Calibration &
BS Config

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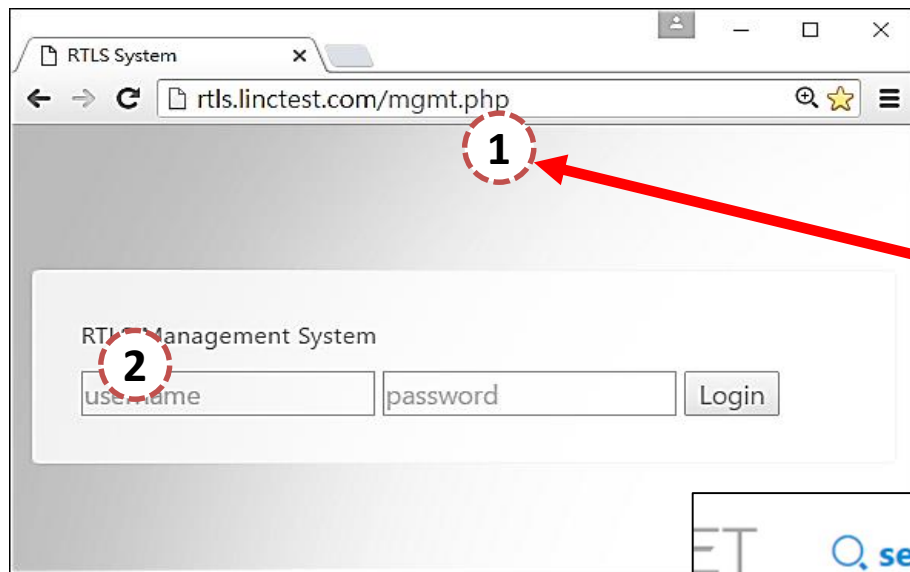
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1. The function description of calibration

- The LBS-3026 can adjust the corresponding characteristic parameters according to the different signal influence (different site or the way of installation). So that the accuracy of position can be improved for each different field site.

Device Config	Bs Config	Category Config						
bs_mac	base_rssi	rssi_curve_factor	base_rssi_wb	rssi_curve_factor_wb	close_rssi	height	is_active	
30:E0:90:01:03:E7	-60	3.1	-60	2.5	-60	150	1	
30:E0:90:01:03:E6	-60	2.8	-60	2.8	-60	150	1	
30:E0:90:01:03:CC	-60	3.3	-60	3.5	-60	150	1	
30:E0:90:01:03:D0	-60	2.1	-60	2.4	-60	150	1	
30:E0:90:01:03:CF	-60	2.2	-60	2.5	-60	150	1	
30:E0:90:01:03:D1	-60	2.6	-60	3.1	-60	150	1	

- The steps of the calibration are simple and intuitive. The system will calculate the most appropriate parameters automatically, and just fill the parameters in the BS Config ,restart the system for new apply.

- There are two sets of parameters available for setting. One is corresponding to the tag devices (STG-1020) and the other is to wristband (WTG-1045)
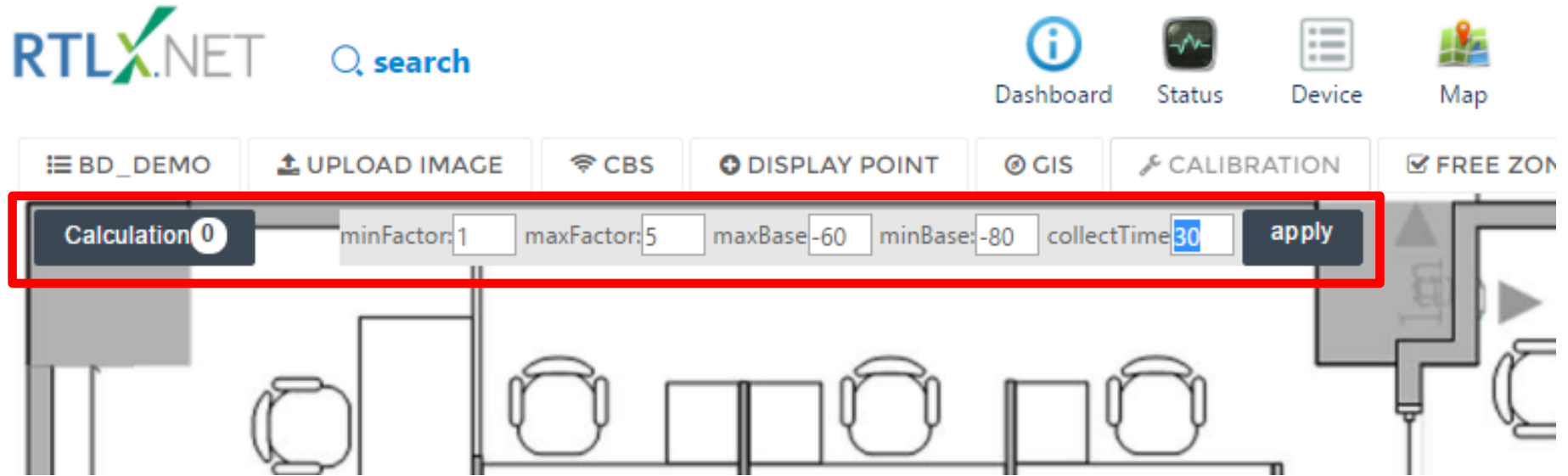
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2. Log in to the management page

1	URL of management site : demo.rtlx.net/mgmt.html
2	Login with ID/pwd
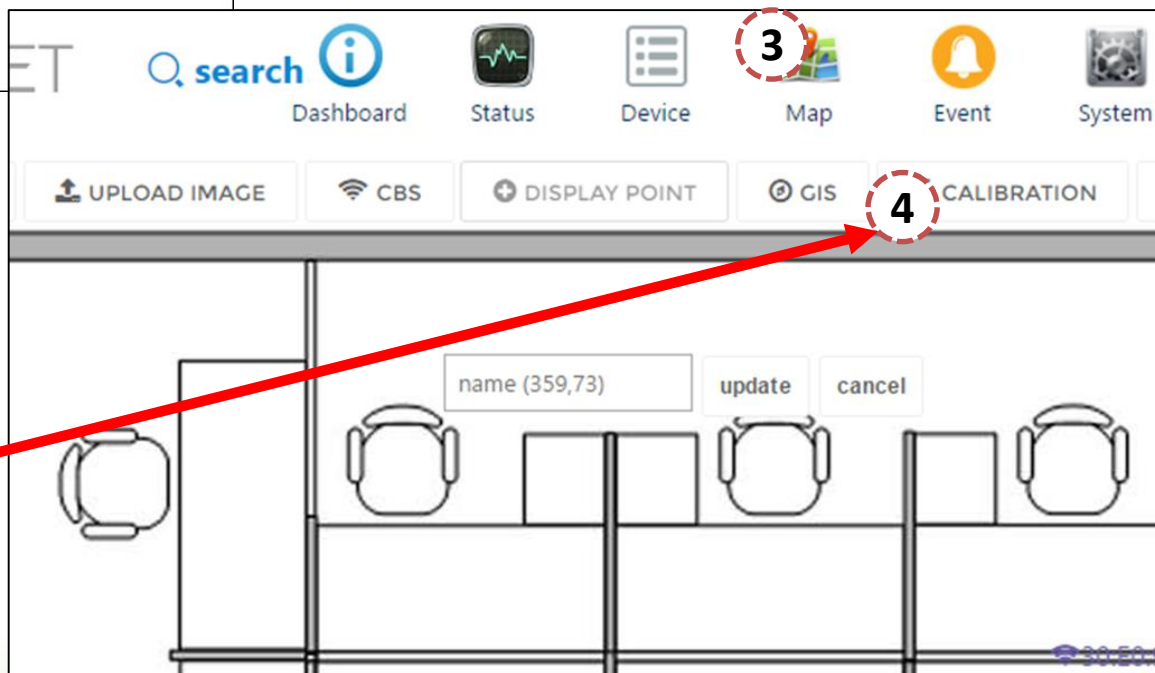
3	Head Function Menu : **Map**
4	tab : **CALIBRATION**

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3. Set time of collection and range of parameter

Calculation	The number figure means the number of the signals record, and click it to calculate the parameters automatically.
minFactor maxFactor	The range of "Factor" preselected between 1 to 5 .Before reloading web page , You can keep changing the range and re-calculating for results.
maxBase minBase	The range of "Base" is preselected between -80 to -60 .Before reloading web page , You can keep changing the range and re-calculating for results.
collectTime	The duration (seconds) of collecting calibration signals. It is preset to 30 seconds.

4. Collect the signal (RSSI) of tag on site field
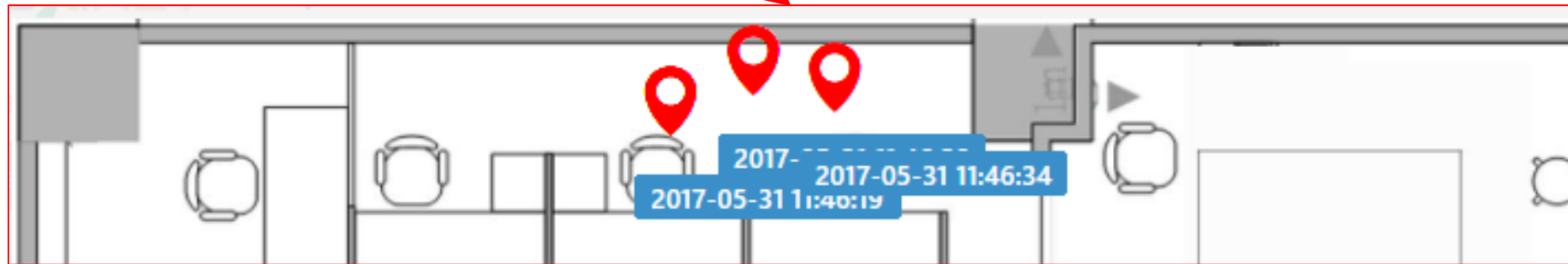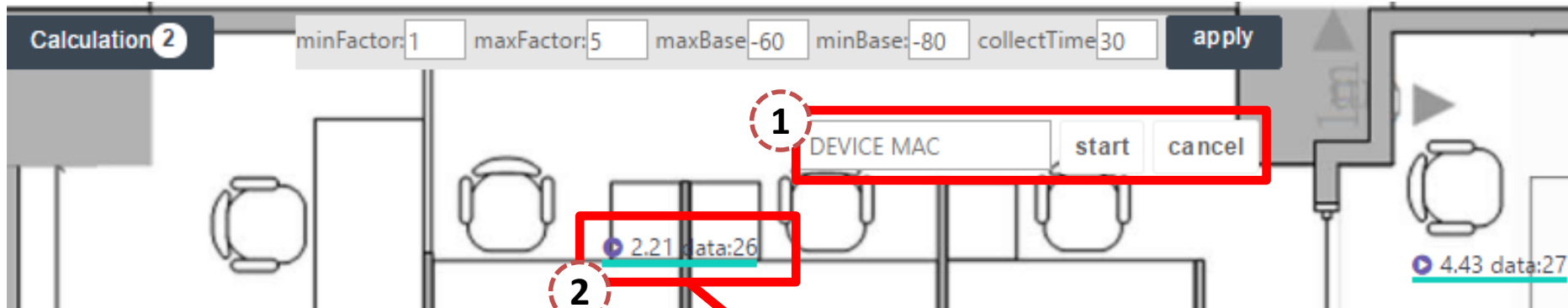
1	place the tag at the real position corresponding to the map. Fill the Mac address of device (STG-1020) and click "start", the system will automatically collect the match signals.
2	After collection, the icon will be shown as above. Click it to display the calculated position this period. Its number means the average gap between the calculated and real position, the "data" means the number of records.

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5. Calculate the characteristic parameters of LBS

Calculation ②   minFactor: 1   maxFactor: 5   maxBase -60   minBase: -80   collectTime 30   **apply**

DEVICE MAC   start   cancel

2.21 data:26   4.43 data:27

CBS	BASERSSI	FACTOR	AVG COVAR(M)
> 30:E0:90:01:03:D0	-60	2.4	1.89
> 30:E0:90:01:03:E6	-60	2.8	2.6

- It is recommended that the collected locations include the near/mid/far ranges for each LBS (0~1m/3~5m/7~9m). You can collect more number of times on where you want to strengthen for.

- By clicking "Calculation", you can get the recommended parameters for BASERSSI and FACTOR .The AVG COVAR (M) means the average gap with this parameters. You can get new recommended parameters by re-adjusting the range config.

- please use the same kind of device for each calculation, and fill the recommended parameters into the corresponding device product settings.

- Don't reloading the web page during the operation ,otherwise the collected data will disappear.

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6. Set the characteristic parameters of LBS

bs_mac	base_rssi	rssi_curve_factor	base_rssi_wb	rssi_curve_factor_wb	close_rssi	height	is_active	
30:E0:90:01:03:E7	-60	3.1	-60	2.5	-60	150	1	
30:E0:90:01:03:E6	-60	2.8	-60	2.8	-60	150	1	
30:E0:90:01:03:CC	-60	3.3	-60	3.5	-60	150	1	

- Device of menu, Bs Config of tab. click on the icon 🖊 to modify
- base_rssi : Please fill in the "BASERSSI" parameters calibrated by using tag.
- rssi_curve_factor：Please fill in the "FACTOR" parameters calibrated by using tag.
- Base_rssi_wb & rssi_curve_factor_wb：Please fill the two parameters calibrated by using wristband.
- close_rssi：The device icon will be displayed directly at the position of this LBS if the signal strength(rssi) it receives exceeds this value.
- height：Please fill in the average height (cm) of the LBS to devices.
- Is_active：1 means enable and 0 means disabled.

6. Restart the system to apply new config

- System of function menu, expand RESTART SYSTEM, click the restart button. The system will restart to apply new config automatically. After operation, please check if the accuracy of location is improved.