

BeaconManager Application – User Manual

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Revision History

Date	Version	Author	Reviewer
2016-03-06	1.0		

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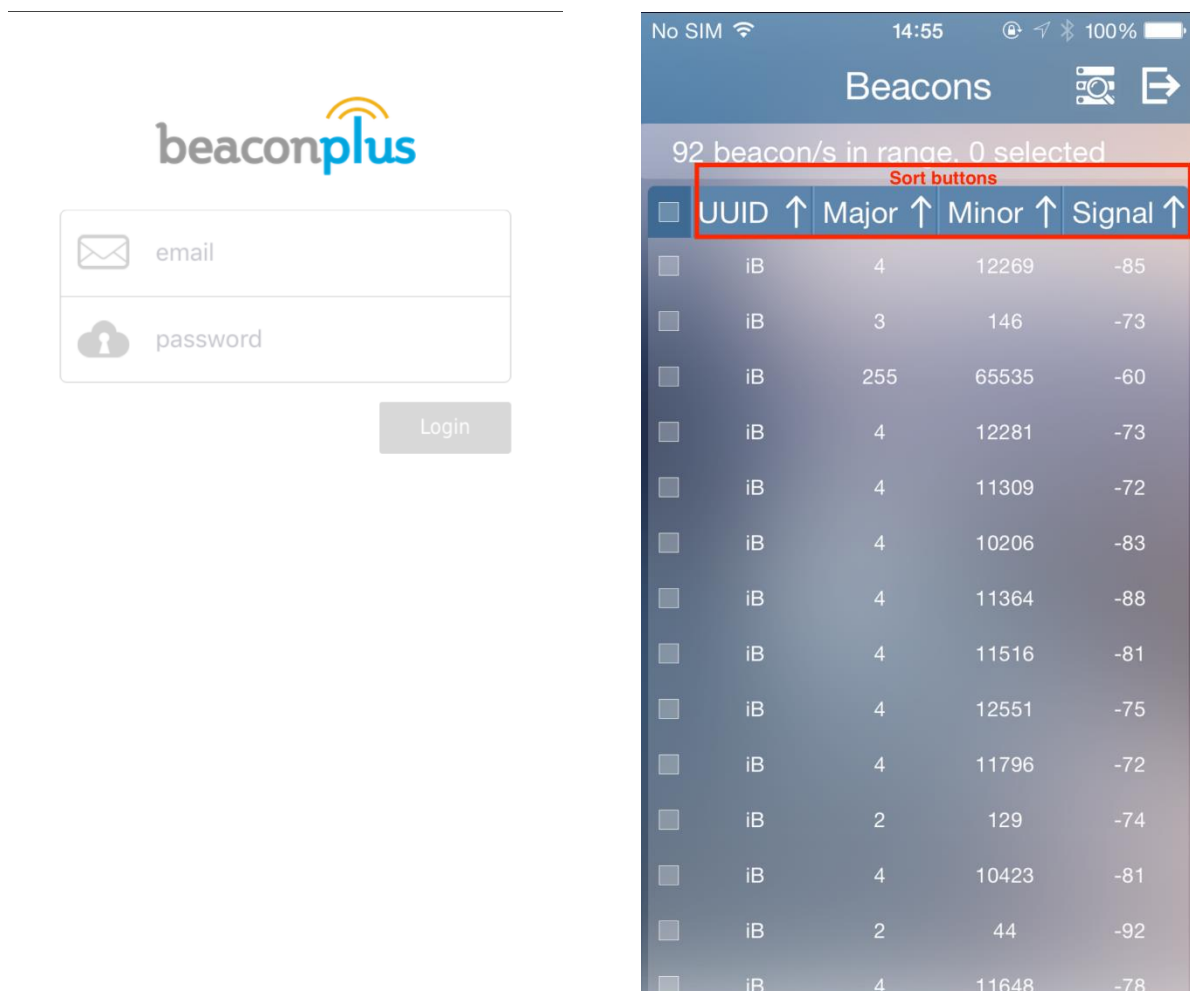
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1 Introduction

This manual describes in detail all the existing functionalities of 'BeaconManager' application. Screenshots are also provided wherever possible for better understanding of the same.

2 Beacon List

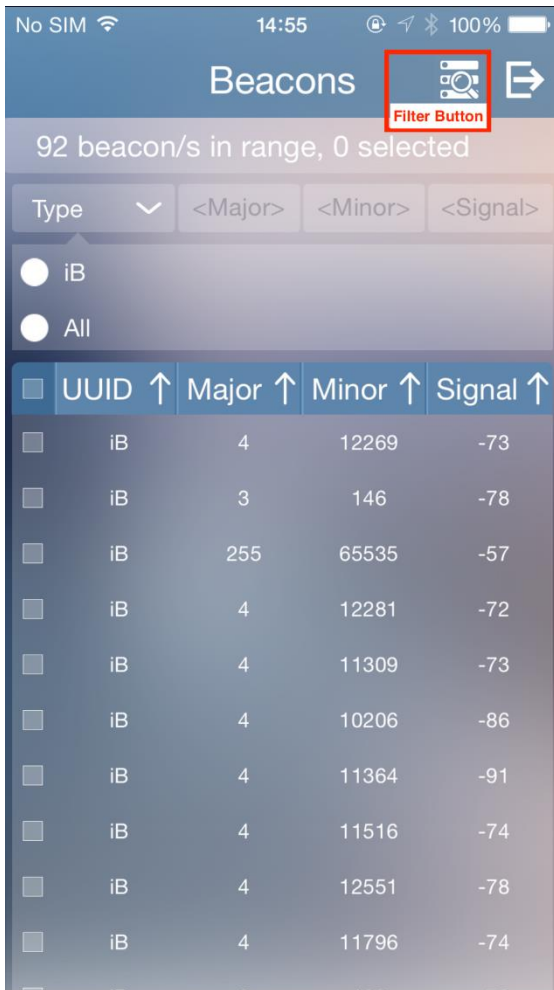
The first and foremost step is to login to the application using the username and password provided during registration. Successful login will direct you to the beacons list page wherein all the detected beacons registered with 'BeaconPlus' cloud will be displayed. The count of detected beacons and the selected beacons as well will be displayed in the space just below the title bar.



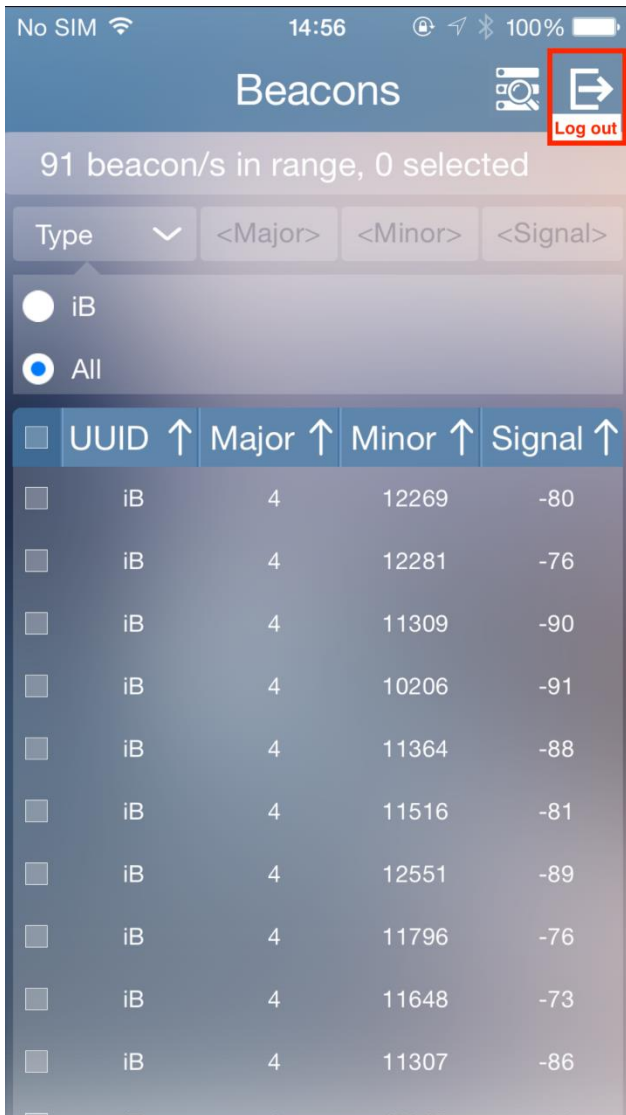
The beacons could be sorted based on their uuid, major or minor values as well as their signal strengths. The listed beacons will be sorted in descending order based on the selected buttons namely UUID, Major, Minor and Signal. For filtering beacon list, one can tap on the filter button (second from top right), which displays a

dropdown view with the following filter options.

- 1. Type
 - 1.1. iB
 - 1.2. All
- 2. Major
- 3. Minor
- 4. Signal



Beacons list could be filtered based on the type of beacon selected. Major, Minor and signal fields accepts values in decimal format. Click the “Done” button after entering the values. This will initiate the filter action immediately. The filter view can be dismissed by clicking on the filter button again. To log out from the application, the user can click on the log out button.



3 Beacon Editing

The user may select a single beacon or multiple beacons at once for editing. All the beacons detected could be selected for editing at once by clicking on the select all button on top of the list. For selecting each beacon, the user may either select a row or click on check box on the left end of each beacon displayed.

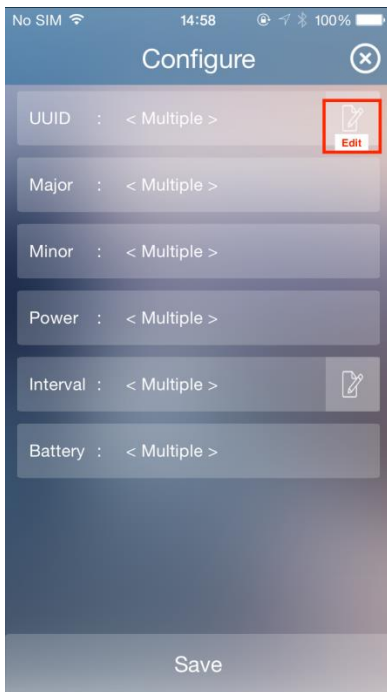


When the user selects one or more beacons, an edit button will appear in place of the filter button. Clicking on the edit button now will guide the user to the edit view. It displays the characteristics of the beacon and its values. If the user chooses to edit "more than one beacon at once, the text "<Multiple>" will get displayed instead of the parameter values.

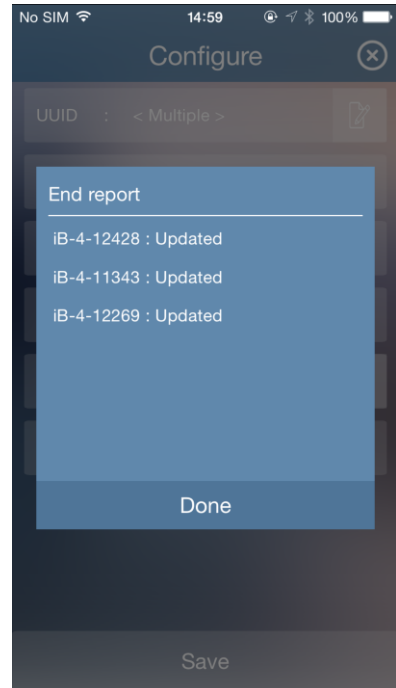
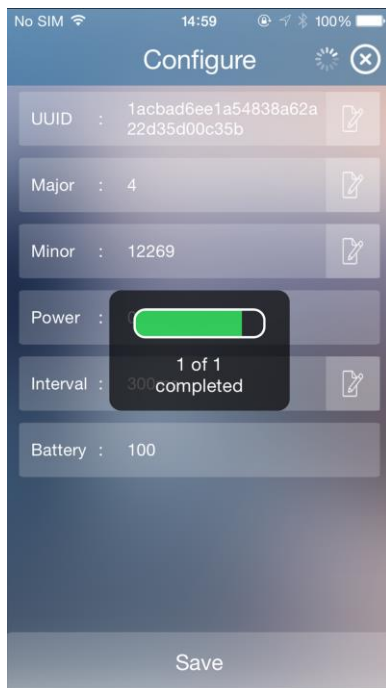
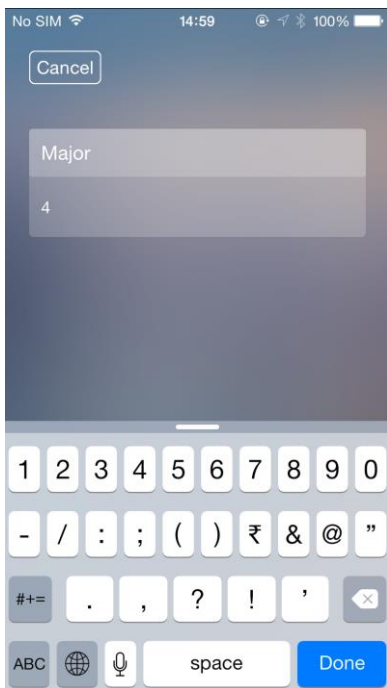
The table below gives a general understanding about the various characteristics in a beacon and the desirable limits for those.

Characteristic	Description	Max value	Min Value	Editable status
UUID	Used to differentiate a large group of related beaconsF...F.... (32 F's)0...0.... (32 0's)	YES
Major	Used to distinguish a smaller subset of beacons within the larger group	65535	0000	YES (single) NO (multiple)
Minor	Meant to identify individual beacons	65535	0000	YES (single) NO (multiple)
Advertising Interval	The time interval in between two broadcasts	900	100	YES
Transmitting Power	Used to determine proximity or distance from the beacon	0	-20	YES (single) NO (multiple)
Battery Level	The current battery status of the beacon	100	0	NO
Connectable packets	Number of connectable broadcasts from the beacon within a stipulated time	255	1	YES
Non-Connectable packets	Number of non-connectable broadcasts from the beacon within a stipulated time	255	1	YES
Broadcasting channels	The channels over which the ble signals are broadcasted	YES or NO status only	YES or NO status only	YES

Parameters that are editable will have an edit button to its right. On clicking the edit button, a pop up view will display wherein the user may input the values that he wishes to keep for his beacons. Clicking on the save button at the bottom after modifying the values will start the editing procedure. Once completed, it will display success/failure messages for the current action.



If multiple beacons are selected, alert messages will present an option to show status report. The user may discard his changes and go back to the list screen by clicking on the close button on the title bar.



4 Advance Settings

Advance settings servers the purpose of optimizing iBeacon power consumption. It allows the user to set the number of connectable and non-connectable packets and also to select the channels for BLE communication from the available three. All three channels cannot be switched off at the same time, at least one has to be ON for broadcasting. It also allows the user to set a suitable company id for the beacon.

Company Id	Company id is a unique number assigned by Bluetooth SIG. It's a 2 byte data.
Connectable Packets	It's the number of iBeacon packets that can establish connection with BLE supported device.
Non connectable Packet	Its iBeacon packets that cannot establish a connection with BLE supported device.

It's recommended to have more connectable packets than non-connectable packets, setting a higher value to connectable packets than non-connectable packets will enhance the Bluetooth connectivity.

