raînus

INFORTAP-READY

USER MANUAL

Version 2.0

2021

ESL Introduction

Electronic Shelf Label System (ESL) provides product information by replacing series of task which is printing attaching price, and merchandise information in paper to electronic display.

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1. InforTab-Ready Preparation

In order to set and monitor InforTab-Ready, Personal computer with network is required.

1-1 InforTab-Ready Composition

Compositions of InforTab-Ready are,

- 1.54 Inch InforTab(R154) 1EA
- 2.13 Inch InforTab(R213) 1EA
- 2.90 Inch InforTab(R290) 1EA
- 4.20 Inch InforTab(R420) 1EA
- 7.50 Inch InforTab(R750) 1EA
- Gateway 1EA, Antenna 4EA
- 5V Power cable 1EA, LAN cable 1EA
- Remote Controll 1EA, UnlockTool 1EA



1. InforTab-Ready Preparation

1-2 Network, UI setting

PC Network setting

For connecting Gateway and User.

Gateway IP is set by 192.168.220.236 in advance.

Setting a PC network fixed IP is required. For instance, 192.168.220.45 can be set as PC network IP.

To change PC network IP,

Control Panel > Network Internet > Network settings > Ethernet Properties > Internet Protocol version 4(TCP/Pv4) > Use following IP > Confirm

| 인터넷 프로토콜 버전 4(TCP/IPv4) 속성 | × |
|--|----------------------|
| 일반 | |
| 네트워크가 IP 자동 설정 기능을 지원하 할 수 있습니다. 지원하지 않으면, 네트: 문의해야 합니다. | |
| ○ 자동으로 IP 주소 받기(O) | |
| ④ 다음 IP 주소 사용(S): | |
| IP 주소(I): | 192 . 168 . 220 . 45 |
| 서브넷 마스크(U): | 255 . 255 . 255 . 0 |
| 기본 게이트웨이(D): | 192 . 168 . 220 . 1 |
| ○ 자동으로 DNS 서비 주소 받기(B) | |
| ④ 다음 DNS 서버 주소 사용(E): | |
| 기본 설정 DNS 서버(P): | 8.8.4.4 |
| 보조 DNS 서버(A): | |
| □ 끝냴 때 설정 유효성 검사(L) | 고급(V) |
| | 확인 취소 |

1. InforTab-Ready Preparation

Connect InforTap UI

- Plug in Gateway with power cable, and connect to PC by LAN cable. If all of these connected properly, Red, Green, and Blue lights will go on.
- 2 Run internet browser in PC, and write Gateway fixed IP (192.168.220.236) on address bar.
- **3** If connected properly, InforTab UI screen will appear.
- **4** Change Password in Menu 'Account Setting'. Initial ID is 'admin' and password is '1234'.

| ID | | |
|----------------------------|-----------------------------|--|
| Password | | |
| Remembe | r Me | |
| Please | log in to access this page. | |
| | Login | |

1. InforTab-Ready Preparation

1-3 InforTab Assign

InforTab and specific product work together showing the product information. This system is operated by 'Assign' process.

Assign confirmatory

InforTab-Ready's 4 InforTabs are already assigned.

Assigned InforTap in Gateway can be verified by

| 'Status > | > Tagʻ | in UI. |
|-----------|--------|--------|
|-----------|--------|--------|

| Rainus Infortab Admi | n | | | | | | | | | | | | | | | Admir | Astrato | |
|----------------------|-----|------|---|------------------|------------|-----|----------------|-----------|---|----------|-----|----|--------|-----|---------|-------|---------|------|
| # Home | | | | | | | | | | | | | | | | | | |
| T Store | | Tag | g S | tatus | | | | | | | | | | | | | | |
| Slatus Gateway | | • Ta | g Assig | o De-assign | | | | | | | | | | | | | | |
| Teg | | | 0 | Tag MAC * | Store Code | | Gateway IP | Operation | | Result | | Da | ittery | Tem | peratur | e R | SSI | 1 |
| E Task | | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | × | « ~ | × ~ | × | LARI | × | IAII | • 8 | >= | × | >= | × | >= | b | x >= |
| F Setting | e . | 1 | 10 | 78E980FFFE004DD2 | store-1 | | localhost:8080 | UPDATE | | ok | | | 32 | | 26 | | 40 | |
| C Product Update | | 2 | - | 78E980FFFE004DD9 | store-1 | | localhost:8080 | UPDATE | | ok | | | 30 | | 25 | | -46 | |
| L P/G Upgrade | | з | | 78E980FFFE004DE4 | store-1 | | localhost;8080 | UPDATE | | ok | | | 32 | | 25 | | -37 | |
| Q. CM Tool | | -4 | 10 | 78E980FFFE004DE5 | store-1 | | localhost:8080 | UPDATE | | ok | | | 30 | | 26 | | -45 | |
| 2 Replication | | 5 | 0 | 78E980FFFE004DE7 | store-1 | - | localhost:8080 | UPDATE | | ok | | | 32 | | 25 | | -37 | |
| Account Setting | | 6 | 0 | 78E980FFFE004DE9 | store-1 | | localhost:8080 | UPDATE | | ok | | | 30 | | 25 | | -40 | |

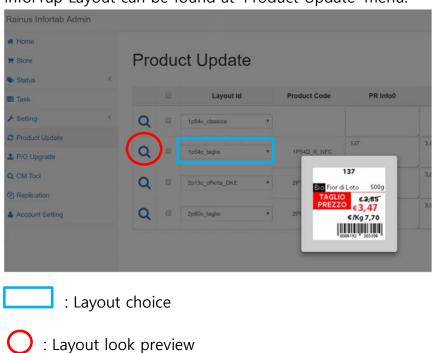
■ InforTap Mac Address check

InforTab Mac address is displayed as barcode when you press '>' or '<' buttons of remote controller in front of tag.

| Assign: Connect | Delete 2 digits and leave 4 digits from the back in order |
|-------------------|---|
| InforTab and | to search Mac address in UI. |
| Product in | |
| Gateway. | For further more explanation, if Mac address is |
| | '78E980FFFE004C4B', can be searched by '004C'. |
| Update: To change | |
| product | |
| information | |
| withAssigned | |
| InforTab | |
| | |
| De-Assign: | |
| Disconnect | |
| InforTab and | |
| Product in | |
| Gateway. | |

2. InfoTab Update

2-1 Confirm InfoTab Layout



InforTap Layout can be found at 'Product Update' menu.

Layout is location of information and design which shows in tag display. It can be adjusted in 'Layout Designer'.

We provide 'Layout Designer Manual' in addition which guides how to use 'Layout Designer'.

2. InfoTab Update

2-2 Product information Update

Product Update window is as below picture.

| e Statum 🤇 | | 10 | Layout id | | Product Code | PR Info0 | PR Info1 | PR Info2 | PR Info3 | PR Info |
|------------------|----------|----|------------------|---|---------------|----------|----------|------------|----------|---------------|
| F Setting | Q | | tyfike staming | | | | | | | |
| 7 Product Update | 1 | - | | _ | | 137 | 3.45 | 500p | Ng 7.70 | 8004152203104 |
| L P/G Upgrade | 0 | 0 | 1/54c_bagio | | 1P540_R_NFC | | | 1.0 | | |
| t CM Tool | Q | | 2015c.offeta_DRE | | 2P130_3CNEC [| 137 | 3,85 | 500g | .0687.70 | 8064182280104 |
| Replication | | | | | | 137 | 3.85 | 600p | Ha7.70 | 8004192293104 |
| Account Setting | Q | 0 | 2290c tepio | | 2P500_R_NFC | | | 1000 | 1.14 | |
| | | | | | | | | 6 | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

- 1 Choose proper Layout and put appropriate InforTab information.
- 2 Check the square box in the right side and click'Update' in the bottom side of page.



3 Press 'Okay' to confirm the procedure.

2. InfoTab Update

2-3 Confirm InfoTab Update Result

After the update, the page automatically moves to 'Task' menu in UI and it is available to check update status in real time.

| | | | | 2015-09- | 10 00 00 🔳 🗰 2015-00-10 33 59 | E Q.Seed |
|------------|------------|-----------|---|---------------------|-------------------------------|----------|
| Task Id | Store Code | Operation | Program(%) | start Time | End Time | Detail |
| 1442061903 | 'store-t" | UPDATE | | 2010-06-18 18:38:33 | W progress | 18 |
| | Note | LAYOUT | 1 IIIN | 2015-05-18 16:26:20 | 2015-09-18 10:20 12 | B |
| | Note | LAVOUT | CC 144% | 2115-05-18 18:35-41 | 2015-09-18 18:36:30 | 8 |
| | None | LAYOUT | C. TANK | 2015-09-18 16:10.10 | 2018-09-18 16:10-86 | 2 |
| | None | LAYOUT | C. Taris | 2015-05-18 16:09.35 | 2015-05-18 16 09 45 | 8 |
| | Hore | LANOUT | and the second se | 2015-09-18 16:08:38 | 2015-00-10 10:00:57 | 8 |
| 442618472 | 3800.1 | LIPCIATE | CC Committee | 2015-25-18 15-41 12 | 2015-05-18 15 41:57 | 2 |
| | Store-1" | AbbioN | ii (tues): | 2015-05-18 13:41:12 | 2010-09-18 10 41 12 | 18 |

InforTab update generally completes in 5 minutes, but time it can be delayed by network circumstance.

To make InforTab update on purpose, Remote Conroller.



After flicker light, update process will be operated when press the 'R' button of remote controller.

3. InforTab De-Assign, Re-Assign

3-1 InforTab De-Assign

'De-Assign' is process that to de-assign InforTab and product from Gateway. De-assigned InforTab cannot be updated unless re-assign it back.

| Rainus Inlortati Adm | ies . | | | | | | | | | | | Administra | |
|----------------------|-------|------|---------|---------------------------------------|-----------------|--------------------------------|---|----------------|--------|-----------------|-----------------------|------------|-----|
| | | | | | | | | | | | | | |
| THE Diane | | Tag | S | tatus | | | | | | | | | |
| Selemer | | 0 10 | 9 Аннар | · · · · · · · · · · · · · · · · · · · | | | | | | | | | |
| Treat | | | 10. | beg Most? * | Silore Clode | finiments (P | | Operation | Arrest | Dottery | her reperiod to a re- | econie . | |
| BR June | | | | | | (a) | - | 1001 | | () Tan () () | 241 18 | No. | *** |
| A Service | | | × | 288/9868/199/0040132 | #10141-1 | Incalliout smore | | LIPTIATE | | 3.2 | 26 | -#0 | |
| Crusters Gasters | | 1 | -10 | 288.08031111100401014 | saliyan ana B | free addressed concords | | £18/32/4.2.P | +46 | .89 | 14 | -44 | |
| A HOLL LANDON MA | | | | | Set in the R | Rose and Proceed a line of the | | 61875 D/1 E B | +44 | 6.0 | | - 17 | |
| CAL THE | | - 4 | 1,1 | | Addition of the | Rose and Record and the second | | A LAPE TO LEAR | 1.00 | 1914 | 10 | -1.5 | |
| C Pastanter | | | 10 | 210,900011111009030,2 | 10111-011 | Incallance, (10)000 | | EINTER. | 144 | 10 | 2% | +3.4 | |
| A Accessed Sectors | | | - 10 | 10F300111F0040F3 | 10111-01-2 | hacatheost.100000 | | UPDATE | 100 | 30 | n | +94 | |

For de-assign, select 'Status > Tag' menu in UI and press 'De-assign'.

3-2 InforTab Re-Assign

If need to update back, 'Re-Assign' work is required. Choose 'Status > Tag' Menu in UI and click 'Assign'.



After click 'Assign' button, write down the InforTab Mac address and product code. Then press the 'Save' to make procedure complete.

4. Appendix

4-1 Wireless Network Circumstance

InforTap system uses two channels of wireless 2.4GHz, so that

it can effect updating speed of InforTab according to wireless

network environment.

Wireless Channel

According to wireless circumstance, InforTab system may not

be operated properly by influence with other wireless

| Rainus Infortab Admin | | | | | | | | | | | | | | | | | | | | A Ad | sministrator - |
|-------------------------------|-----|-------------------|---------------|-------------|----------------|---------------|---------------|---------------|------------------|--------------------|-----------------|------------------|----------------|------------|-------------------|-----------------|---------------|----------------|----------------|-----------------------|----------------|
| # Hone | | | | | | | | | | | | | | | | | | | | | |
| I Glore | | Gateway | / Co | nfig | | | | | | | | | | | | | | | | | |
| Statue | . 4 | | | | | | | | | | _ | | | | | | | | | - | |
| EF Task | | | | | | | | | | | | | | | Store Co | | • Gatew | And the | alaway MAC | | Q, Bearch |
| / Setting | | Gateway MAC | Store Code | GW Index | Gateway IP | Netmask | Default GW | DNS IP | ESL Server IP | ESL Server Port | Data Channel | Event Channel | Radio Power | OP Mode | Note | Channel Mask | Radio Baud | GMP Version | GRM Version | Updated | |
| Server Config Store Config | | 70-20:1F.03:1A:21 | store-1 | 0 | localhost 8080 | 256.255.255.0 | 192.168.220.1 | 203.248.252.2 | localhost | 80 | 13 | 14 | 100 | norm | Note something | 12 | 250 | 2.1.0 | 4 | 2016-11-0 02:38:28 | a 📀 |
| Gateway Config | | | | | | | | | | | | | | | | | | | | | |
| Embedded Fort Config | | | | | | | | | | | | | | | | | | | | | |
| C Product Update | | | | | | | | | | | | | | | | | | | | | |

instruments. In this case, changing channel is required.In

order to change channel, click 'Gateway Config' menu in UI

and press 'Setting' Icon in right side of the page.

Gateway Config

| Gateway MAC | 70.2C.1F.03.1A.21 | |
|-----------------|-------------------|--|
| Store Code | store-1 | • |
| GW Index | 0 | must be a unique value in a store |
| IP Address | localhost 8080 | Gateway IPv4 address |
| Netmask | 255.255.255.0 | |
| Default GW | 192.168.220.1 | Default GW IPv4 address |
| DNS IP | 203.248.252.2 | |
| ESL Server IP | localhost | ESL Server IPv4 address |
| ESL Server Port | 80 | |
| Data Channel | 13 | • IEEE 802.15.4 channel(11~26) |
| Event Channel | 14 | channel(11-26), should use one value for all gatewa in a store |
| Radio Power | 100 | Radio power in percentage(1~100) |
| OP Mode | norm | Use "Normal Operation" |
| Channel Mask | 12 | Calculated by system on data channel change |
| Radio Baud | 250 | Gateway Ethernet MAC |
| GMP Version | 2.1.0 | Gateway Main Processor Version |
| GRM Version | 4 | Gateway Radio Module F/W Version |
| Note | Note something | |
| | | 6 |

Date channel, Event channel are composited with 11~26 channels..

Begin with 11 channel and go up until finding a proper one.

Press 'Save' button to confirm the channel.

Information to user

WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications, However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

-IMPORTANT NOTE: FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.