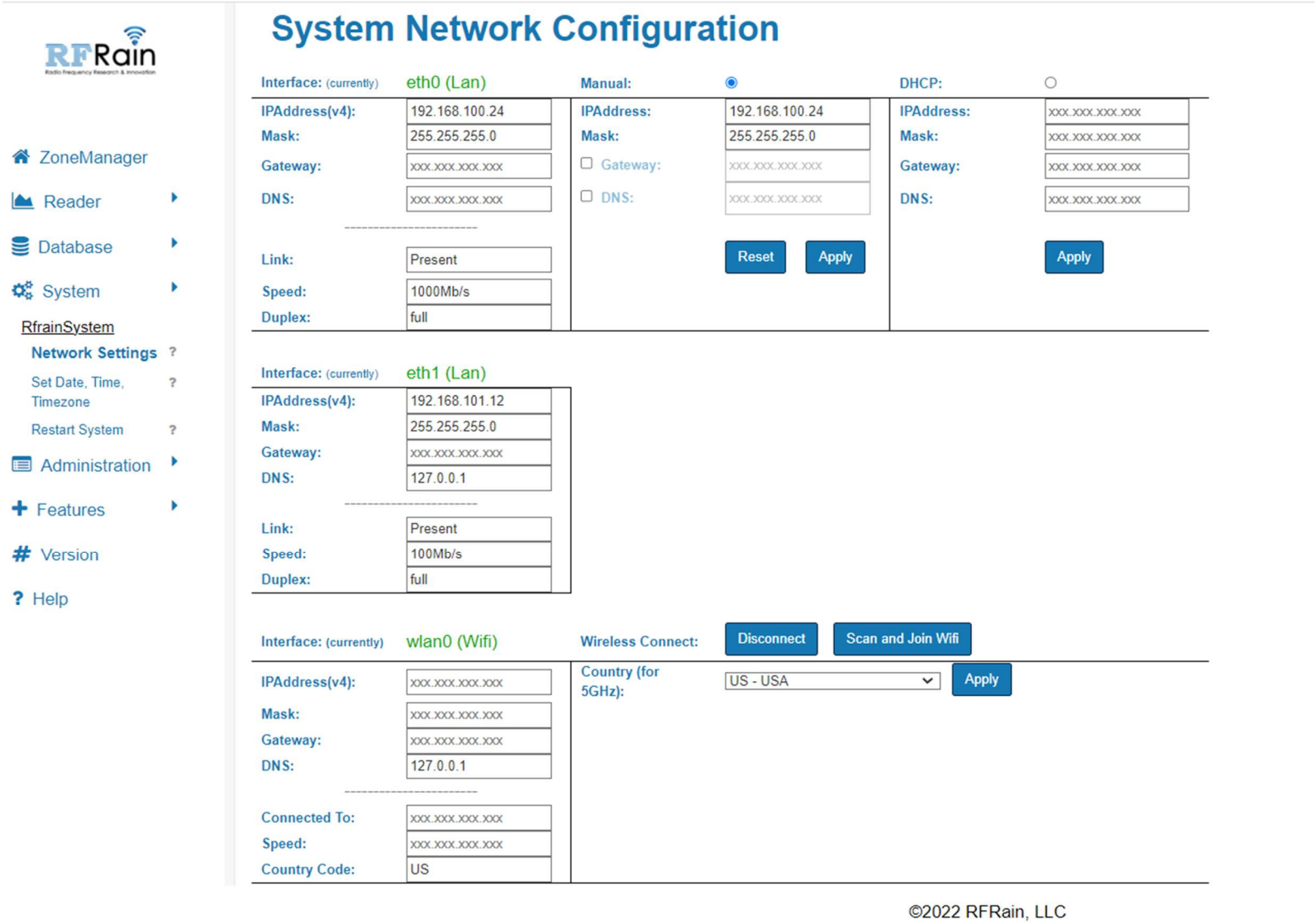


Note: In this example you can login to the ZoneManager Software using the newly assigned IP from any computer that is connected to your local area network by visiting the following URL: https://(local IP). For example: https://10.1.10.96

3.1.1.2 Wi-Fi Network (wlan0):

Note: We recommend using the USB port at IP address: 192.168.101.12 to setup the reader to connect to the Wi-Fi. Please check section 2.1.1.

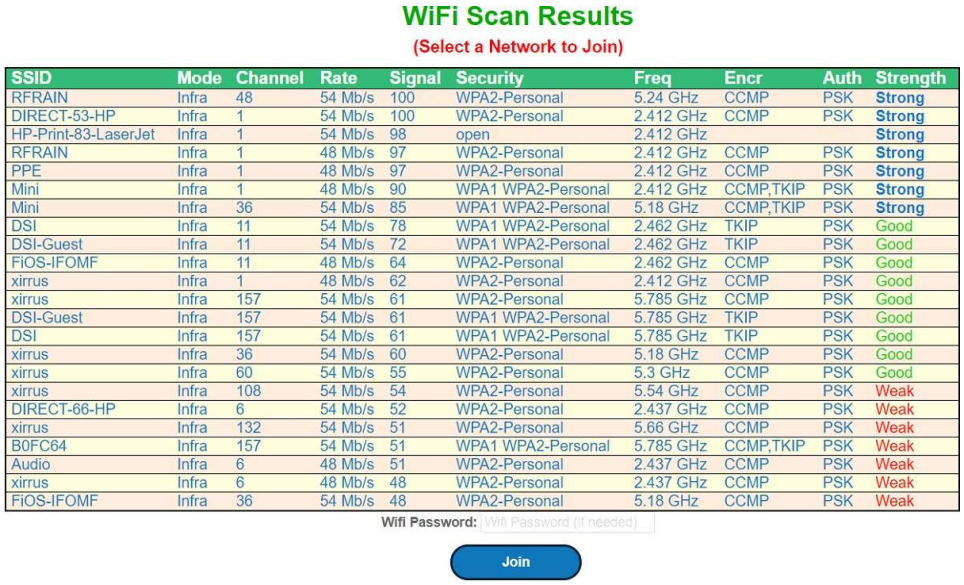
- Make Sure LAN is not connected to DHCP.
- Click on automatic, then click on Scan for Available Networks



- A new window will open showing a list of all the nearby networks in a descending order by signal strength (Very Strong, Strong and Weak).

Note: If the signal is weak, please place the Smart Reader closer to the router or use a Wi-Fi extender to boost the signal. The Zone Manager will not connect to a network with a weak signal.

- Click on your preferred network name, enter your WiFi password, click Join and wait until you are successfully connected.



WiFi Scan Results

(Select a Network to Join)

SSID	Mode	Channel	Rate	Signal	Security	Freq	Encr	Auth	Strength
RFRAIN	Infra	48	54 Mb/s	100	WPA2-Personal	5.24 GHz	CCMP	PSK	Strong
DIRECT-53-HP	Infra	1	54 Mb/s	100	WPA2-Personal	2.412 GHz	CCMP	PSK	Strong
HP-Print-83-LaserJet	Infra	1	54 Mb/s	98	open	2.412 GHz			Strong
RFRAIN	Infra	1	48 Mb/s	97	WPA2-Personal	2.412 GHz	CCMP	PSK	Strong
PPE	Infra	1	48 Mb/s	97	WPA2-Personal	2.412 GHz	CCMP	PSK	Strong
Mini	Infra	1	48 Mb/s	90	WPA1 WPA2-Personal	2.412 GHz	CCMP,TKIP	PSK	Strong
Mini	Infra	36	54 Mb/s	85	WPA1 WPA2-Personal	5.18 GHz	CCMP,TKIP	PSK	Strong
DSI	Infra	11	54 Mb/s	78	WPA1 WPA2-Personal	2.462 GHz	TKIP	PSK	Good
DSI-Guest	Infra	11	54 Mb/s	72	WPA1 WPA2-Personal	2.462 GHz	TKIP	PSK	Good
FiOS-IFOMF	Infra	11	48 Mb/s	64	WPA2-Personal	2.462 GHz	CCMP	PSK	Good
xirrus	Infra	1	48 Mb/s	62	WPA2-Personal	2.412 GHz	CCMP	PSK	Good
xirrus	Infra	157	54 Mb/s	61	WPA2-Personal	5.785 GHz	CCMP	PSK	Good
DSI-Guest	Infra	157	54 Mb/s	61	WPA1 WPA2-Personal	5.785 GHz	TKIP	PSK	Good
DSI	Infra	157	54 Mb/s	61	WPA1 WPA2-Personal	5.785 GHz	TKIP	PSK	Good
xirrus	Infra	36	54 Mb/s	60	WPA2-Personal	5.18 GHz	CCMP	PSK	Good
xirrus	Infra	60	54 Mb/s	55	WPA2-Personal	5.3 GHz	CCMP	PSK	Good
xirrus	Infra	108	54 Mb/s	54	WPA2-Personal	5.54 GHz	CCMP	PSK	Weak
DIRECT-66-HP	Infra	6	54 Mb/s	52	WPA2-Personal	2.437 GHz	CCMP	PSK	Weak
xirrus	Infra	132	54 Mb/s	51	WPA2-Personal	5.66 GHz	CCMP	PSK	Weak
B0FC64	Infra	157	54 Mb/s	51	WPA1 WPA2-Personal	5.785 GHz	CCMP,TKIP	PSK	Weak
Audio	Infra	6	48 Mb/s	51	WPA2-Personal	2.437 GHz	CCMP	PSK	Weak
xirrus	Infra	6	48 Mb/s	48	WPA2-Personal	2.437 GHz	CCMP	PSK	Weak
FiOS-IFOMF	Infra	36	54 Mb/s	48	WPA2-Personal	5.18 GHz	CCMP	PSK	Weak

Wifi Password: Wifi Password (if needed)

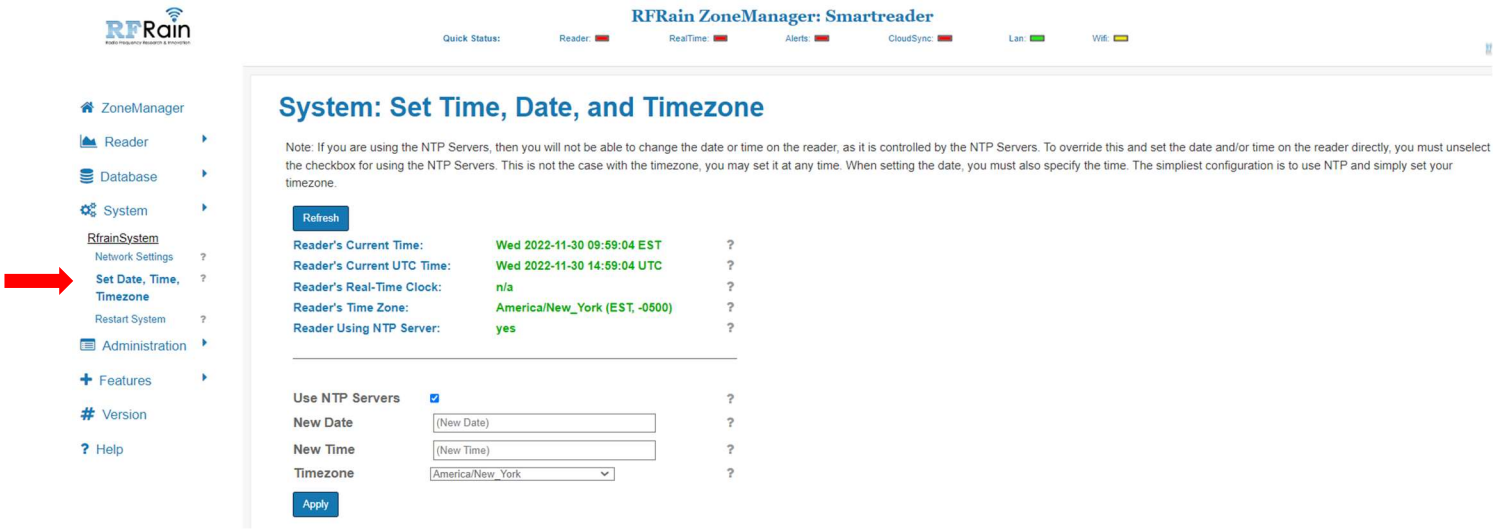
Join

3.1.2 Set Time/Date/Time zone

From the Dashboard go to System > Under Action, click play button > Setup (located left side drop down menu) > Settings > Set Time/Date/Timezone.

3.1.2.1 Set Time zone

- Please select your Time zone and click Apply.

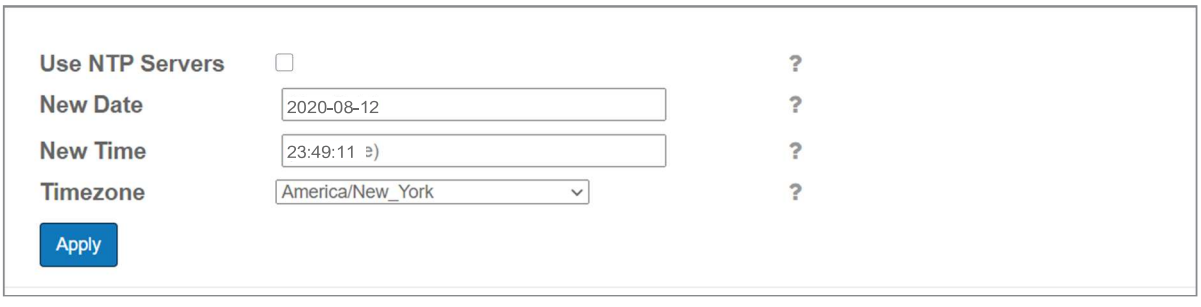


-

3.1.2.2 Set Time & Date

Note: If you are using the NTP Servers, then you will not be able to change the date or time on the reader as it is controlled by the NTP Servers.

- To set the date and/or time manually unselect the checkbox for using the NTP Servers.
- Set the new date in the format YYYY-MM-DD. Example 2020-08-12.
- Set the new time in the format HH:MM:SS. Example 23:49:11.

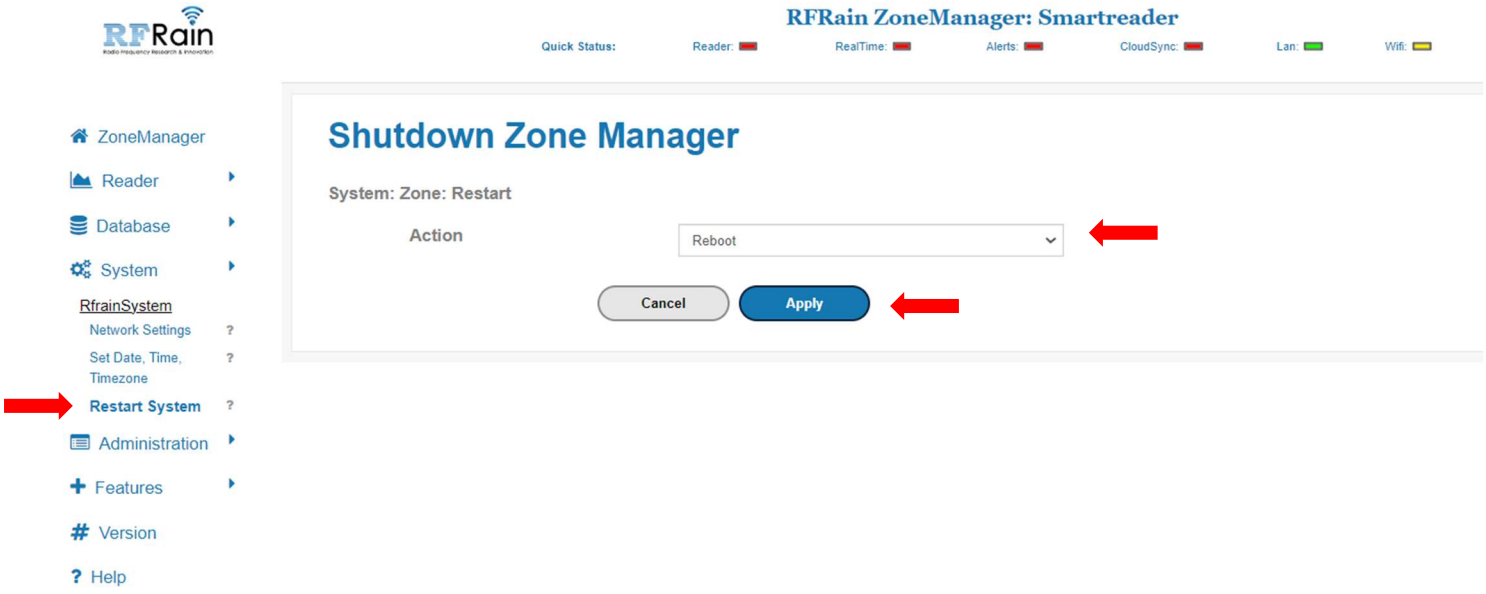


3.1.3 Restart Reader

From the Dashboard go to System > Under Action, click play button > Setup (located left side drop down menu) > Settings > Restart Reader.

Note: We recommend stopping the reader first before performing this step. See section 4.1 Start/Stop.

- Select Reboot or Shutdown in the dropdown menu.
- Click Apply.



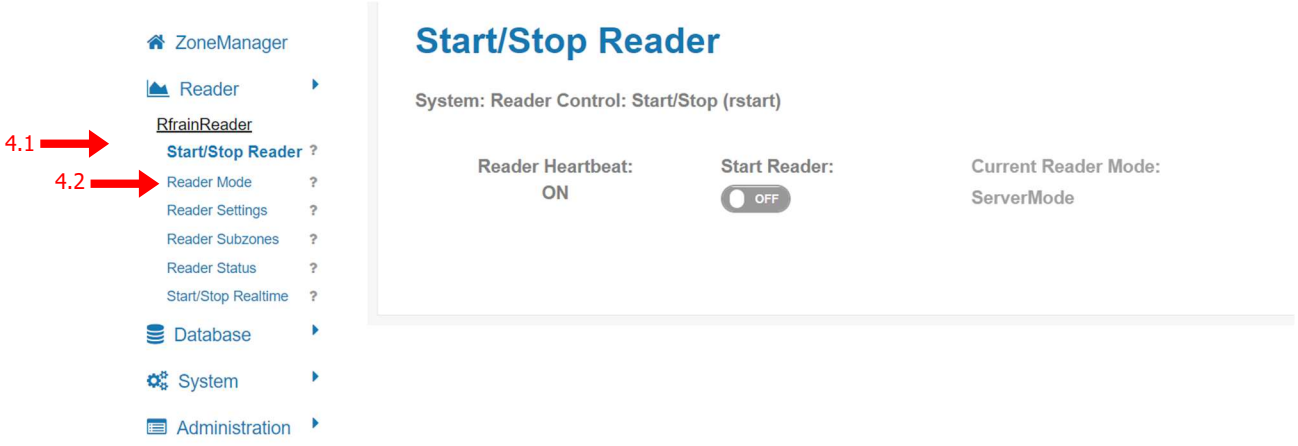
4. Reader

4.1 Start/Stop

From the Dashboard go to Reader > Start/Stop

Note: Always stop the reader before making any changes to Reader Mode, Reader Settings, or Subzones.

- Toggle ON to start RF power and toggle OFF to stop the RF power.



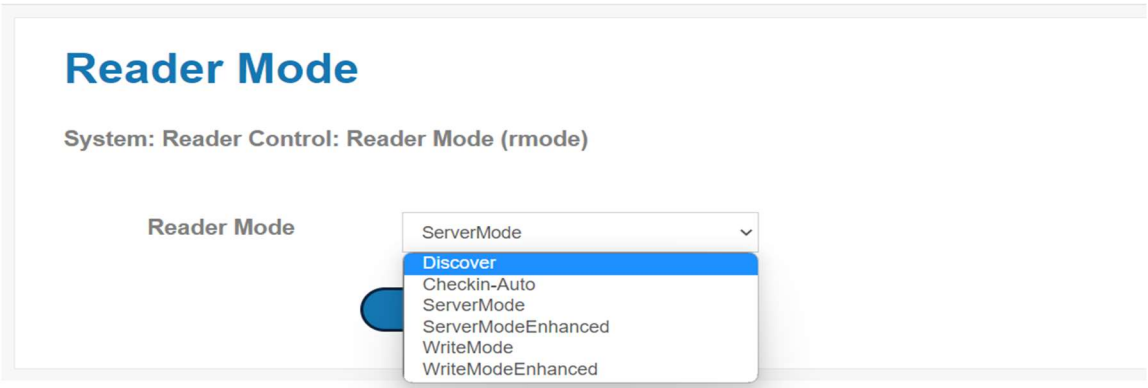
4.2 Reader Mode

4.2.1 Under Reader select Reader Mode.

Note: Always stop the reader before switching between any of the Reader Modes. See section 4.1 Start/Stop.

There are six modes to choose from: Select Discover, Checkin-Auto, ServerMode, ServerModeEnhanced, WriteMode and WriteModeEnhanced.

Select a mode and Click apply.



4.2.2 Discover: Allows a user to monitor tags or assets that are manually uploaded into the "User Data" table. If a tag is detected, a PRES is indicated in the detectstat column. Otherwise, a MISS is indicated.

4.2.3 Checkin-Auto: Allows a user to discover new tags that are not located in the database. This mode is important when an operator is not aware of the tags that need to be detected and each tag will be stored once in the detectstat column with an entry IN.

4.2.4 ServerMode: Allows a user to monitor all tags that are within the antennas reach. If an asset is detected, a PRES is indicated in the detectstat column. Otherwise, a MISS is indicated.

4.2.5 ServerModeEnhanced: Just like with ServerMode, the reader will display any tag it reads and adds the entry to the database, however with ServerModeEnhanced an additional data field is added to the database.

4.2.6 WriteMode Write the EPC number to a tag.

4.2.7 WriteModeEnhanced Write user data info to a tag.

4.3 Status

From the Dashboard go to Reader > Reader Status. This section provides the reader RF power is on or off.

- **Reader Comm Status:**

on: If the RF power is on.
off: If the RF power is off.

- **Reader Status:**

start: The RF module is running.
stop: The RF module is not running.

- **Mode:** Indicates the reader mode. Please refer to section 4.2.

Status is also shown on the status bar at the top of the page.
★Green = On ★ Red = Off ★Yellow = On not connected

4.4 Settings

Note: Always stop the reader before making changes to the reader settings. See section 4.1 Start/Stop.
Settings are already configured by the RFRain team for your specific application. However, you can reconfigure the following parameters:

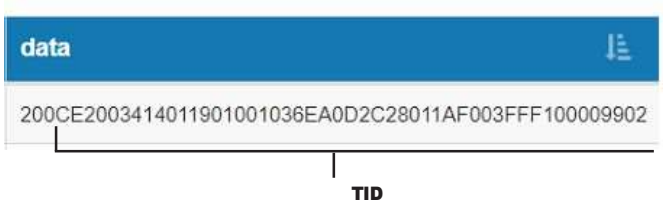
4.4.1 Reader Name: Reader name to help you identify the reader name and location.
4.4.2 Reader GroupName: Name to group readers together.
4.4.3 Max Time Loc Tag: Unused at this point.
4.4.4 Max Time Monitor Tag: The time it takes for a missing tag to be set as MISS. Value between 1-3000 seconds. By default it set to 10 seconds.
4.4.5 Reader WatchDog: Always set to yes.
4.4.6 Region: Pre-configured to your region. Do not modify.
4.4.7 Power Level: You can select a power level between 10dBm and 30dBm that fits your use-case.
4.4.8 Max Time Read Tag: Amount of time in milliseconds the reader spends reading a tag. Default value of 300 is recommended.
4.4.9 Max Time Monitor Read: Amount of time to spend after a tag read. Default value of 100 is recommended.
4.4.10 Min EPC Count
4.4.11 Min EPC Length
4.4.12 QSelect
4.4.13 QStatic Init
4.4.14 QMiller Encoding
4.4.15 Link Frequency
4.4.16 Tari
4.4.17 Target:
Target-A: Search on channel A. (Recommended to read large number of tags) Target-B: Search on channel B.
Target-AB: Search on channel A then channel B. (Recommended to determine movement of tags)
Target-BA: Search on channel B then channel A.
4.4.18 Read Mode:
S0: Keep state of tags indefinitely when powered. Non otherwise.
S1: Keep state of tags between 5 milliseconds and 5 seconds when powered or not powered. (Recommended)
S2: Keep state of tags indefinitely when powered. Greater than 2 seconds otherwise. S3: Keep state of tags indefinitely when powered. Greater than 2 seconds otherwise.

4.4.19 Tag Read Mode: Always set to S1.

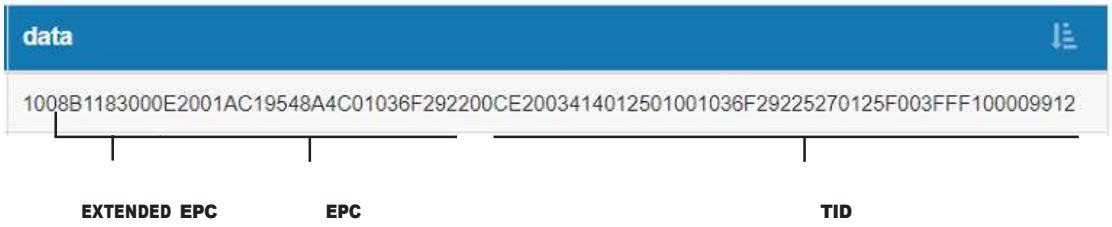
4.4.20 Tag Data to Read: Additional tag information to read
Used in ServerModeEnhanced only.
(Discussed in section 4.2 Reader Mode)Tag
Tag Embedded TID Memory:
Tag Embedded EPC and TID Memory:
Tag Embedded USER, EPC and TID Memory:
Note TID Memory is always preceded with 0x200.

4.4.21 RTP Alert Reporting
Subzone Alerts (rtsubz)
Monitor Alerts (rtmon)
Real Time Embedded Alerts (rtlive)
None (none)

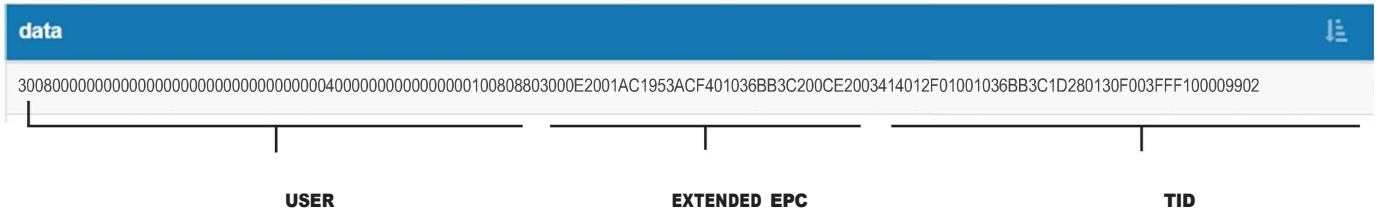
4.4.22 Parsing On
Parsing Off



Tag Embedded EPC and TID Memory: Read Extended EPC and TID Memory. Note Extended EPC Memory is preceeded by 0x100 and TID Memory is preceeded by 0x200.



Tag Embedded USER, EPC, and TID Memory: Read User, EPC and TID Memory. Note User Memory starts with 0x3, EPC 0x100, and TID 0x200.



Reader Setting

System: Reader Control: Setting (rsetting)

Reader Management Settings

Reader Name: Large_Cabinet (optional)

Reader GroupName: Reader (optional)

Reader Operational Settings

Max Time Loc Tag: 250

Max Time Monitor Tag: 300 (a number between 1 and 3000)

Reader WatchDog: Yes

Reader Antenna Settings

Region: North America, (902 - 928 Mhz) (Region Lock Set: 1) Region Lock: ☐

Power Level: 30 dBm

Reader Tag Settings

Max Time Read Tag: 100

Max Time Monitor Read: 100

Min EPC Count: 0

Min EPC Length: 0

QSelect: dynamic

QStatic Init: 2

QMiller Encoding: MILLER_4

Link Frequency: LINK_250_KHZ

Tari: TARI_25_US

Target: Target-A

Read Mode: S1

Tag Data to Read: Tag Embedded TID Memory

Reader Real Time Protocol

RTP Alert Reporting: Subzone Alerts (rtsubz)

Convert

Parsing: OFF (off)

Apply

4.5 Subzones

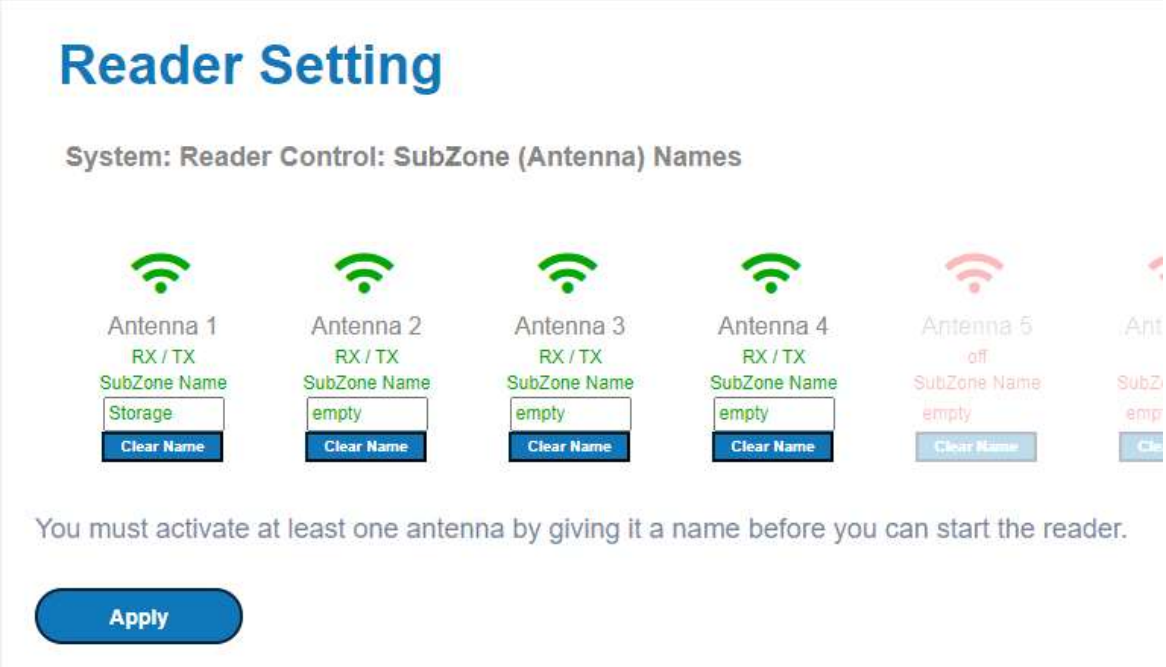
From the Dashboard go to Reader > Under Action, click play button > Reader Control (located left side drop down menu) > Reader Control > Subzones.

Note: Always stop the reader before making changes to the subzones section. See section **4.1***Start/Stop.*

- You must activate at least one antenna by giving it a name before you can start the reader.

Note: Only name the antennas that are connected to the reader and leave the rest as empty. Otherwise you may damage the internal circuitry and/or slow the read capabilities of the reader.

- Click Apply.

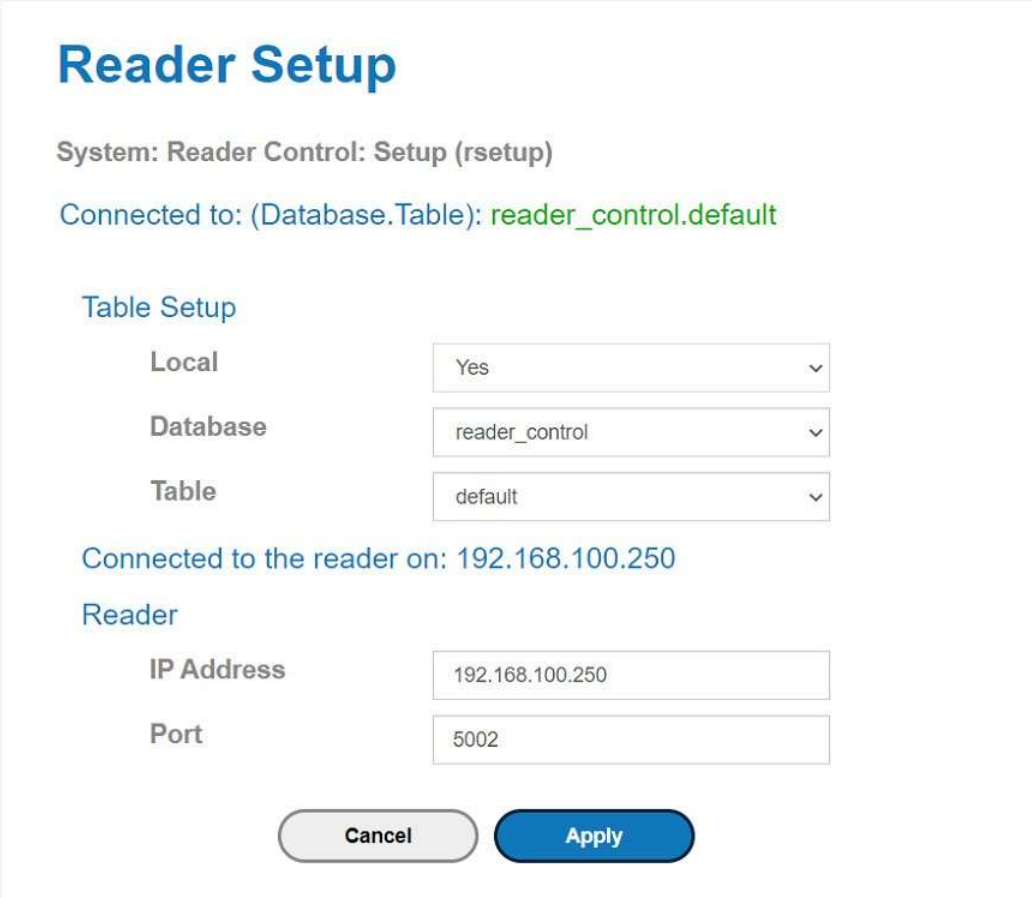


Note: When Changing Antenna names, adding or removing antennas, you will need to restart the reader (Refer to section 4.1 Start/Stop)

4.6 Setup

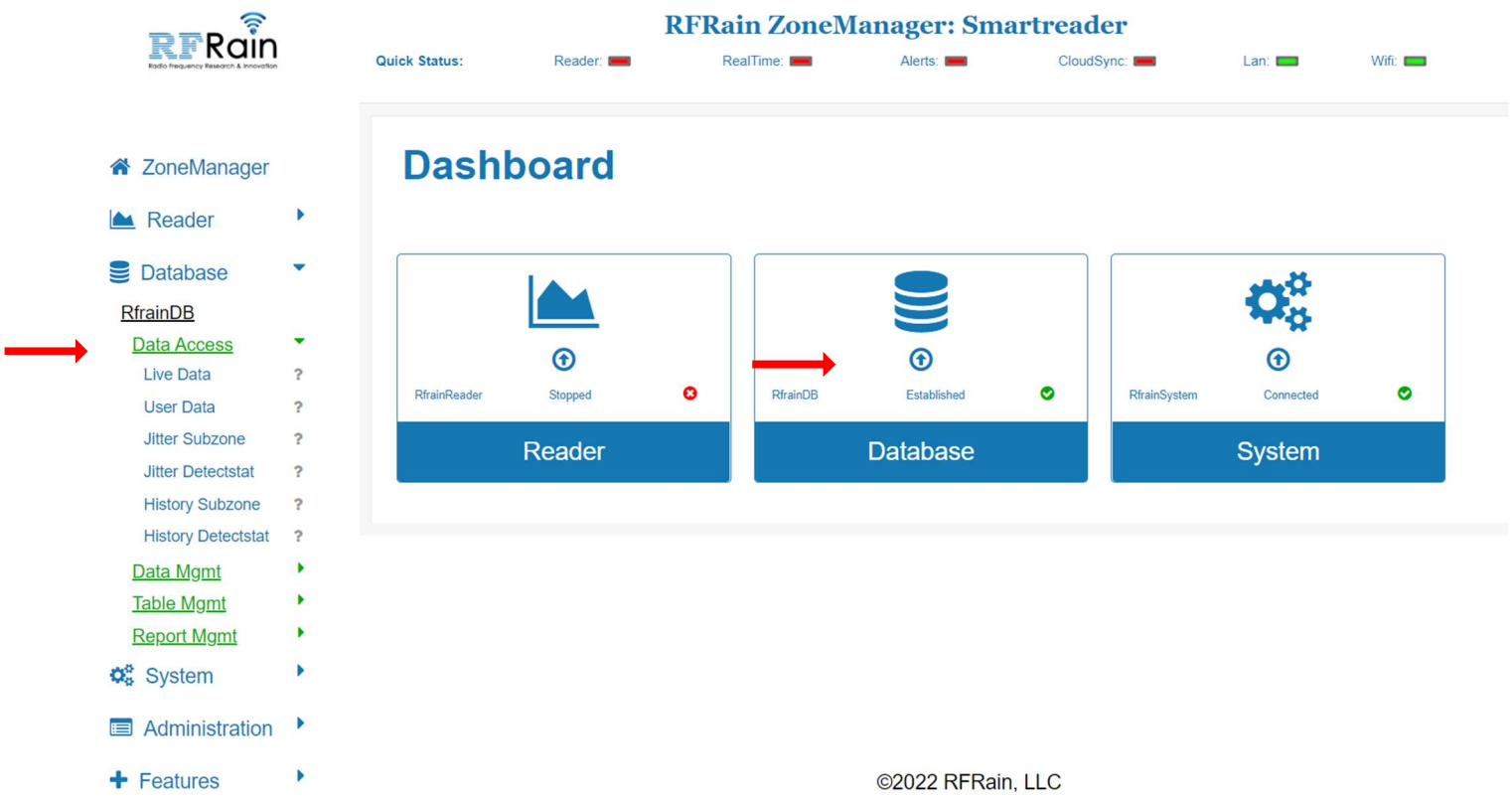
4.6.1 From the Dashboard go to Reader > Under Action, click play button > Reader Control (located left side drop down menu) > Reader Control > Setup.

Note: The menu should say Connected to: (Database.Table): reader_control.default. Leave these entries as default.



5. Database

5.1 From the Dashboard go to Database > Data Access

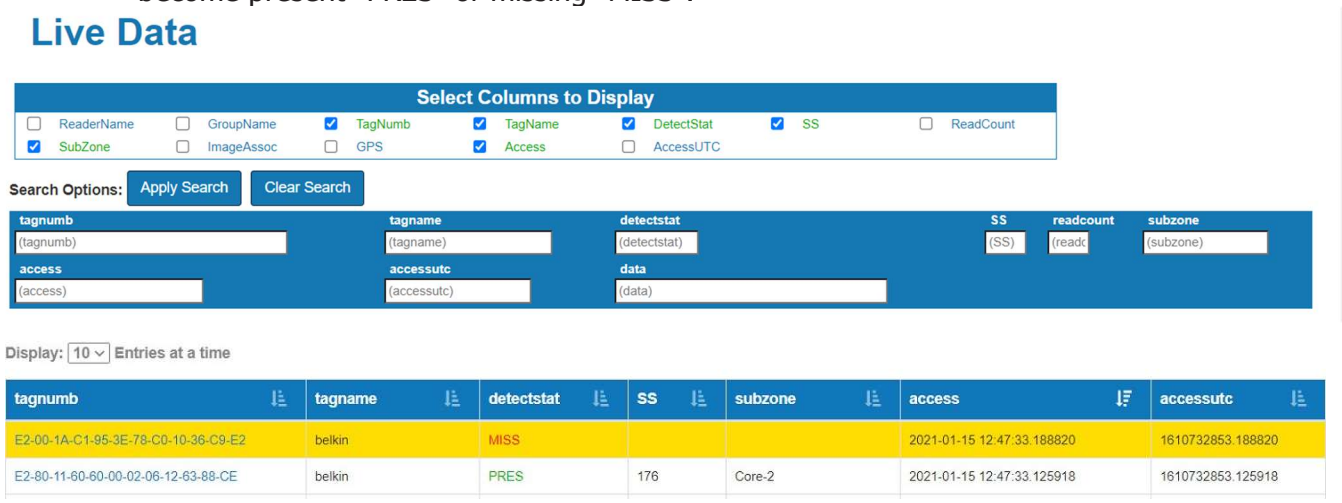


5.1 Access

5.1.1 Live Data

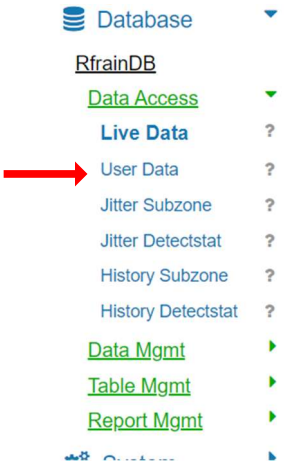
From the Dashboard go to Database > Data Access > Live Data.

This table displays all live tags that are detected by the antenna in real time as they become present "PRES" or missing "MISS".



Here is a breakdown of each column to better understand the database table structure:

- tagnumb: A 12/16/24-byte EPC number separated by dashes.
  For example: E2-00-48-0A-E5-22-C8-89-92-7B-60-E7
- tagname: All tag names are set to "new" unless they are defined in User Data table. Discussed further in section 5.1.2 User Data.
- detectstat: This field indicates the status of a tag as "PRES" for present, "MISS" for missing or "IN" for Checkin-Auto see section 4.2 Reader Mode.
- SS: This is the tag's signal strength that was read by the antenna. The signal ranges 170 - 230 depending on the received strength. 170 being the lowest.
- subzone: Indicates the antenna which reads the tag. See section 4.5 Subzones.
- access: Indicates the date and time of last detection displayed using the timezone selected in section 3.1.2 Set Time/Date/Timezone.



5.1.2 User Data

From the Dashboard go to Database > Data Access > User Data.

This table lists all the custom user data information.

Default User Custom Entries

user defined fields - five per tag available

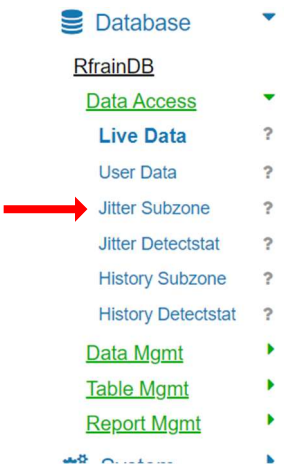
Display: 10 Entries at a time

tagnumb	tagname	custom1	custom2	custom3	custom4	custom5
E2-00-48-0A-E5-22-C8-89-92-7B-60-E7	desk	composite_wood	part_number_1234ERT3	espresso_color	Dimensions_4x6x3_ft	price_49.99

Here is a breakdown of each column to better understand the database table structure:

- tagnumb: A 12/16/24-byte EPC number separated by dashes.
  For example: E2-00-48-0A-E5-22-C8-89-92-7B-60-E7

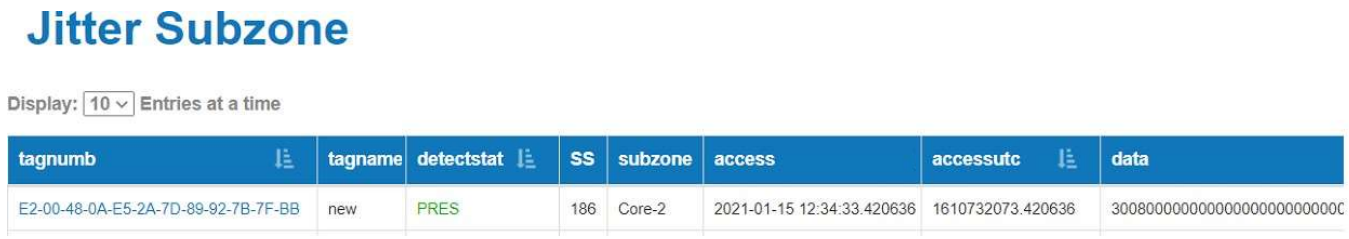
- tagname, custom1, custom2, custom3, custom4, custom5: can be any information that pertain to the asset you wish to track as shown in the example figure above.



5.1.3 Jitter Subzone

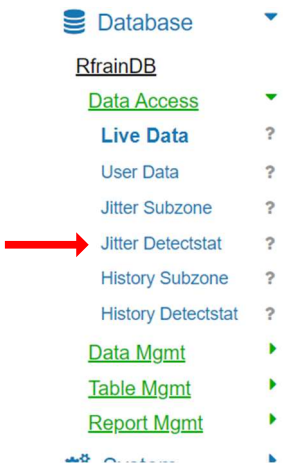
From the Dashboard go to Database > Data Access > Jitter Subzone.

This table displays each time a tag changes subzones and is stable for 30 seconds or more.



Here is a breakdown of each column to better understand the database table structure:

- tagnumb: A 12/16/24-byte EPC number separated by dashes.
  For example: E2-00-48-0A-E5-22-C8-89-92-7B-60-E7
- tagname: All tag names are set to "new" unless they are defined in User Data table. Discussed further in section 5.1.2 User Data.
- detectstat: This field indicates the status of a tag as "PRES" for present, "MISS" for missing or "IN" for Checkin-Auto see section 4.2 Reader Mode.
- SS: This is the tag's signal strength that was read by the antenna. The signal ranges 170 - 230 depending on the received strength. 170 being the lowest.
- subzone: Indicates the antenna which reads the tag. See section 4.5 Subzones.
- access: Indicates the date and time of last detection displayed using the timezone selected in section 3.1.2 Set Time/Date/Timezone.
- accessutc: Indicates the date and time of last detection displayed in UTC time.
- data: This is the embedded data stored in the tag. See "Tag Data to Read" in section 4.4 Settings.



5.1.4 Jitter Detectstat

From the Dashboard go to Database > Data Access > Jitter Detectstat.

This table displays each time a tag is stable for 30 seconds or more in either a present or miss state.

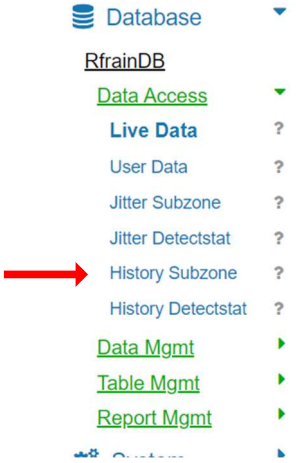
Jitter Detectstat

Display: 10 Entries at a time

tagnumb	tagname	detectstat	SS	subzone	access	accessutc	data
E2-80-11-70-00-00-02-09-82-ED-C0-B1	belkin	PRES	185	Core-2	2021-01-15 12:50:38.554985	1610733038.554985	3002000000000070000000000

Here is a breakdown of each column to better understand the database table structure:

- tagnumb: A 12/16/24-byte EPC number separated by dashes.
  For example: E2-00-48-0A-E5-22-C8-89-92-7B-60-E7
- tagname: All tag names are set to "new" unless they are defined in User Data table. Discussed further in section 5.1.2 User Data.
- detectstat: This field indicates the status of a tag as "PRES" for present, "MISS" for missing or "IN" for Checkin-Auto see section 4.2 Reader Mode.
- SS: This is the tag's signal strength that was read by the antenna. The signal ranges 170 - 230 depending on the received strength. 170 being the lowest.
- subzone: Indicates the antenna which reads the tag. See section 4.5 Subzones.
- access: Indicates the date and time of last detection displayed using the timezone selected in section 3.1.2 Set Time/Date/Timezone.
- accessutc: Indicates the date and time of last detection displayed in UTC time.
- data: This is the embedded data stored in the tag. See "Tag Data to Read" in section 4.4 Settings.



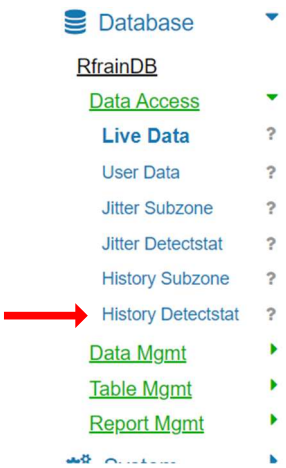
5.1.5 History Subzone

From the Dashboard go to Database > Data Access > History Subzone.

This table displays each and every time a tag changes subzones. It will display as PRES for each new antenna/subzone that detected the tag.

Here is a breakdown of each column to better understand the database table structure:

- tagnumb: A 12/16/24-byte EPC number separated by dashes.
  For example: E2-00-48-0A-E5-22-C8-89-92-7B-60-E7
- tagname: All tag names are set to "new" unless they are defined in User Data table. Discussed further in section 5.1.2 User Data.
- detectstat: This field indicates the status of a tag as "PRES" for present, "MISS" for missing or "IN" for Checkin-Auto see section 4.2 Reader Mode.
- SS: This is the tag's signal strength that was read by the antenna. The signal ranges 170 - 230 depending on the received strength. 170 being the lowest.
- subzone: Indicates the antenna which reads the tag. See section 4.5 Subzones.
- access: Indicates the date and time of last detection displayed using the timezone selected in section 3.1.2 Set Time/Date/Timezone.
- accessutc: Indicates the date and time of last detection displayed in UTC time.
- data: This is the embedded data stored in the tag. See "Tag Data to Read" in section 4.4 Settings.



5.1.6 History Detectstat

From the Dashboard go to Database > Data Access > History Subzone.

This table displays each and every time a tag was detected as PRES or MISS.

History Detectstat

Display: 10 Entries at a time

tagnumb	tagname	detectstat	SS	subzone	access	accessutc	data
E2-00-1A-C1-95-46-83-80-10-36-EA-0D	new	PRES	180	Core-2	2021-01-15 12:54:56.980985	1610733296.980985	
E2-00-1A-C1-95-46-83-80-10-36-EA-0D	new	MISS	0		2021-01-15 12:54:55.474928	1610733295.474928	

Here is a breakdown of each column to better understand the database table structure:

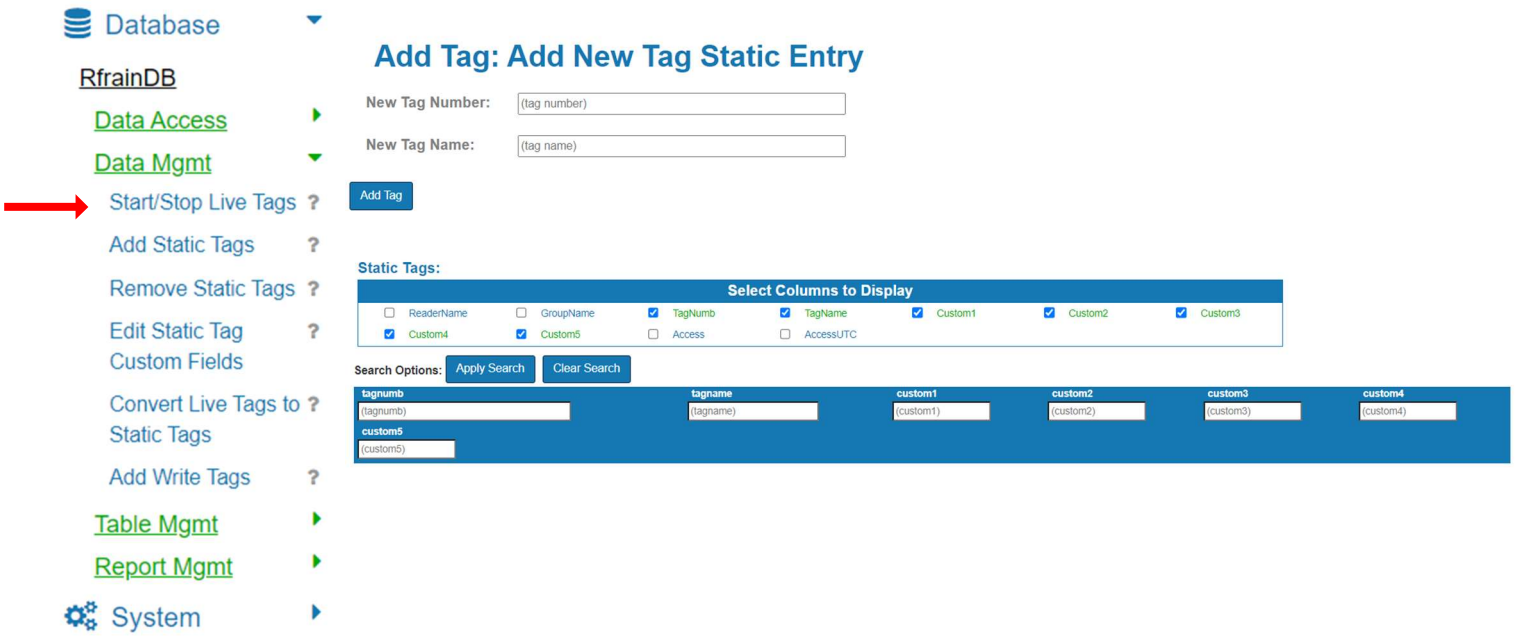
- tagnumb: A 12/16/24-byte EPC number separated by dashes.
  For example: E2-00-48-0A-E5-22-C8-89-92-7B-60-E7
- tagname: All tag names are set to "new" unless they are defined in User Data table. Discussed further in section 5.1.2 User Data.
- detectstat: This field indicates the status of a tag as "PRES" for present, "MISS" for missing or "IN" for Checkin-Auto see section 4.2 Reader Mode.
- SS: This is the tag's signal strength that was read by the antenna. The signal ranges 170 - 230 depending on the received strength. 170 being the lowest.
- subzone: Indicates the antenna which reads the tag. See section 4.5 Subzones.
- access: Indicates the date and time of last detection displayed using the timezone selected in section 3.1.2 Set Time/Date/Timezone.
- accessutc: Indicates the date and time of last detection displayed in UTC time.
- data: This is the embedded data stored in the tag. See "Tag Data to Read" in section 4.4 Settings.

5.2 Table Entries Setup

5.2.1 Start/Stop Live Tags

From the Dashboard go to Database > Data Mgmt > Start/Stop Live Tags.

This page allows you to start or stop reading tags.



- Tag Name: Select ALL for all tags or enter tag number.
- Select Value:

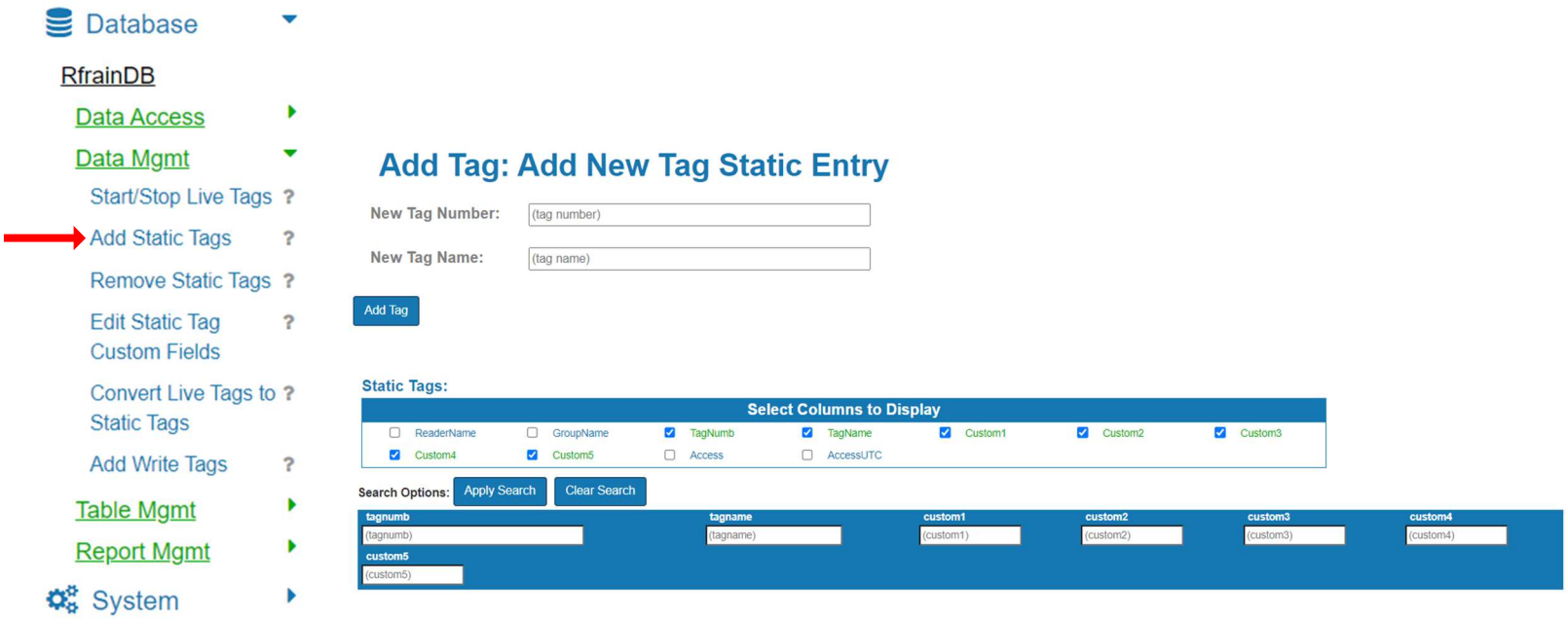
  Start: to start reading tags.

  Stop: to stop reading tags.
- Click Apply.

5.2.2 Add Static Tag

From the Dashboard go to Database > Data Mgmt > Add Static Tag.

This section allows you to manually upload one tag at a time and associate a name to it. These tags are stored in the User Data table. Refer to section 5.1.2 User Data.

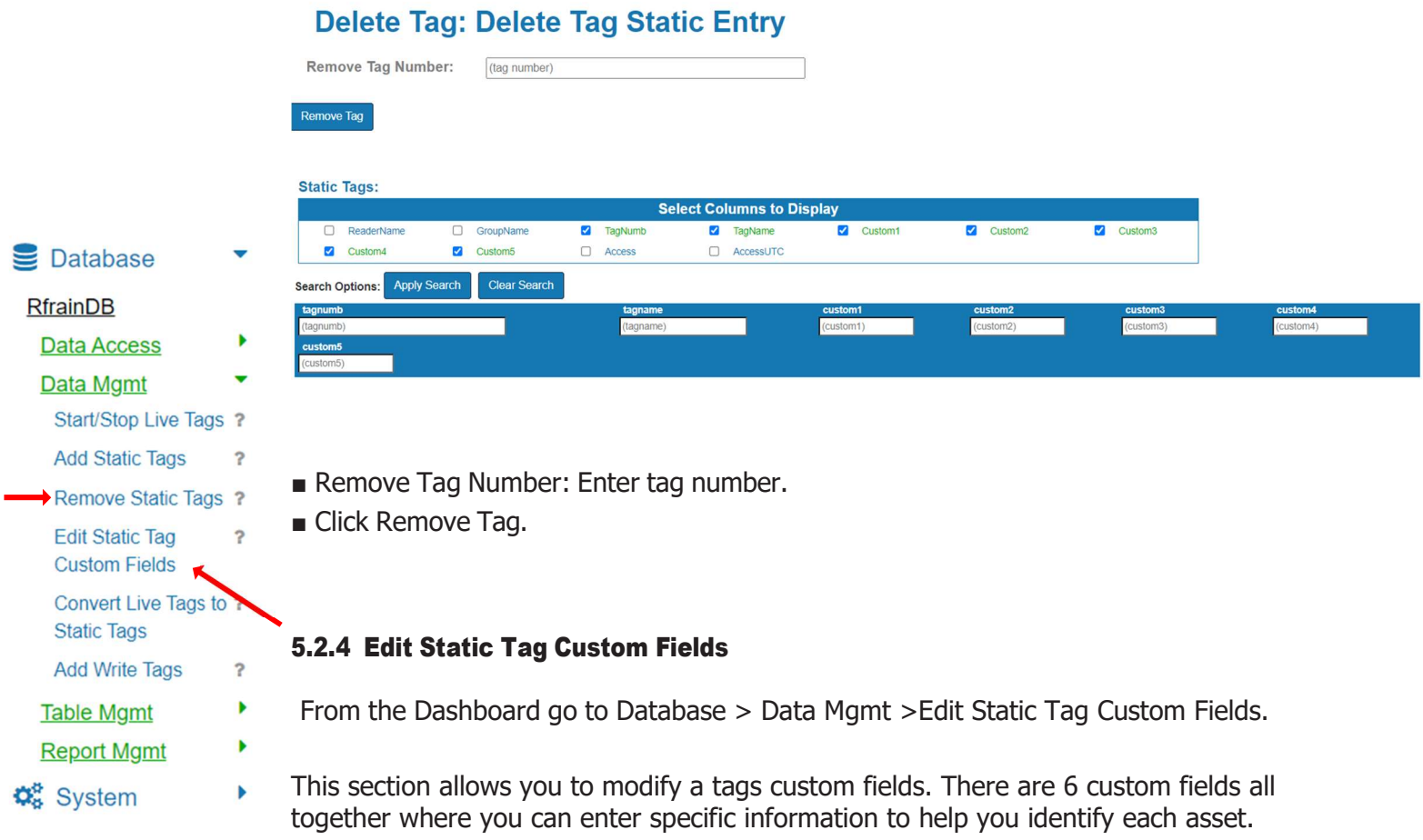


- New Tag Number: Enter a tag number.
- New Tag Name: Enter a name.
- Click Add Tag.

5.2.3 Remove Static Tag

From the Dashboard go to Database > Data Mgmt > Remove Static Tag.

This section allows you to remove one tag at a time using the tag number only.

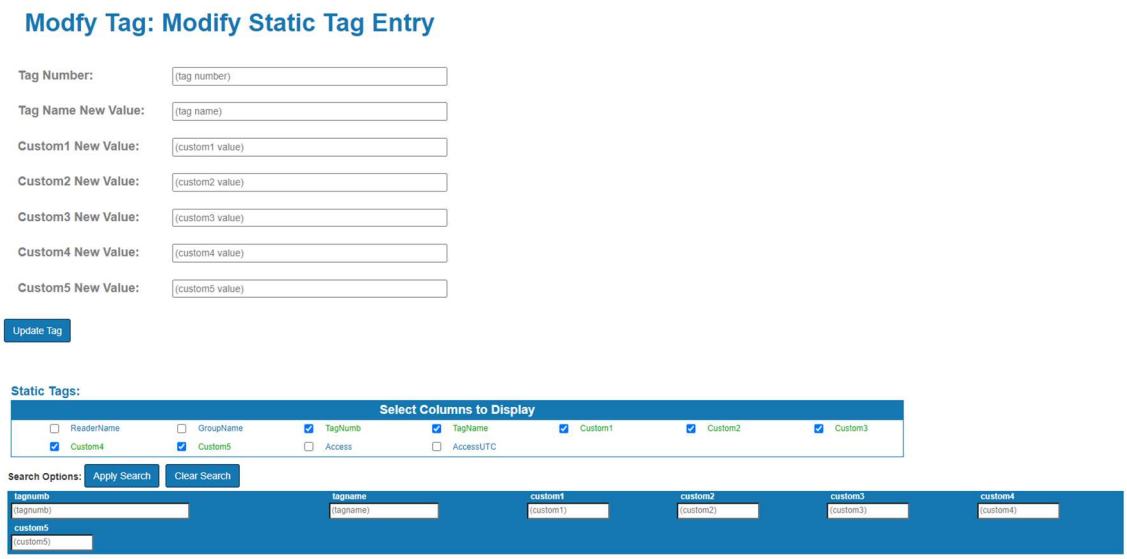


- Remove Tag Number: Enter tag number.
- Click Remove Tag.

5.2.4 Edit Static Tag Custom Fields

From the Dashboard go to Database > Data Mgmt >Edit Static Tag Custom Fields.

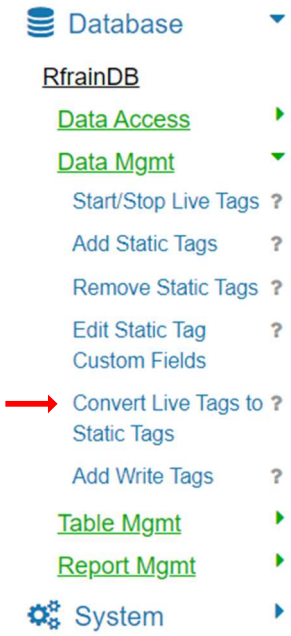
This section allows you to modify a tags custom fields. There are 6 custom fields all together where you can enter specific information to help you identify each asset.



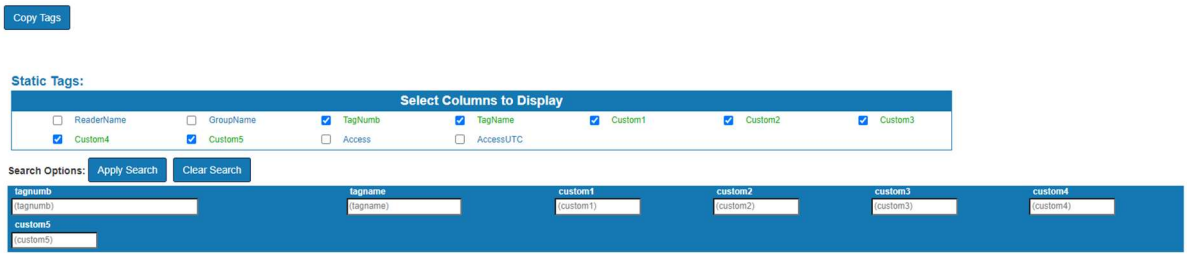
- Tag Number: Enter a tag number.
- Tag Name New Value: Enter a tag name.
- Custom1 New Value: Enter asset association.
- Custom2 New Value: Enter asset association.
- Custom3 New Value: Enter asset association.
- Custom4 New Value: Enter asset association.
- Custom5 New Value: Enter asset association.
- Click Update Tag.

5.2.5 Convert Live Tags to Static Tags

From the Dashboard go to Database > Data Mgmt > Convert Live Tags to Static Tags.

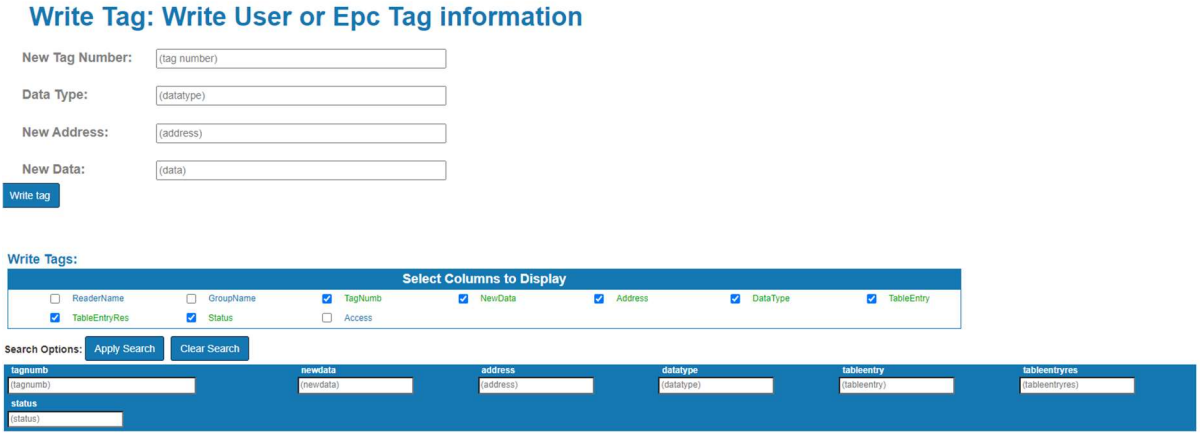


This will copy any tags found in the real-time live data table and save them into the static tag table. This option is typically only used when the intention is to use "DISCOVER" mode, but you must read the tag first using a different mode instead of manually entering or upload the tag data. This will copy the current live tag data into the static tag data table.



5.2.6 Add Write Tags

From the Dashboard go to Database > Data Mgmt > Add Write Tags.



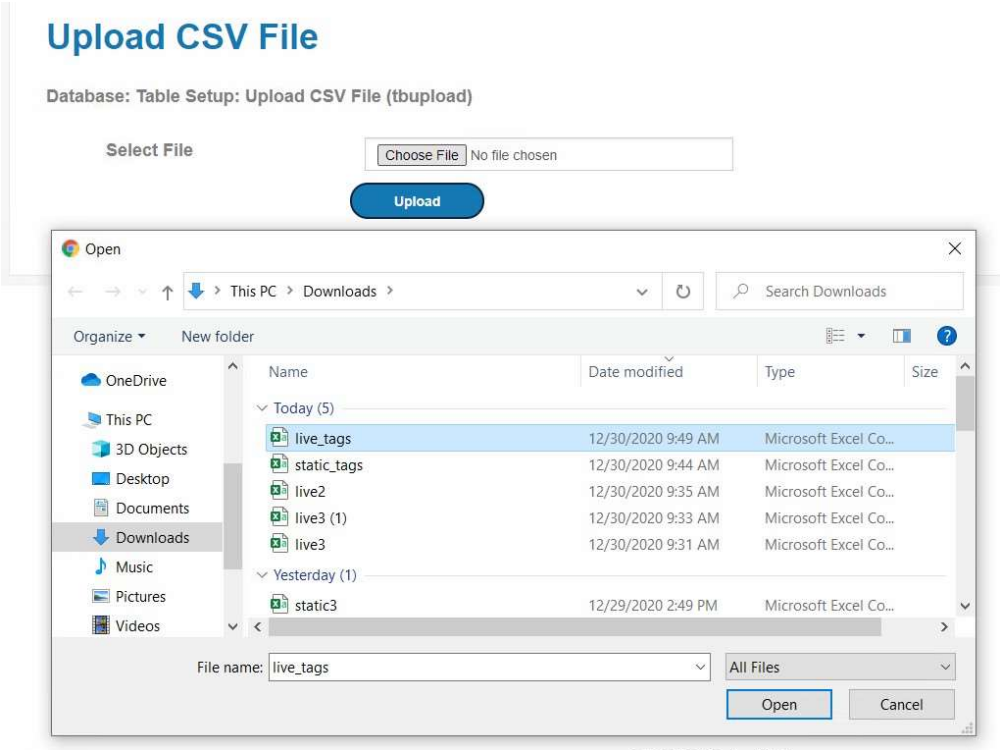
5.3 Table Setup

5.3.1 Upload Static Tag CSV File

From the Dashboard go to Database > Table Setup > Upload Static Tag CSV File.

This section allows you to import a CSV file of static tag information.

- Select File: Click on Choose File to upload a CSV file.
- Store the uploaded CSV file as shown in the next section 5.3.2.
- Click Upload.



Below is a sample table layout CSV file in excel:

	A	B	C	D	E	F	G
1	tagnumb	tagname	custom1	custom2	custom3	custom4	custom5
2	00-00-00-00-00-00-00-00-00-00-0D-44	new					
3	00-00-00-00-00-00-00-00-24-12-24-F9-78	new					
4	00-00-00-00-00-00-00-00-24-12-24-F9-79	new					
5	00-00-00-00-00-00-00-00-24-12-24-F9-88	new					
6	00-00-00-00-00-00-00-00-24-12-24-F9-89	new					
7	00-00-00-00-00-00-00-00-24-12-24-F9-8A	new					
8	00-00-00-00-00-00-00-00-24-12-24-F9-8B	new					
9	30-36-00-CC-41-6B-02-AD-9D-94-89-D6	new					
10	31-D2-BC-6C-89-26-C1-21-00-AA-33-11	new					
11	35-E0-17-00-4F-AA-FD-CC-00-00-C1-BB	new					
12	E2-00-00-16-19-11-02-66-13-50-8E-48	new					
13	E2-00-1A-C1-95-3A-CF-40-10-36-BB-3C	new					
14	E2-00-1A-C1-95-3A-CF-80-10-36-BB-3D	new					
15	E2-00-1A-C1-95-3E-78-C0-10-36-C9-E2	new					
16	E2-00-1A-C1-95-3F-AA-80-10-36-CE-A9	new					
17	E2-00-1A-C1-95-42-03-C0-10-36-D8-0E	new					
18	E2-00-1A-C1-95-42-04-00-10-36-D8-0F	new					
19	E2-00-1A-C1-95-42-04-40-10-36-D8-10	new					
20	E2-00-1A-C1-95-43-2A-40-10-36-DC-A8	new					
21	E2-00-1A-C1-95-45-6B-C0-10-36-E5-AE	new					
22	E2-00-1A-C1-95-45-6C-00-10-36-E5-AF	new					
23	E2-00-1A-C1-95-46-83-00-10-36-EA-0B	new					
24	E2-00-1A-C1-95-46-83-80-10-36-EA-0D	new					
25	E2-00-1A-C1-95-49-AC-40-10-36-F6-B0	new					
26	E2-00-1A-C1-95-4C-9F-C0-10-37-02-7E	new					
27	E2-00-1A-C1-95-4C-A0-00-10-37-02-7F	new					
28	E2-00-21-00-20-00-71-8D-BB-8E-08-DF	new					
29	E2-00-21-00-20-00-79-0B-BB-8D-08-DF	new					
30	E2-00-21-00-20-00-7A-53-BC-12-08-DF	new					
31	E2-00-34-12-01-3B-FB-00-08-32-34-E9	new					
32	E2-00-90-33-11-06-00-70-13-00-8E-5E	new					
33	E2-00-90-33-11-06-00-70-13-80-85-A6	new					

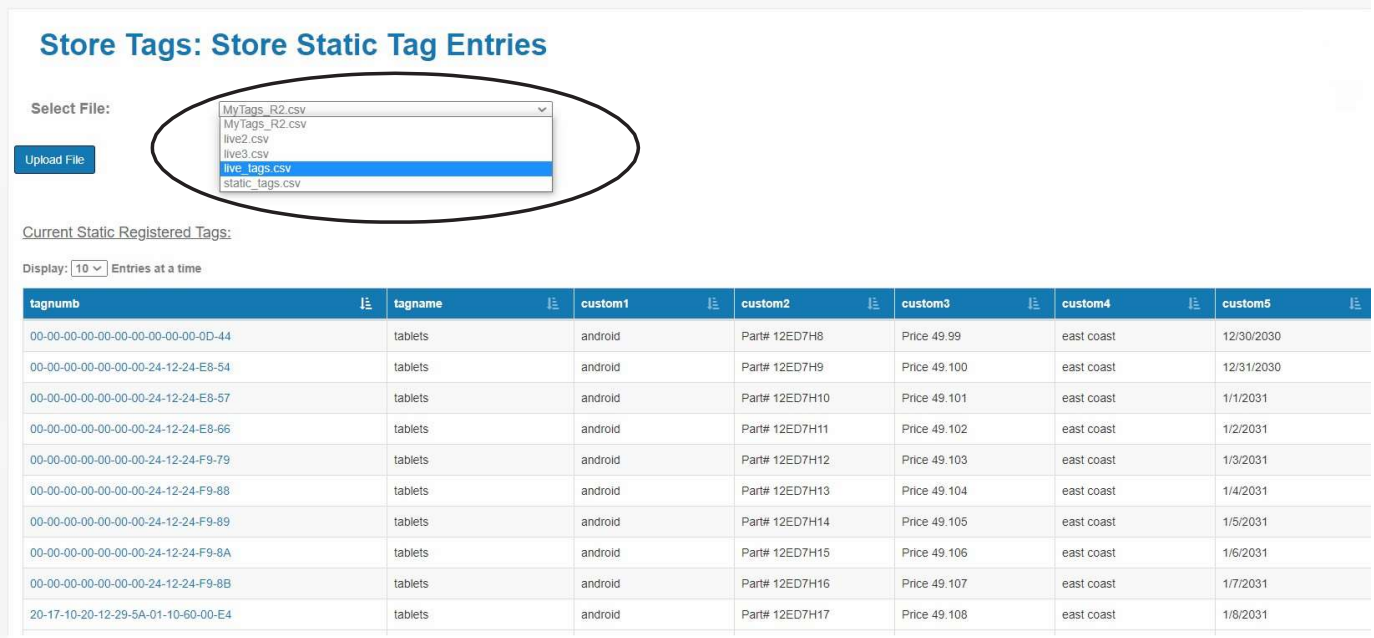
5.3.2 Store Uploaded Tags into Table

From the Dashboard go to Database > Table Setup > Store Uploaded Tags into Table.

This section allows you to store an uploaded CSV file of tags into the table, thus activating them.

- Select File: Click on the drop-down menu and choose the file which you have previously uploaded in section 5.3.1 Upload Static Tag CSV file.
- Click Upload File.

Note: Any tags stored here are displayed in the User Data table as well. See section 5.1.2 User Data.



tagnumb	tagname	custom1	custom2	custom3	custom4	custom5
00-00-00-00-00-00-00-00-00-00-0D-44	tablets	android	Part# 12ED7H8	Price 49.99	east coast	12/30/2030
00-00-00-00-00-00-00-24-12-24-E8-54	tablets	android	Part# 12ED7H9	Price 49.100	east coast	12/31/2030
00-00-00-00-00-00-00-24-12-24-E8-57	tablets	android	Part# 12ED7H10	Price 49.101	east coast	1/1/2031
00-00-00-00-00-00-00-24-12-24-E8-66	tablets	android	Part# 12ED7H11	Price 49.102	east coast	1/2/2031
00-00-00-00-00-00-00-24-12-24-F9-79	tablets	android	Part# 12ED7H12	Price 49.103	east coast	1/3/2031
00-00-00-00-00-00-00-24-12-24-F9-88	tablets	android	Part# 12ED7H13	Price 49.104	east coast	1/4/2031
00-00-00-00-00-00-00-24-12-24-F9-89	tablets	android	Part# 12ED7H14	Price 49.105	east coast	1/5/2031
00-00-00-00-00-00-00-24-12-24-F9-8A	tablets	android	Part# 12ED7H15	Price 49.106	east coast	1/6/2031
00-00-00-00-00-00-00-24-12-24-F9-8B	tablets	android	Part# 12ED7H16	Price 49.107	east coast	1/7/2031
20-17-10-20-12-29-5A-01-10-60-00-E4	tablets	android	Part# 12ED7H17	Price 49.108	east coast	1/8/2031

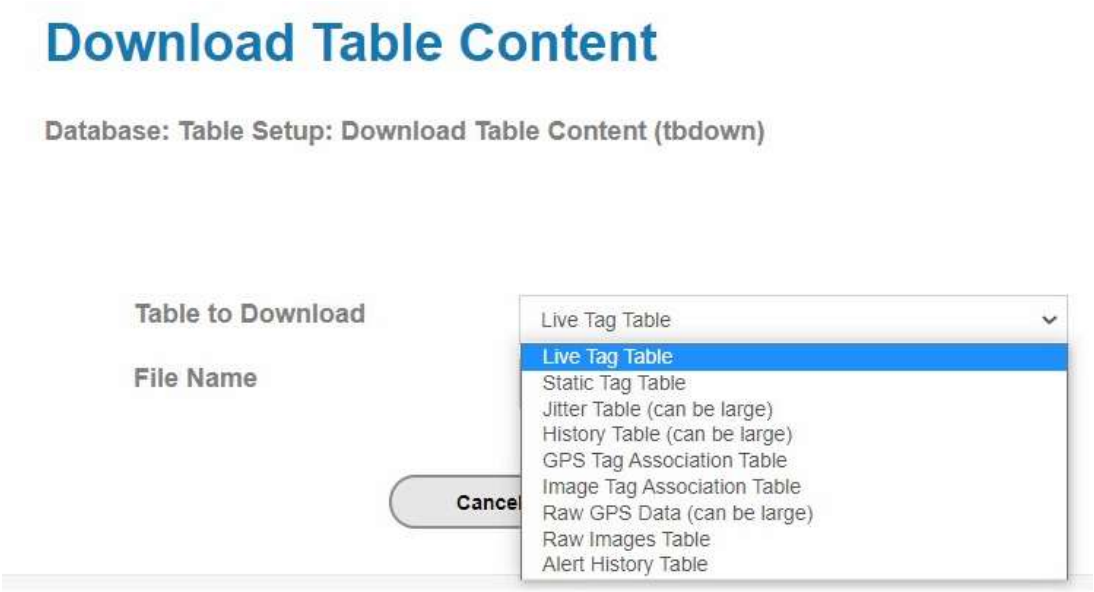
5.3.3 Download Static Tag CVS Files

From the Dashboard go to Database >Table Mgmt > Download Static Tag CVS File

This section allows you to export data from the various reader tables into CSV files.

- Select the table you wish to download from the drop down menu.
- Enter a File Name.
- Click download.

Note: By default, the Static Tag Table is empty. You must first ensure there are Static Tags saved in the User Data table before attempting to download its content.



Live Tag Table: This will download all live data found in section 5.1.1 Live Data.
Static Table: This will download all static data found in section 5.1.2 User Data.
Jitter Table: This will download all Jitter data found in section 5.1.3 Jitter Subzone and section 5.1.4 Jitter Detectstat.
History Table: This will download all data found in section 5.1.5 History Subzone and section 5.1.6 History Detectstat.
GPS Tag Assoiation Table: Do not download.
Image Tag Assoiation Table: Do not download.
Raw GPS Data: Do not download.
Raw Images Table: Do not download.
Alert History Table: Do not download.

6. Features

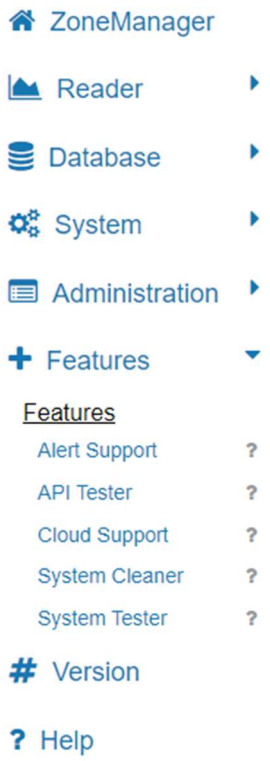
This section covers all the add-on features that RFRain offers as a plug and play solution.

Please consult with the RFRain sales team about software quotes. The features vary between the Smart Reader and Smart Reader Advanced.

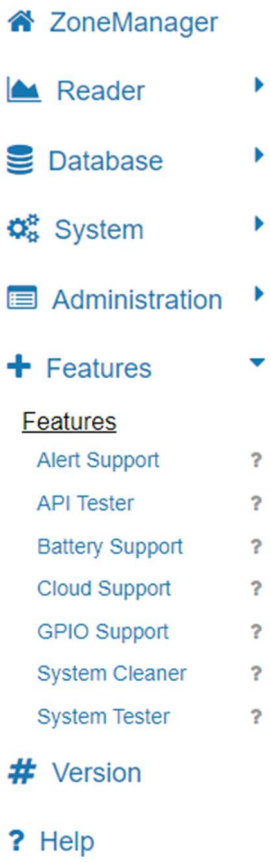
The Advanced Reader has GPIO support feature unlike the Smart Reader.

From the side panel go to Features where you will find the table of all features.

Smart Reader



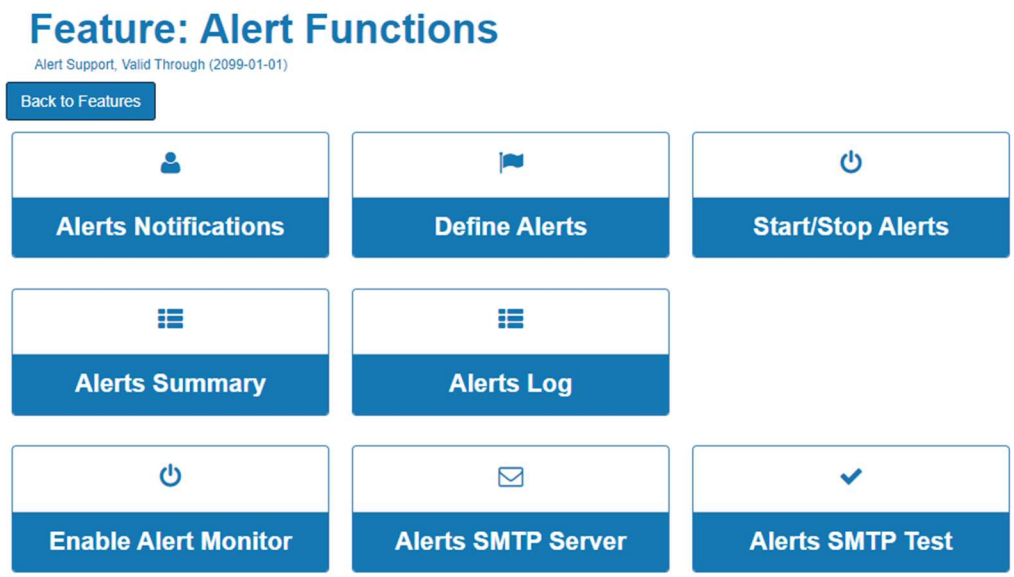
Smart Reader Advanced with Battery



6.1 Alert Support

From the side panel go to Features > Alert Support.
This will open the Main Panel Feature: Alert Functions

This section allows a user to create alerts and be alerted via text message, e-mail or Rest API (JSON Encrypted base64) when an event occurs.



6.1.1 Alerts Summary

From the side panel go to Features > Alert Support.
From the main panel select > Alerts Summary.

This section shows you a summary of the alerts that have been created and the Alert Monitor Status.

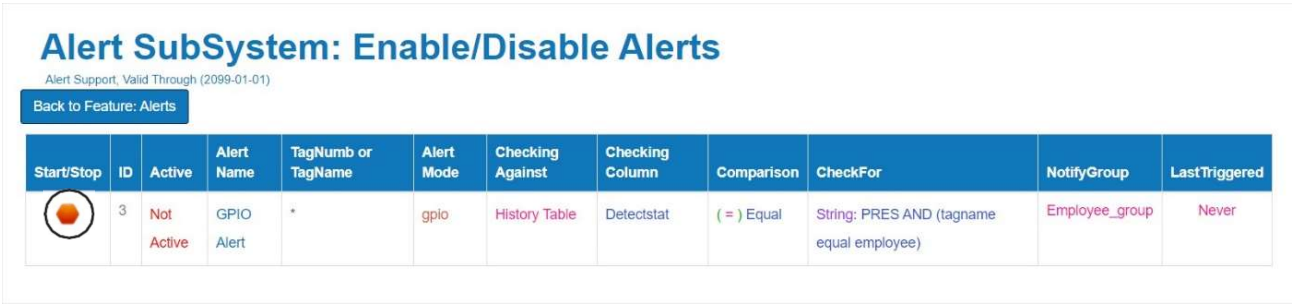
- ID: This is the ID number of the defined alert created in section 6.1.3 Define Alerts.
- Active: This shows if the Alert is Active or Not Active. Refer to section 6.1.2 Start/ Stop Alerts
- Alert Name: This is the alert name defined in section 6.1.3 Define Alerts.
- TagNumb or TagName: This shows the tag number or name. It can also be "*" for all tags.
- Alert Mode: This can be either Subzone, Event or GPIO.
- Checking Against: This can be checking against History table or Jitter table.
- Checking Column:
  Column will be Subzone if Alert Mode is set to Subzone.
  Column will be Detectstat if the Alert Mode is set to Event or GPIO.
- Comparison: This can be equal or not equal to.
- CheckFor: This checks for Pres, Miss or IN.
- NotifyGroup: This is the where the notifications are sent. This group is created in section 6.1.4 Alert Notifications.
- LastTriggered: This shows the time/date of the most recent triggered alert.

6.1.2 Start/Stop Alerts

From the side panel go to Features >Alert Support
From the main panel select > Start/Stop Alerts.

This section allows you to Start or Stop each defined alert individually.

- Click on the red hexagon button to activate each alert.



6.1.3 Define Alerts

From the side panel go to Features > Alert Support
From the main panel select > Define Alerts.

This section allows you to define alerts.

- **Alert Name:**

All alerts must have a unique name.

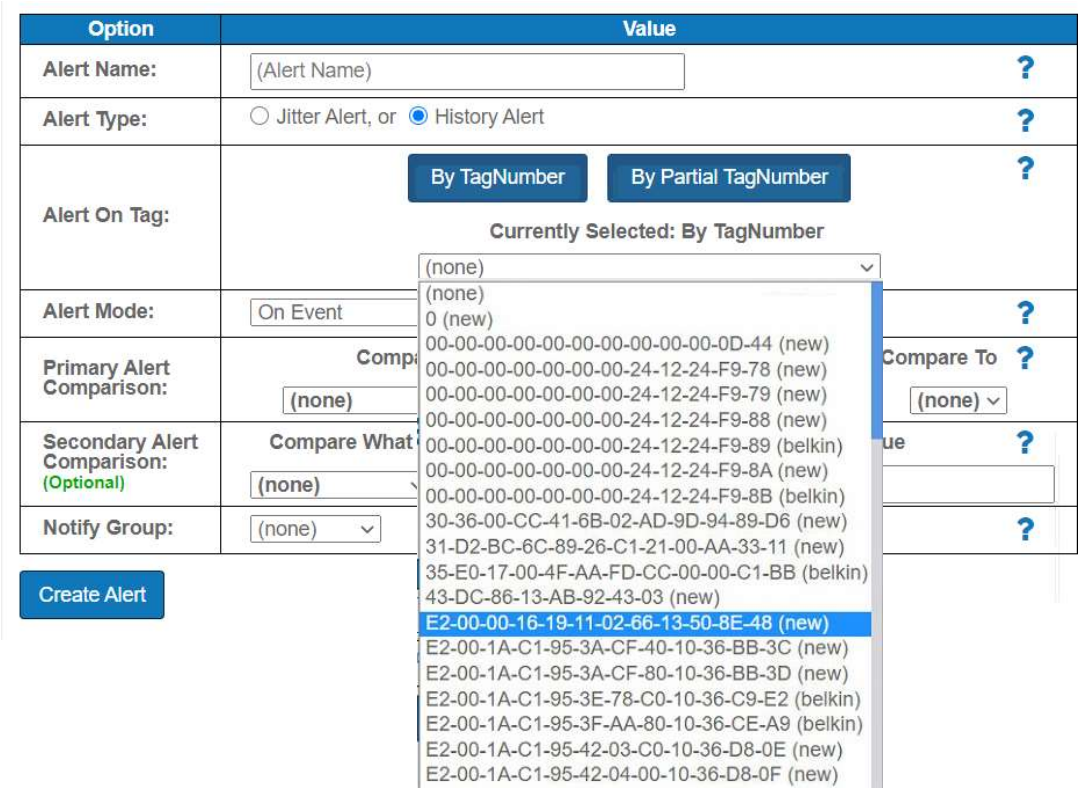
- **Alert type:**

Jitter alerts: typically used for inventory management and tracking where multiple antennas can detect the asset simultaneously.

History alerts: typically use for doorway monitoring and click presents alerts where a single antenna is used or two antennas are less likely to detect an asset simultaneously.

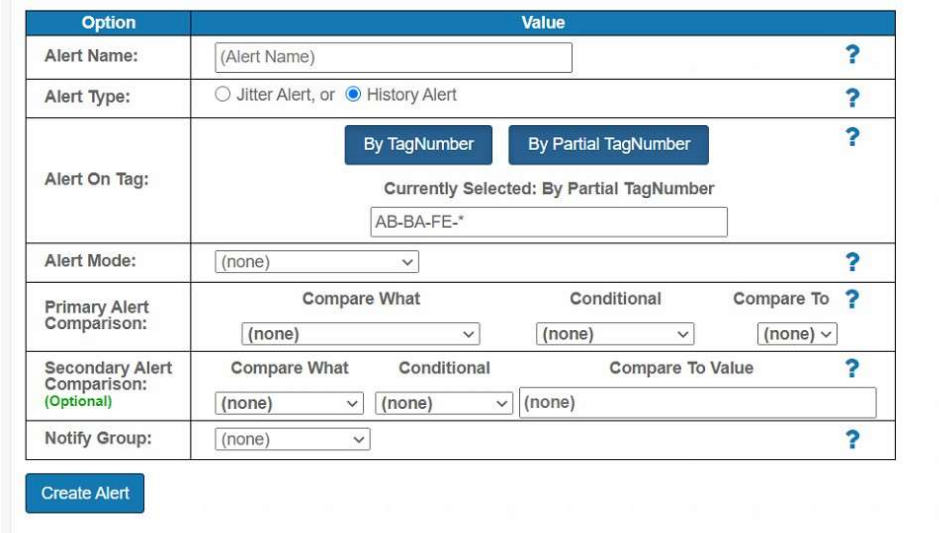
- **Alert on tag:**

By TagNumber: You may select an existing tag from the pulldown menu. Ensure the tag in question is read by the reader prior to this step.



OR

By Partial TagNumber: if using a partial tag number the unknown portion of the tag number may be specified with an asterisk (*)



Examples:

AB-BA-FE-* this will match all tags that start with AB-BA-FE-

*-AB-BA-FE this will match all tags that end with -AB-BA-FE

-AB-BA- This will match all the tags that have the sequence of within the tag numbers

(*) this will match any tag

- **Alert mode:**

Subzone change: whenever an asset is detected by a different antenna from where it was previously.

OR

On event: Whenever an asset is present in a given location or is not present when it should be.

OR

On Reader GPIO event: Particular asset has opened a doorway or triggered an external event on a reader. See section 6.5 GPIO Support.

- **Primary alert comparison:**

Event alerts: you may define what to look for before firing an alert. You may check the tag status of PRES, MISS, or IN.

OR

GPIO alerts: You may check for a specific defined GPIO event. This GPIO event is defined in section 6.5 GPIO Support.

OR

Subzone alerts: There are no additional checking primary options for subzone alerts.

- **Secondary alert comparison (optional):**

This is an optional secondary alert comparison that triggers an alert based on custom field values which are entered in User Data table. Refer to section 5.1.2 User Data.

Once the primary condition is matched you can optionally add a secondary comparison that also must match for an alert to be triggered. If defined, the comparison is done with the primary as an 'AND' conditional (primary AND secondary must match for the alert to fire). If you do not wish to use this option, simply leave it blank.

- **Notify group:**

This defines the action to take once the alert conditions have been matched. Select a group from the drop-down menu. These groups are created in section 6.1.4 Alert Notifications.

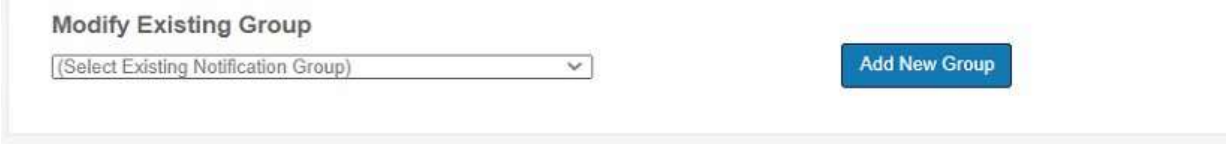
6.1.4 Alert Notifications

From the side panel go to Features > Alert Support
On the main panel select > Alerts Notifications.

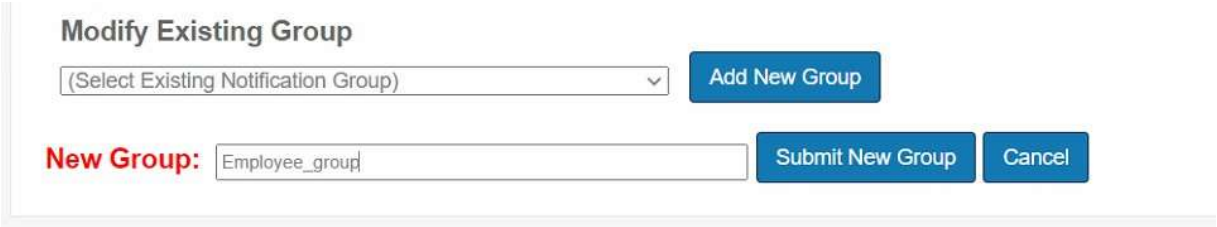
This page allows you to define how you want to receive notifications. There are three ways to receive alert notifications: email, text and API notifications.

6.1.4.1 Email Notifications:

- Click on add new group.



- Name the group and click Submit New Group.



- Under Modify Existing Group, select the group from the dropdown menu.

- Click the green plus sign located in the Email column.
- Email/Phone: Enter the email address where you want your notifications to be sent.

Note: A good rule of thumb is to first perform an Alert SMTP Test on the email you choose as discussed in section 6.1.7 Alerts SMTP Test.

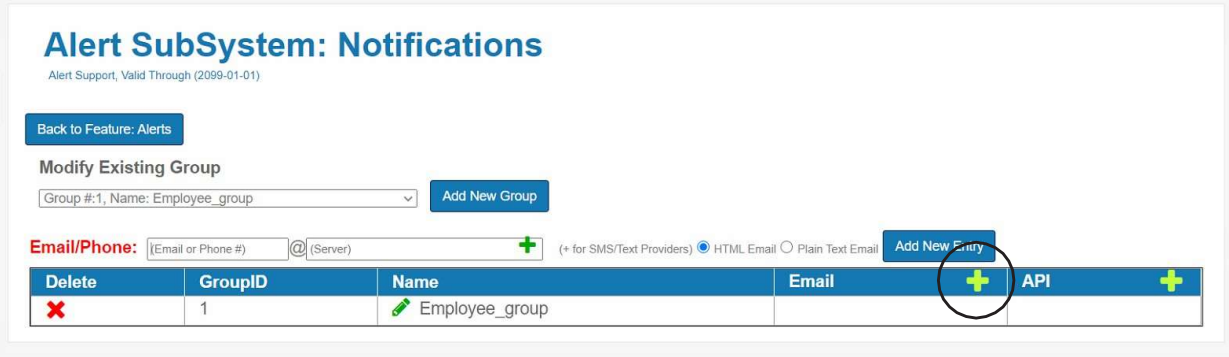
st.

- Click Add New Entry.

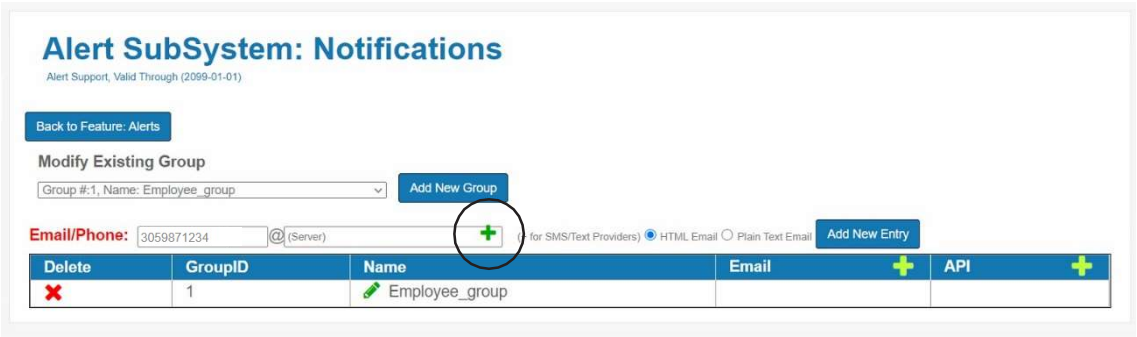
- Go to Section 6.1.4 Define Alerts to complete the email alert setup.

6.1.4.2 Text Notifications:

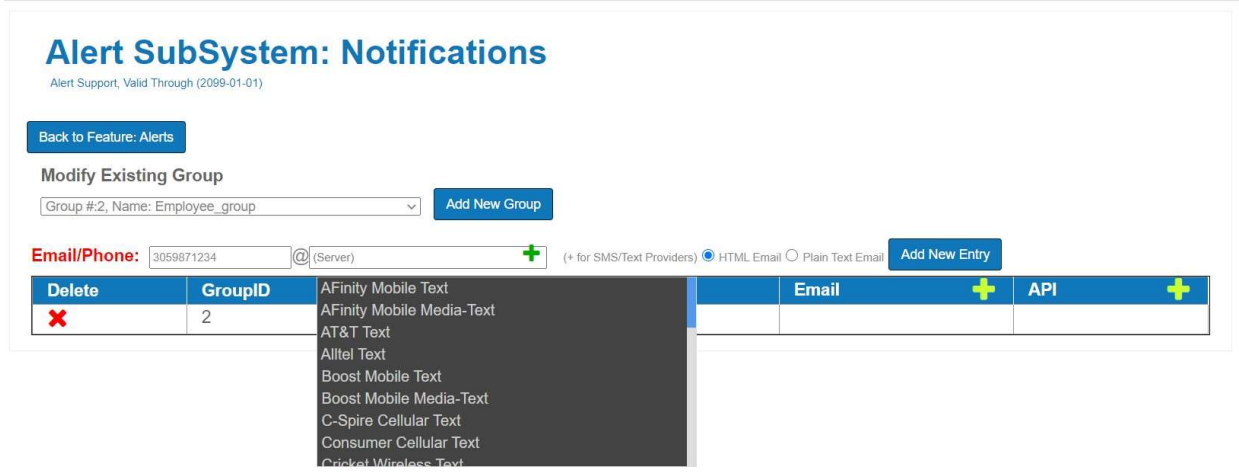
- Click the green plus sign located in the Email column.



- Email/Phone: Enter your phone number.
- Click on the green plus sign next to the (server) box.



- Choose your phone provider from the drop down menu.
- Click Add New Entry.

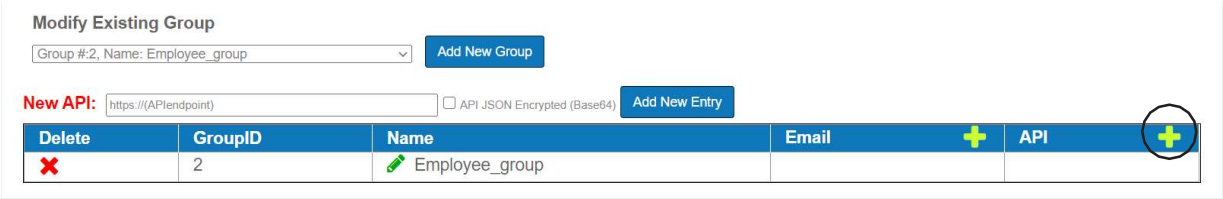


- Go to Section 6.1.4 Define Alerts to complete the text alert setup.

Note: If your provider is not in this list, please reach out to your provider to obtain their email text extension.

6.1.4.3 API Notifications:

- Click on the green plus sign next to API.
- Optional: check the box for API JSON encription.
- Enter the URL for your API end point.
- Click Add New Entry.
- Go to Section 6.1.4 Define Alerts to complete the alert setup.



Here is an example of the data you will receive in a JSON format for each notification:

```
NotifyMe: Payload Encrypted: : FALSE
NotifyMe: Content-Type: : application/json
NotifyMe: Content-Length: : 14329
NotifyMe: ================================================
NotifyMe: Received: alertname: API_Alert
NotifyMe: Received: alertid: 1
NotifyMe: Received: notifygroup: api_endpoint
NotifyMe: Received: found: Tag: E2-00-48-0A-E5-22-C8-49-92-7B-60-E6 Subzone isNow: (Ant1) and
Secondary: (tagname equal employee)
NotifyMe: Received: gpio_name:
NotifyMe: Received: gpio_port:
NotifyMe: Received: alert_against: History
NotifyMe: Received: atype: subzone
NotifyMe: Received: sign: notequal
NotifyMe: Received: alert_on:
NotifyMe: Received: sec_col: tagname
NotifyMe: Received: sec_cond: equal
NotifyMe: Received: sec_val: employee
NotifyMe: Received: tagnumb: E2-00-48-0A-E5-22-C8-49-92-7B-60-E6
NotifyMe: Received: tagname: employee
NotifyMe: Received: subzone: Ant1
NotifyMe: Received: SS: 177
NotifyMe: Received: readername: SR_V7.67
NotifyMe: Received: groupname: RFRAIN544
NotifyMe: Received: readerid: B827EB3D7995
NotifyMe: Received: data:
NotifyMe: Received: zone: RfrainReader
NotifyMe: Received: location: RfrainReader
NotifyMe: Received: custom1:
NotifyMe: Received: custom2:
NotifyMe: Received: custom3:
NotifyMe: Received: custom4:
NotifyMe: Received: custom5:
NotifyMe: Received: current_status: PRES
NotifyMe: Received: current_access: 2020-12-29 12:53:14.533455
NotifyMe: Received: current_access_utc: 1609275194.533455
NotifyMe: --End of Notification------------------------------------------------
```

6.1.5 Enable Alert Monitor

From the side panel go to Features > Alert Support
On the main panel select > Enable Alert Monitor.

Alert Monitor must be enabled for alerts to process.

- Clear Old Alerts: If checked, previous alerts will not cause an alert to occur.
  If unchecked, previous alerts will cause an alert to occur.

  OR

- Clear Older Than: If date and time specified, clear all alerts before the date.
  Date & Time format:

  Date & Time:
  yyyy-mm-dd HH:MM
  Where yyyy-mm-dd HH:MM specifies the date and time from which all alerts older will be cleared have the option to “Clear Older Than”.

  OR

  UTC Format:
  xxxxxxxxxx utc
  Where xxxxxxxxxx (or xxxxxxxxxx.xxxxxx) is the UTC timestamp from which alerts older will be cleared.

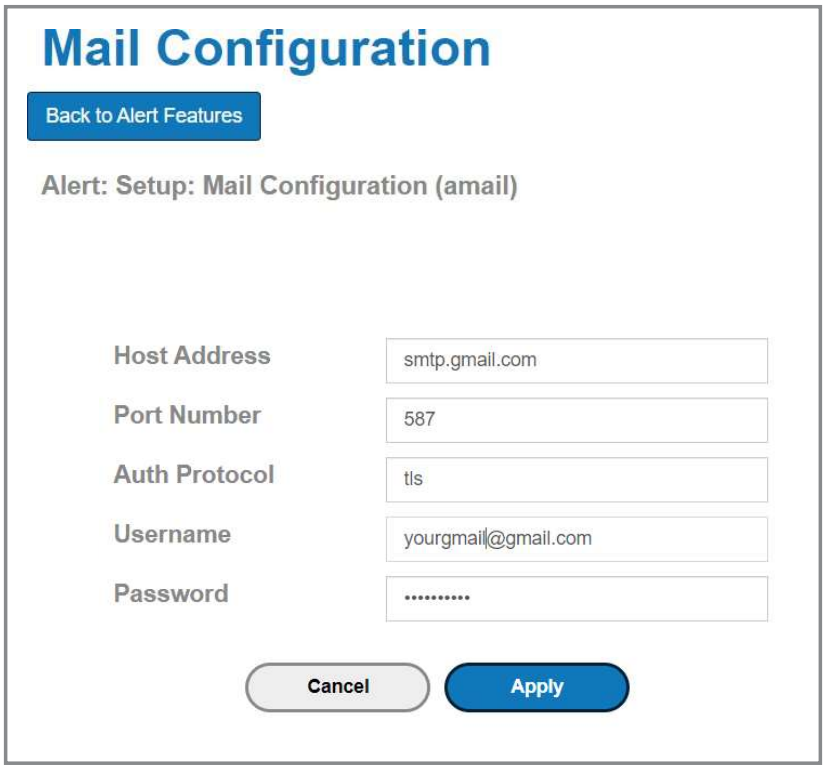
- Click Apply.

6.1.6 Alert SMTP Server

From the side panel go to Features > Alert Support
On the main panel select > AlertS SMTP Server.

- Host Address: smtp.gmail.com
- Port Number: 587
- Auth Protocol: tls
- Username: enter your own gmail account.
- Password: enter your gmail password.

Note: Gmail will flag your first login attempt as it does not recognize the application. Login to your gmail and verify this activity.

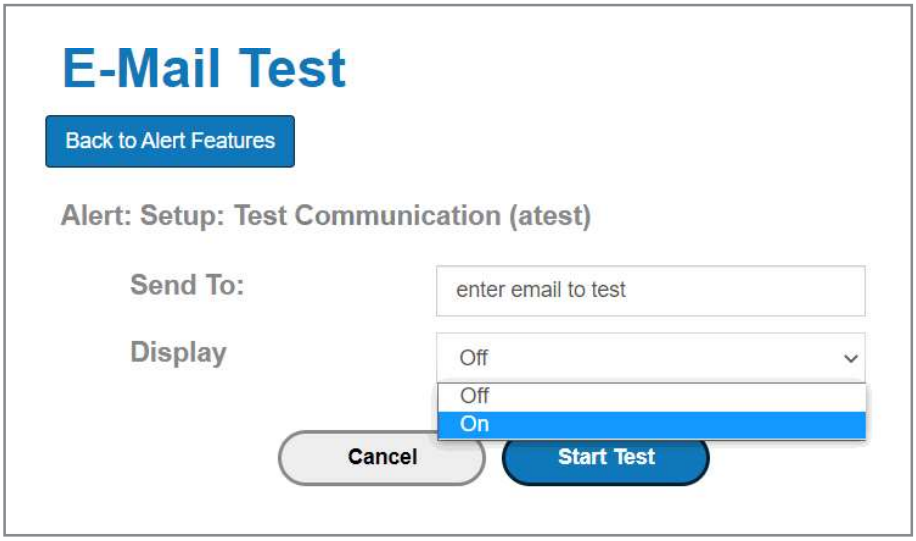


6.1.7 Alert SMTP Test

From the sidepanel go to Features > Alert Support
On the main panel select > Alerts SMTP Test.

This page allows you to test email communication.

- Enter the email you wish to test.
- Under Display, select On.
- Click Start Test.
- Verify it worked by checking your inbox.

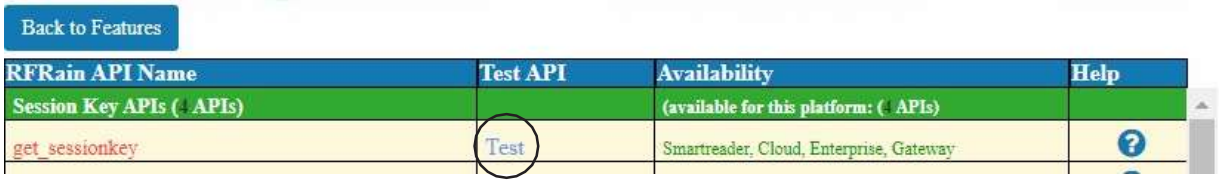


6.2 API Tester

From the sidepanel go to Features > API Tester

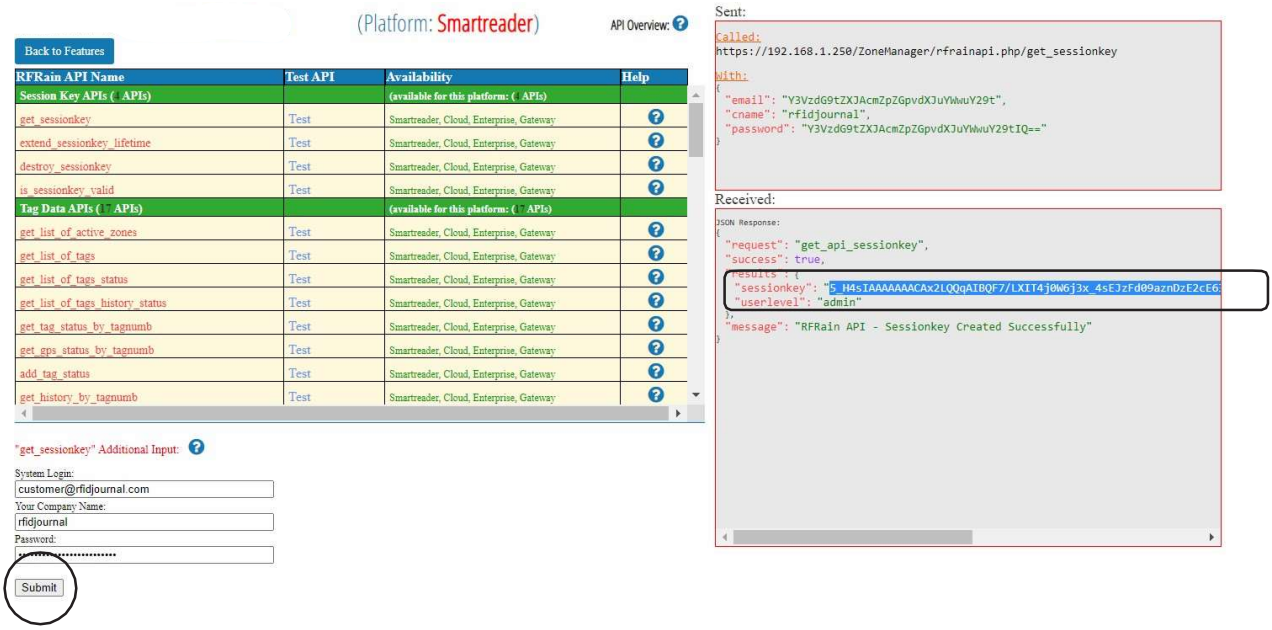
Each API call has a Test button next to it and a Help document that explains each call. Refer to RFRain API 7.00.13.39 User Guide and Reference Guide for more information.

- To get started, click on Test next to get_sessionkey

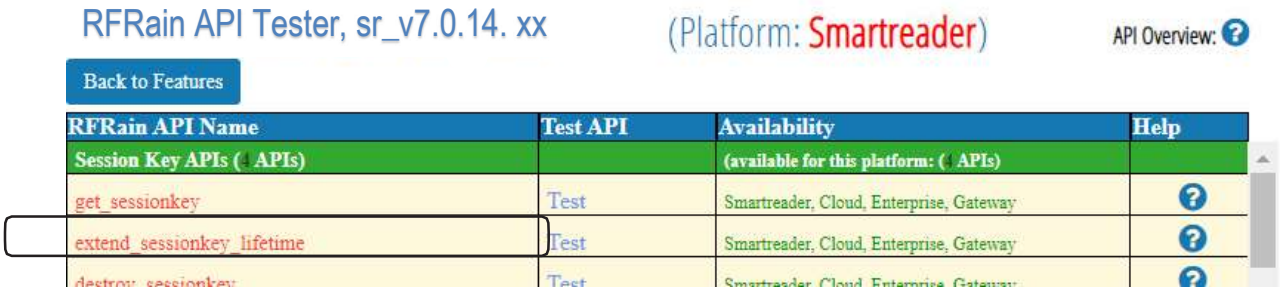


- Enter your login credentials.
- Click submit.

- Copy the sessionkey generated in the window on the right of the screen.



■ This sessionkey will expire in 30 minutes. You have the option to extend_ sessionkey_liftetime.



6.3 Battery Support

From the sidepanel go to Features > Battery Support
This section displays the battery charge level and System Power.

- **Battery Charge Level:** Displays battery charge percentage.
- **System Power:** Connected means it is connected to a power source and charging.

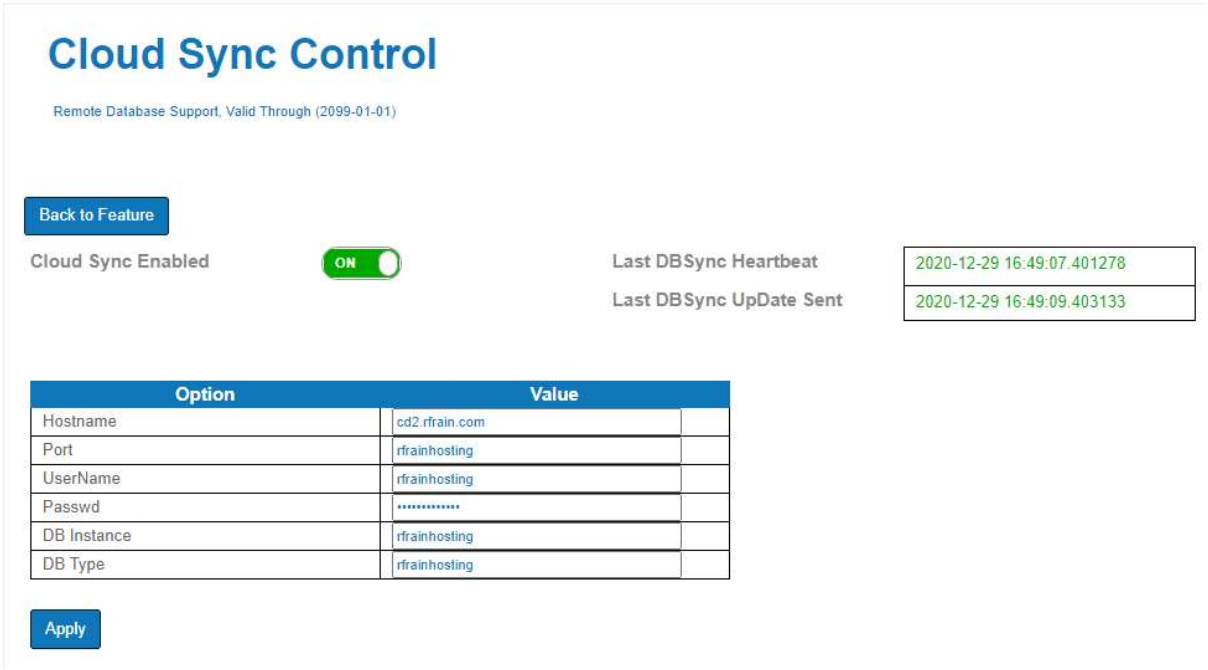
6.4 Cloud Support

From the sidepanel go to Features > Cloud Support

This page allows you to sync the reader's data to the ZoneManager Enterprise software in the cloud and monitor the Last DBSync Heartbeat update as well as the Last DBSync Update Sent.

- Toggle ON to sync the reader's data to the ZoneManager Enterprise software in the cloud

Note: Do not modify the entries in the table unless specifically instructed by RFRain team member.



6.5 GPIO Support

From the sidepanel go to Features > GPIO Support

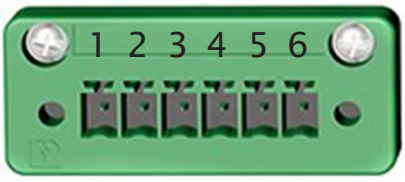
This feature allows you to set up Door Access, and Alarms.

Note: This feature is only available on the Smart Reader Advanced.

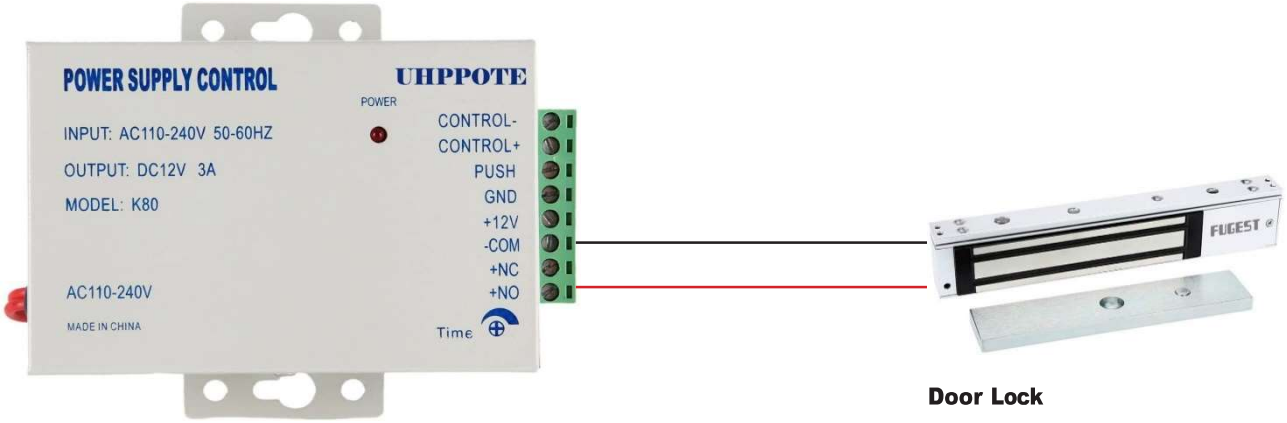
6.5.1 Hardware Setup

6.5.1.1 Doorway setup

The GPIO brick has 6 ports numbered 1 through 6 from left to right. Port 1 is 5V, Port 6 is ground and Ports 2, 3, 4 and 5 are available for use.



- **WARNING: First shutdown the reader. See section 3.1.3 Restart Reader.**
- **Once powered off, unplug the power supply.**
- Connect Door Lock to Power Supply Control:
  The Door Lock Black wire goes to -COM on the Power Supply Control.
  The Door Lock Red wire goes to +NO on the Power Supply Control.



Door Lock

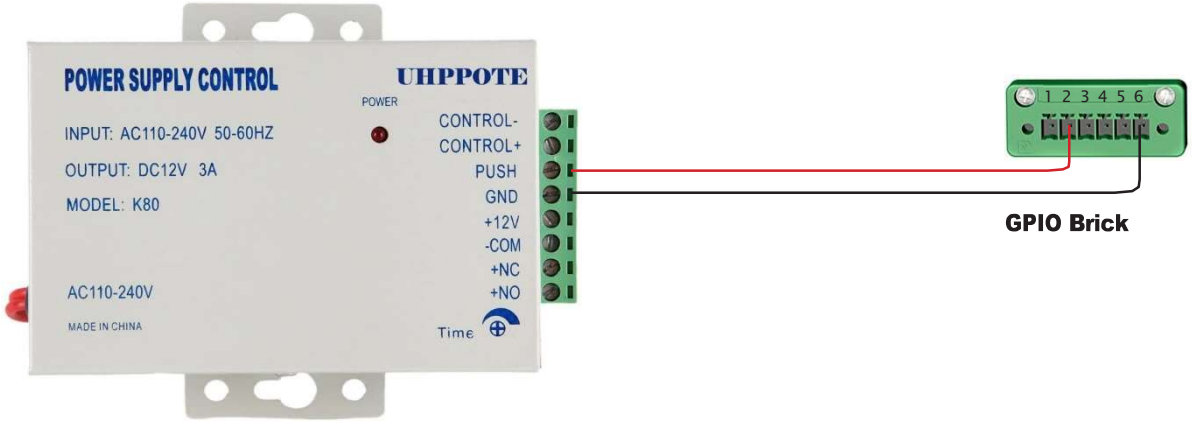
Power Supply Control

- Connect GPIO brick to Power Supply Control:

  Take a piece (Red And Black) from a wire roll.

  Red wire: One end to PUSH Power Supply Control and other end: GPIO brick. Choose any Port 2-5. In this example we use port 2.

  Black wire: One end to GND Power Supply Control and other end: GPIO brick port 6.



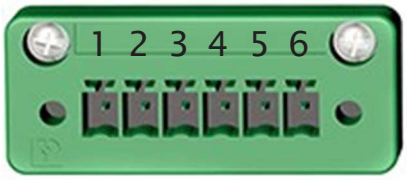
GPIO Brick

Power Supply Control

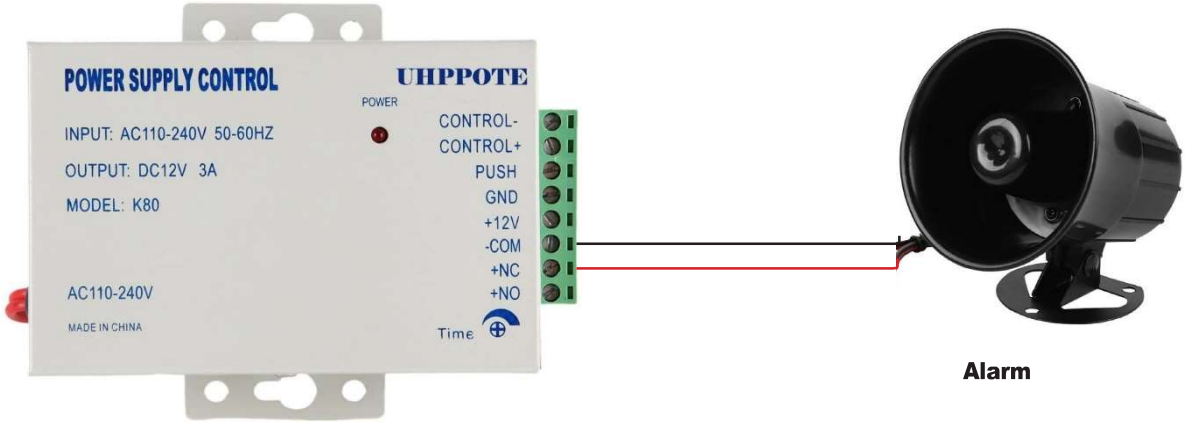
- Plug back the power supply and wait for the Reader to power ON.
- Login to the Zone Manager and go to Features > GPIO Suppor.
- Go to section 6.5.2 GPIO Alert Setup to activate the doorway Alert.

6.5.1.2 Alarm setup

The GPIO brick has 6 ports numbered 1 through 6 from left to right. Port 1 is 5V, Port 6 is ground and Ports 2, 3, 4 and 5 are available for use.



- **WARNING: First shutdown the reader. See section 3.1.3 Restart Reader.**
- **Once powered off, unplug the power supply.**
- Connect Alarm to Power Supply Control:
  The Alarm Black wire goes to -COM on the Power Supply Control.
  The Alarm Red wire goes to +NC on the Power Supply Control.



Alarm

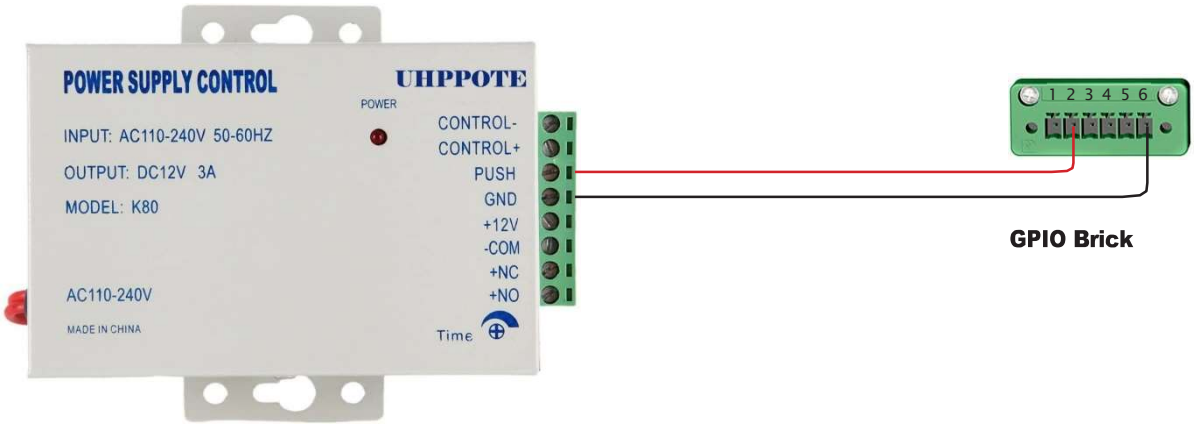
Power Supply Control

- Connect GPIO to Power Supply Control:

  Take a piece (Red And Black) from a wire roll.

  Red wire: One end to PUSH Power Supply Control and other end: GPIO brick. Choose any Port 2-5. In this example we use port 2.

  Black wire: One end to GND Power Supply Control and other end: GPIO brick port 6.



Power Supply Control

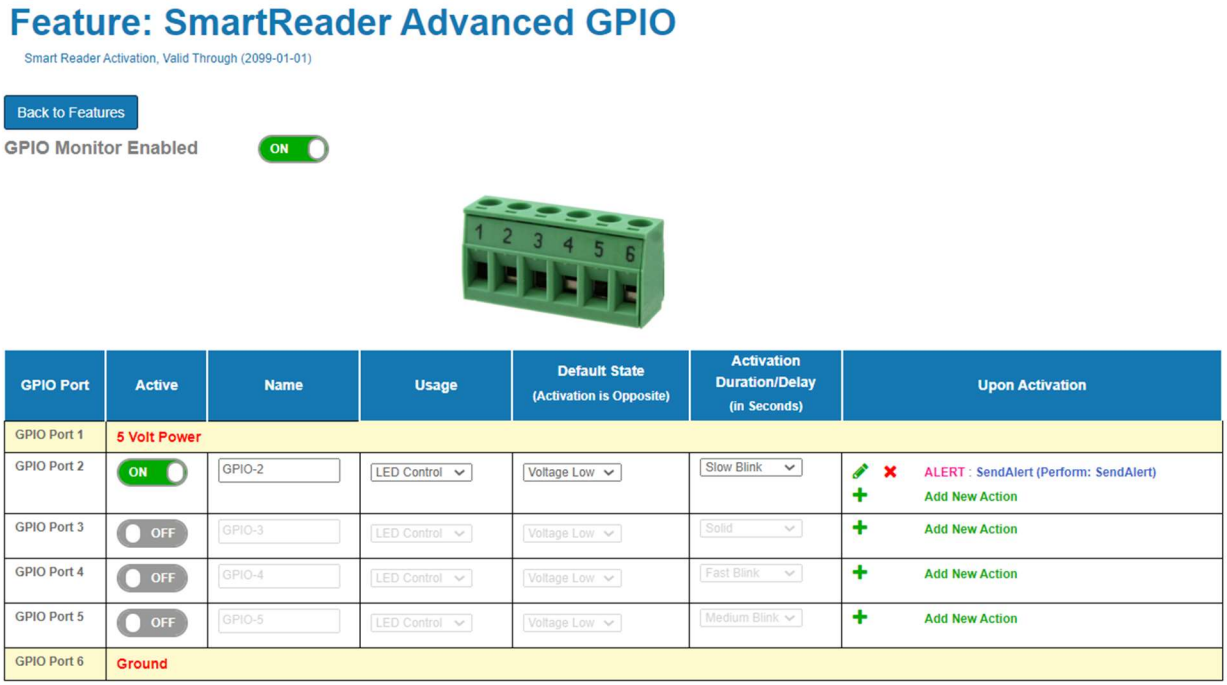
- Plug back the power supply and wait for the Reader to power ON.
- Login to the Zone Manager and go to Features > GPIO Support > Under Action, click on play button.
- Go to section 6.5.2 GPIO Alert Setup to activate the alarm Alert.

6.5.2 GPIO Alert Setup

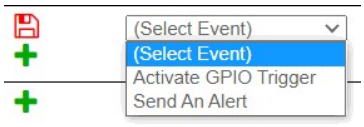
From the side panel go to Features > GPIO Support.

This page allows you to activate GPIO ports 2 through 5 to trigger an alert upon activation.

- GPIO Port: Provides the GPIO port name.
- Active: Toggle ON the port you have physically wired in the previous section 6.5.1.
- Name: Name the GPIO port.
- Usage: Select Trigger Event only.
- Default State: Select Voltage Low only.
- Activition Duration/Delay: Enter Activation period in seconds that best meets your use case.



- Upon Activation: Click on green plus sign and select Send an Alert only.



Click red disc button to save.

- Toggle on the GPIO Monitor Enable. Wait for the screen to refresh.
- See section 6.1.4 Alert Notifications to setup.
- Define alerts for GPIO. See section 6.1.3.

Option	Value
Alert Name:	GPIO_alert ?
Alert Type:	○ Jitter Alert, or ◉ History Alert ?
Alert On Tag:	By TagNumber / By Partial TagNumber ? Currently Selected: By Partial TagNumber *
Alert Mode:	On Reader GPIO Event ?
Primary Alert Comparison:	Compare What (none) ? (none) / Event: GPIO-2, Port: 2
Secondary Alert Comparison: (Optional)	Compare What (none) (none) Compare To Value (none) ?
Notify Group:	(none) ?

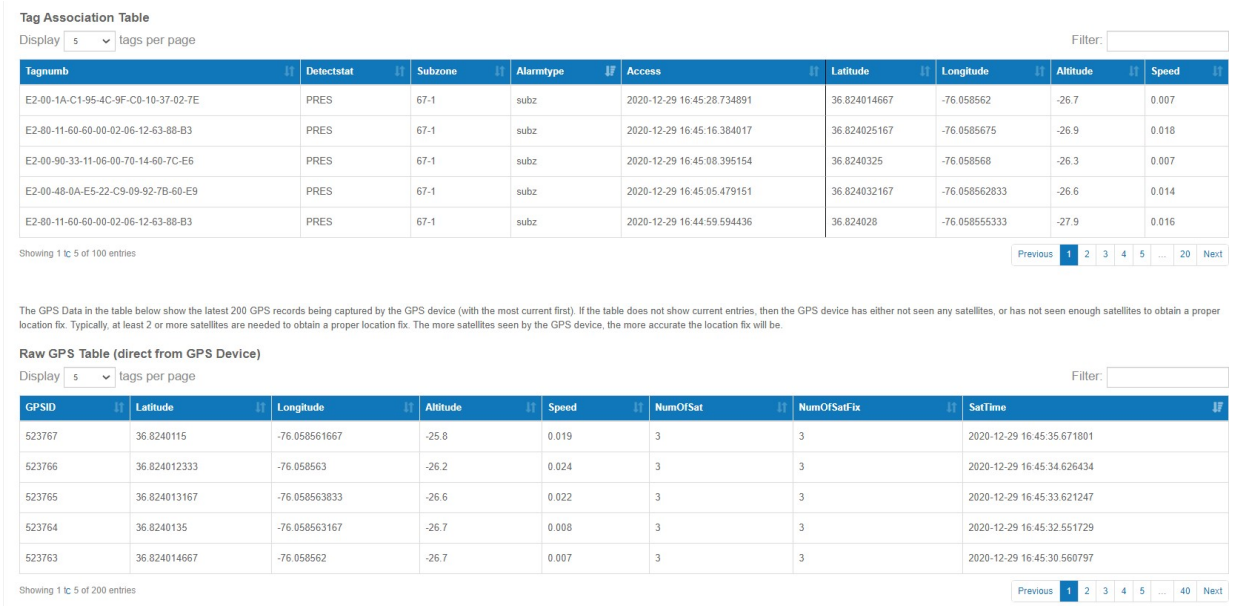
- See section 6.1.2 Start/Stop Alerts to setup.
- See section 6.1.5 Enable Alert Monitor to setup and complete.

6.6 GPS Support

From the sidepanel go to Features > GPS Support.

- **WARNING: First shutdown the reader. See section 3.1.3 Restart Reader.**
- **Once powered off, unplug the power supply.**
- Plug the GPS into the USB port of the Reader.
- Plug back the power supply and wait for the Reader to power ON.
- Login to the Zone Manager
- Go to Features > GPS Support

This table shows Tag Association Table and Raw GPS Table.



Tag Association Table

Display 5 tags per page Filter:

Tagnumb	Detectstat	Subzone	Alarmtype	Access	Latitude	Longitude	Altitude	Speed
E2-00-1A-C1-95-4C-9F-C0-10-37-02-7E	PRES	67-1	subz	2020-12-29 16:45:28.734891	36.824014667	-76.058562	-26.7	0.007
E2-80-11-60-60-00-02-06-12-63-88-B3	PRES	67-1	subz	2020-12-29 16:45:16.384017	36.824025167	-76.0585675	-26.9	0.018
E2-00-90-33-11-06-00-70-14-60-7C-E6	PRES	67-1	subz	2020-12-29 16:45:08.395154	36.8240325	-76.058568	-26.3	0.007
E2-00-48-0A-E5-22-C9-09-92-7B-60-E9	PRES	67-1	subz	2020-12-29 16:45:05.479151	36.824032167	-76.058562833	-26.6	0.014
E2-80-11-60-60-00-02-06-12-63-88-B3	PRES	67-1	subz	2020-12-29 16:44:59.594436	36.824028	-76.058555333	-27.9	0.016

Showing 1 to 5 of 100 entries Previous 1 2 3 4 5 ... 20 Next

The GPS Data in the table below show the latest 200 GPS records being captured by the GPS device (with the most current first). If the table does not show current entries, then the GPS device has either not seen any satellites, or has not seen enough satellites to obtain a proper location fix. Typically, at least 2 or more satellites are needed to obtain a proper location fix. The more satellites seen by the GPS device, the more accurate the location fix will be.

Raw GPS Table (direct from GPS Device)

Display 5 tags per page Filter:

GPSID	Latitude	Longitude	Altitude	Speed	NumOfSat	NumOfSatFix	SatTime
523767	36.8240115	-76.058561667	-25.8	0.019	3	3	2020-12-29 16:45:35.671801
523766	36.824012333	-76.058563	-26.2	0.024	3	3	2020-12-29 16:45:34.626434
523765	36.824013167	-76.058563833	-26.6	0.022	3	3	2020-12-29 16:45:33.621247
523764	36.8240135	-76.058563167	-26.7	0.008	3	3	2020-12-29 16:45:32.551729
523763	36.824014667	-76.058562	-26.7	0.007	3	3	2020-12-29 16:45:30.560797

Showing 1 to 5 of 200 entries Previous 1 2 3 4 5 ... 40 Next

7. Administration

Click on Administration in the left-hand side panel, a sub menu will open that contains User Admin, Reset System Settings and System Updater.

7.1 User Admin

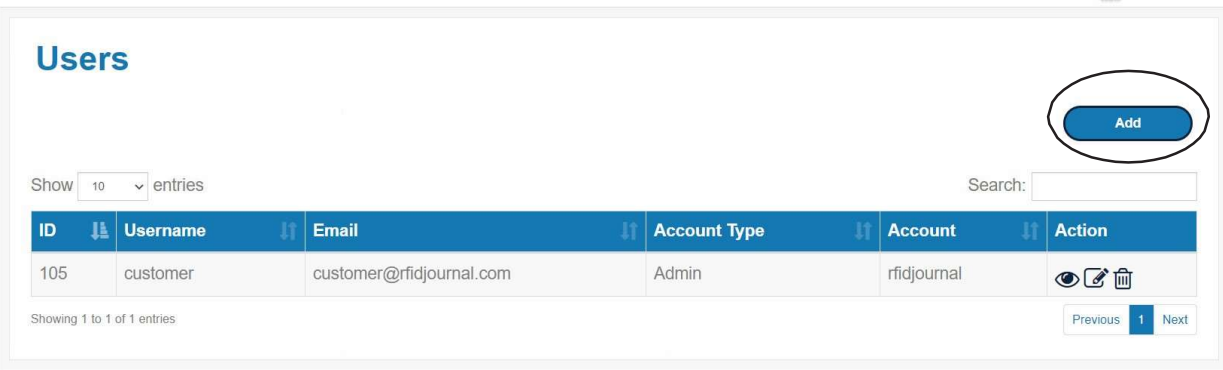
There are two modes of authentication, which include admin and user. An “Admin” has full control of the system whereas a “User” has only limited access.

The difference between the Admin account and the User account is as follows ; The “Admin” has full ”Read” and “Write” privileges for all users listed in the Users table and access to all “action” commands available in the Zone Manager software.

The “User” has “Read” privileges only. This means that the “User” can only view the status or configurations in the Zone Manager software but cannot add, delete, nor change any of the parameters.

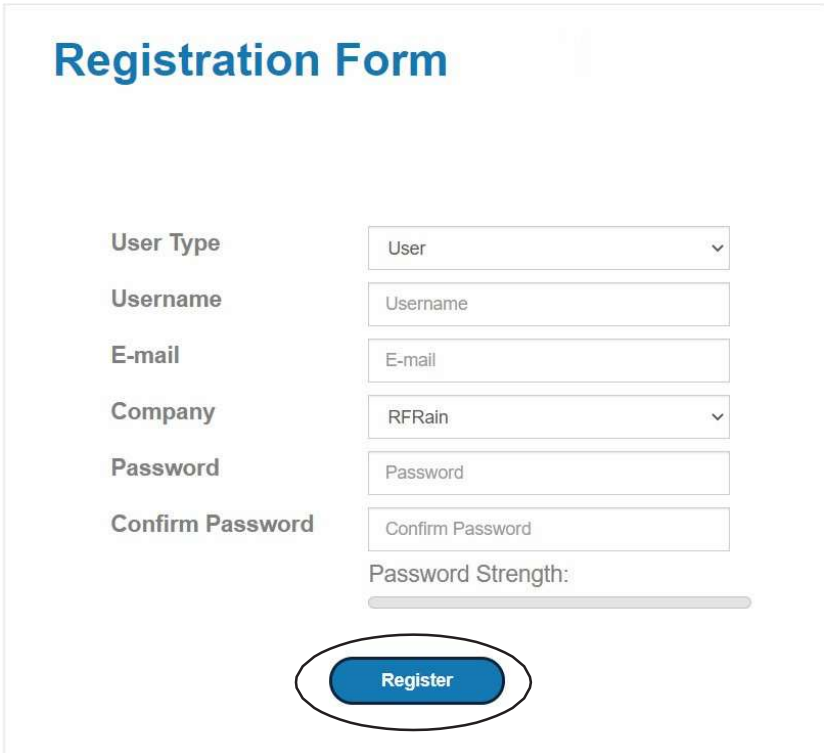
7.1.1 Add New User

- From the sidepanel go to Administration > User Admin.
- Click on the Add button.

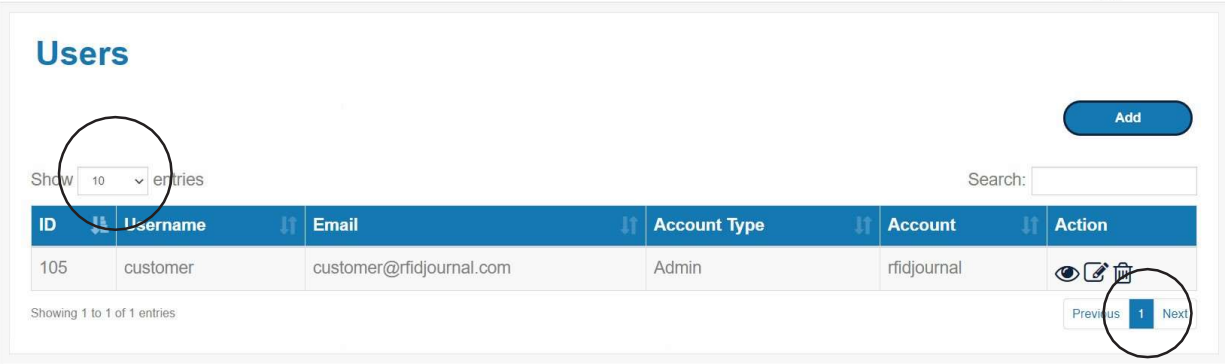


In the registration form, add the following information:

- User Type: Select "Admin" or "User" from the drop-down menu.
- Username: Enter a username. (no spaces)
  - Username must contain only letters, numbers, and underscores.
- Company: Select your company's name from drop down menu.
- E-mail: Enter an e-mail address
- Password: Choose a password that contains the following:
  - Minimum of 8 characters
  - At least one Capital Letter
  - One special character such as ! or #
- Confirm Password: Retype the same password to ensure accuracy.
- Click on the Register button.



After you click on the Register button, you will be brought back the Users screen.



- Verify that the information you just added in the Registration form has been added to the Users table.

Note: If you do not see the "new" Admin user that you just created, it is possible that the maximum number of visible entries has been reached and the "new" Admin user is in the table but not visible on the screen. If this is the case, you can do either of the following:

- Choose a larger number in the pull-down tab of the "Show # entries", located at the upper, left-hand side of the Users table, or
- Click on the "Next" option, located at the lower, right-hand corner of the Users table. This will display the next screen of users listed in the table.

7.1.2 View/Modify/Remove User

- The view button allows you to view user profile. (account type/email/name)
- The modify button allows you to edit user information such as account type, email and password.
- Select the trash can button under action to remove a user from the table.

7.2 Reset System Settings

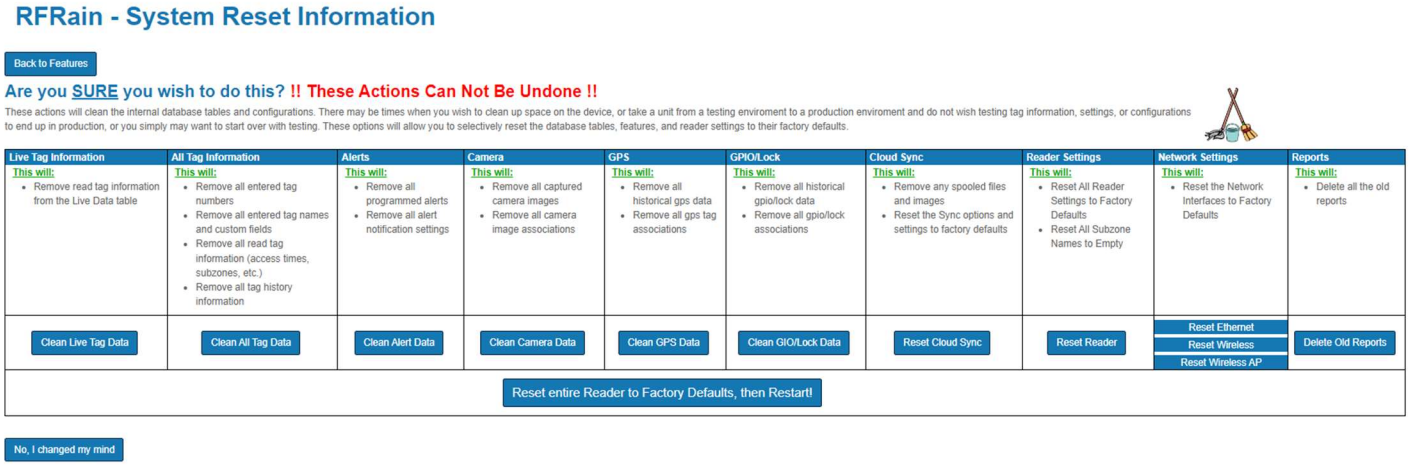
- From the sidepanel go to Administration > Reset System Settings.

View section 6.7 System Cleaner.

7.3 System Cleaner

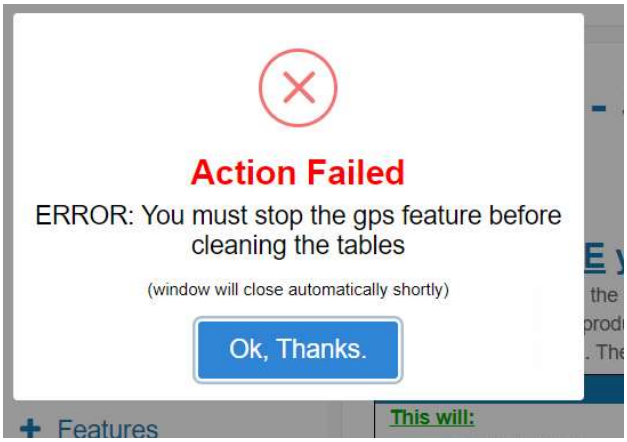
From the side panel go to Features > System Cleaner.

This page allows you to clean various data tables with a simple click.



- Clean Live Tag Data: First you will have to stop the reader see section 4.1 Start/ Stop Reader before clicking Cleaning Live Tag Data for instance.
- Clean All Tag Data: First you will have to stop the reader see section 4.1 Start/Stop Reader and stop Cloudsync see section 6.4 Cloud Support before clicking Cleaning All Tag Data.
- Clean Alert Data: First you will have to turn off Monitor Enable in section 6.1.5 Enable Alert Monitor before clicking on Clean Alert Data.
- Clean GPS Data: First you will have to Stop GPS Subsystem in section 6.6 GPS Support before clicking on Clean GPS Data.
- Clean GPIO/Lock Data: First you will have to turn off GPIO Monitor and turn off GPIO Engine in section 6.5.2 GPIO Alert Setup.
- Reset Cloud Sync: Please do not click.
- Reset Network Settings: Reset the Network Interfaces to Factory Defaults
- Reset Reader: Please do not click. Consult with your RFRain team first.
- Clean and Reset Everything: Please do not click. Consult with your RFRain team first.

Note: You must shut down the processor that is feeding data to each table prior to cleaning that table. Failing to do so, will generate a pop-up message that instructs you to stop the feature before cleaning the tables:



- Proceed by clicking the blue clean/reset button under the desired table you want to reset.

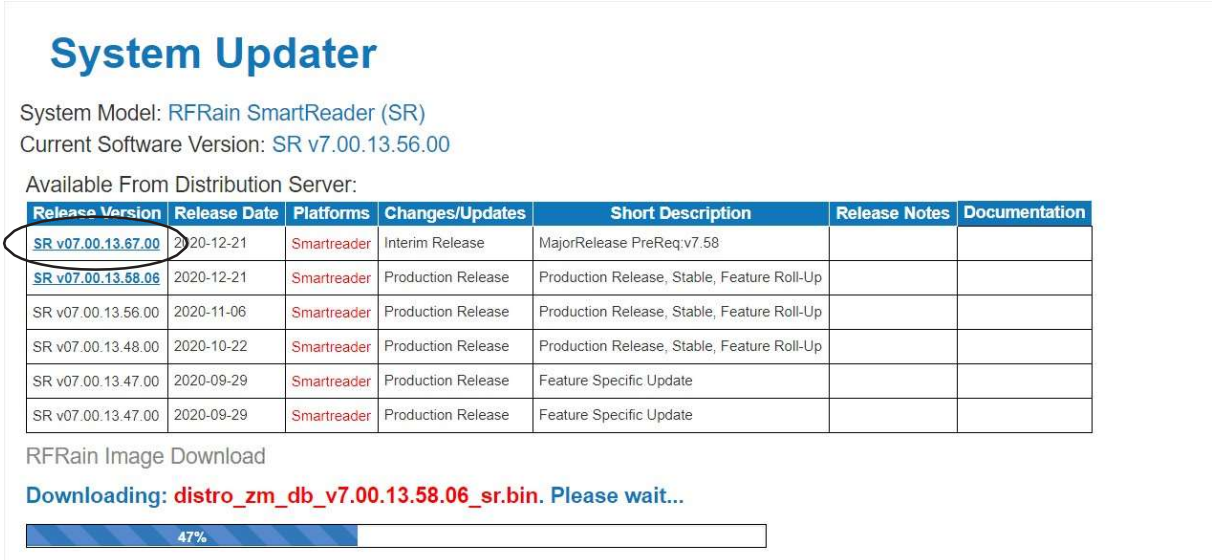
7.4 System Updater

From the sidepanel go to Administration > System Updater.

This section allows a user to perform a system update.

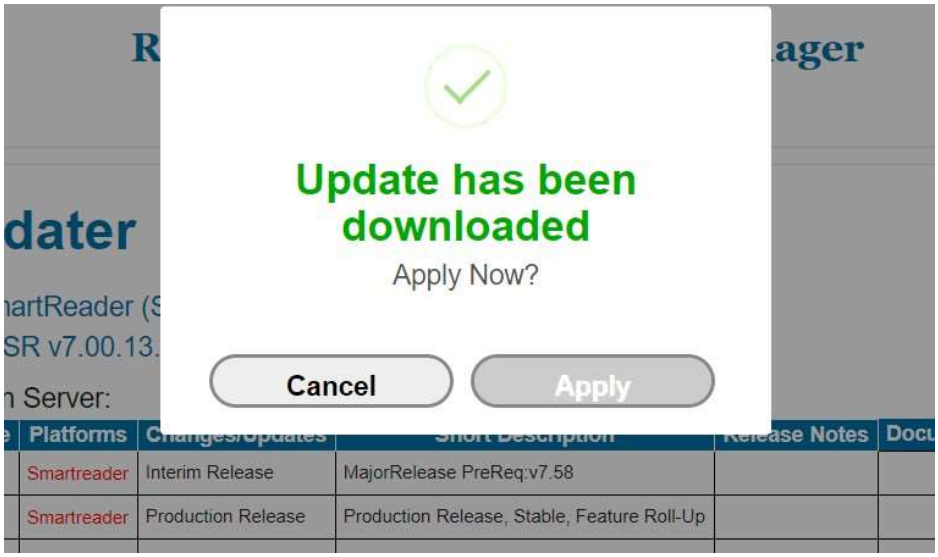
- Click on the latest "Release Version".

Note: Please consult with your RFRain support team prior to updating the Zone Manager Software.

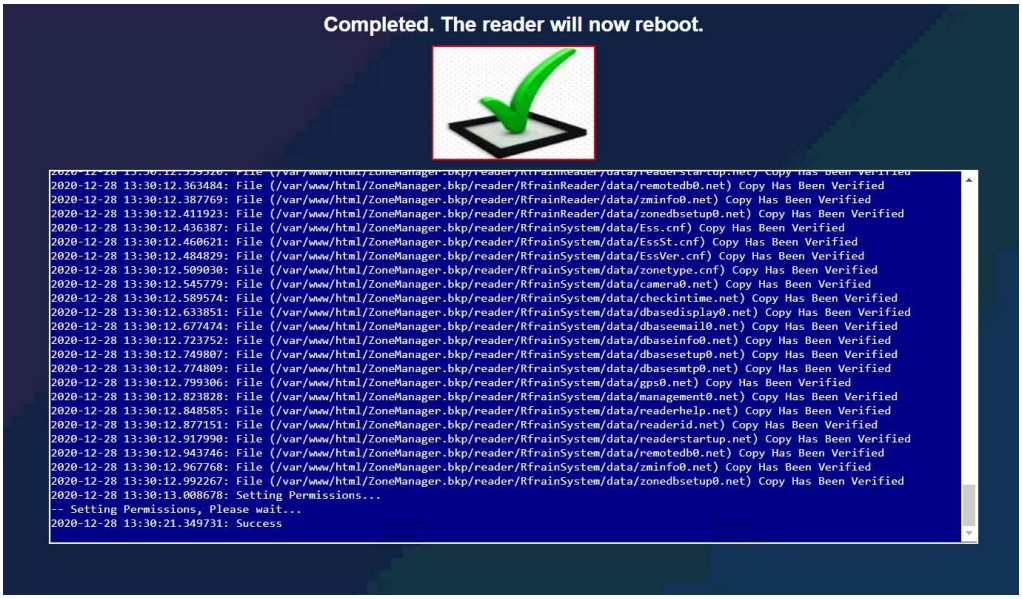


Release Version	Release Date	Platforms	Changes/Updates	Short Description	Release Notes	Documentation
SR v07.00.13.67.00	2020-12-21	Smartreader	Interim Release	MajorRelease PreReq:v7.58		
SR v07.00.13.58.06	2020-12-21	Smartreader	Production Release	Production Release, Stable, Feature Roll-Up		
SR v07.00.13.56.00	2020-11-06	Smartreader	Production Release	Production Release, Stable, Feature Roll-Up		
SR v07.00.13.48.00	2020-10-22	Smartreader	Production Release	Production Release, Stable, Feature Roll-Up		
SR v07.00.13.47.00	2020-09-29	Smartreader	Production Release	Feature Specific Update		
SR v07.00.13.47.00	2020-09-29	Smartreader	Production Release	Feature Specific Update		

- Once the download is finished a window box will pop up. Click Apply.



- Wait until a "Success" message is displayed. Please allow enough time for the reader to finish rebooting.



For more support email us at sales@rfrain.com
or call 1.833.273.7246

Email: sales@rfrain.com
Phone: 1-833-273-7246
Availability: 24/7
www.rfrain.com