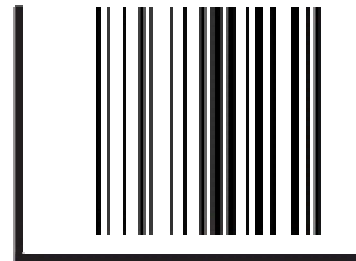
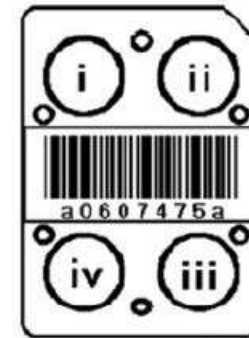


Radiation Badge Inventory System

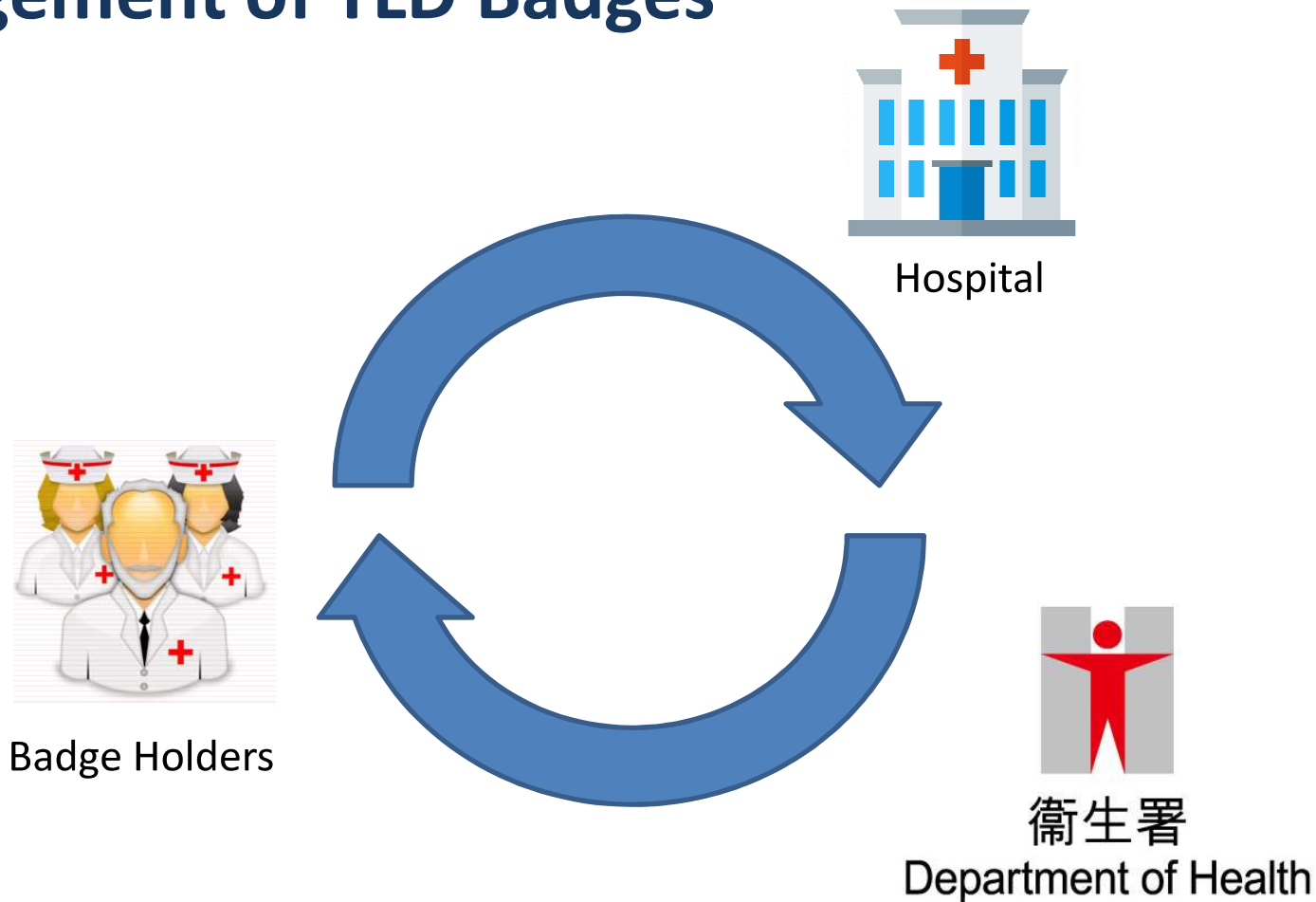


Routine Work



TLD badges are effective at measuring gamma rays, x-rays, beta particles, and neutrons for those people who may be exposed to ionising radiation from equipment, radioactive source, or radioactive material. Every TLD badges are required to be sent to Department of Health at least once during a period (3 months or less).

Management of TLD Badges



Currently the badges will be used and sent through three parties: Badge Holders, Hospital & Department of Health. In order to always control the return & borrow process, status and history of those badges, it is suggested to start using the Radiation Badge Inventory System

Work Flow

1 Staff wears one of the badge, another badge is held by DH.

10/10~1/11



2 DH send back the badge to MPD, MPD scan the badge into TLD Management System.

1/11~4/11

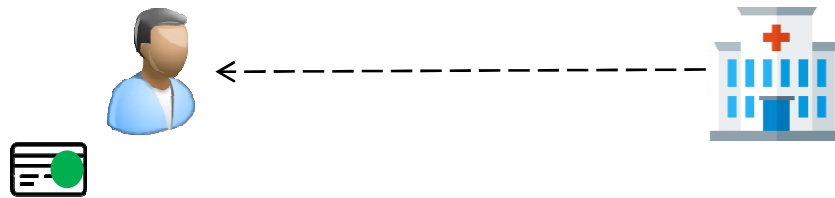


We wouldn't bring any big changes on the current procedures. What the program will do is only to make the procedure to be more efficient and reliable.

Work Flow (cont'd)

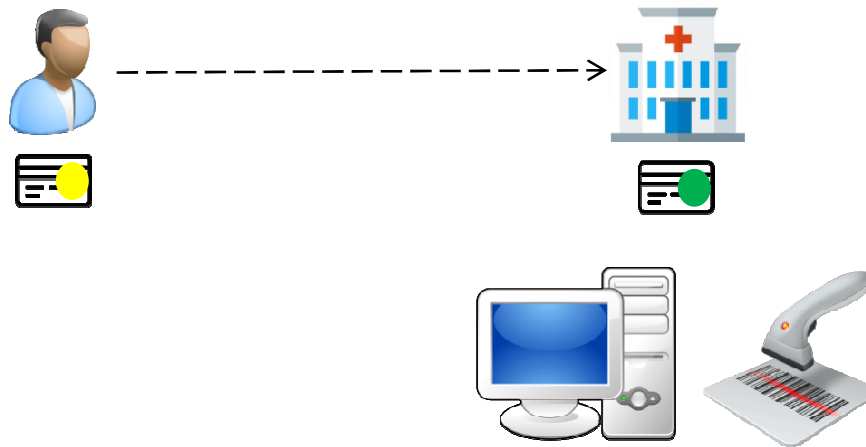
- 3 TLD Management System automatically generate the receipt, MPD give the badges correspondingly back to staff.

4/11~10/11



- 4 Staff return the badge to MPD, MPD scan the badge into TLD Management System.

4/11~10/11



***Users are allowed to return the same badge to MPD, but not more than 3 months continuously.**

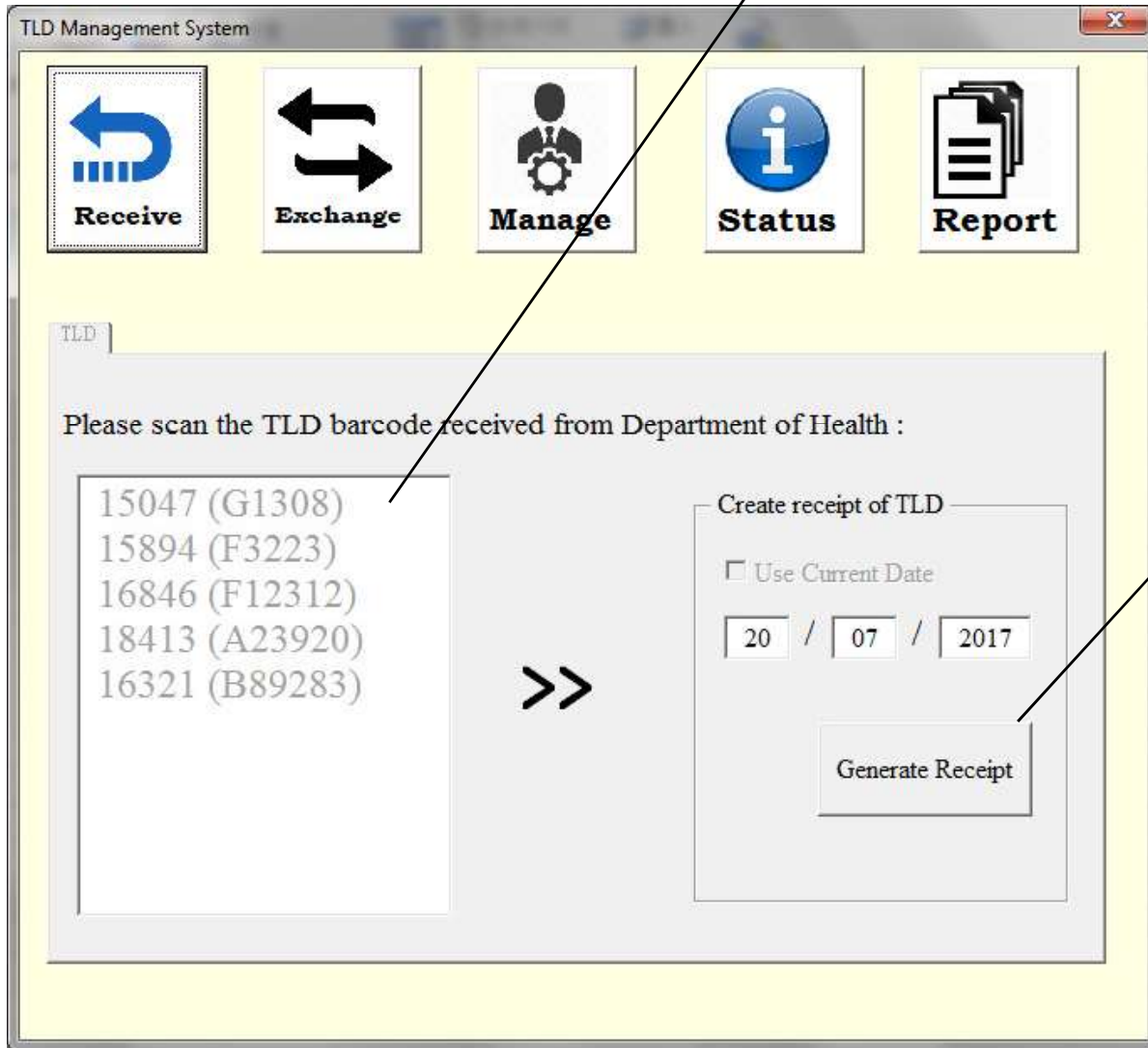
System Feature

System consists of 5 Main Function:

1. Receive	Scan the badge received from Department of Health
2. Exchange	Return the badge to holders and get back the another one
3. Manage	Add or edit the information of staff or badge in record
4. Status	Immediately check the current status of corresponding badge & check the previous loan record of it
5. Report	Generate report

System function: Receive

1. User open the "Receive" page and scan all the badges from Department of Health



2. After scanning all badge, user can choose to print the receipt of TLD

Receipt of TLD

Radiation Monitors Service for Oct 2017				
Please sign and return the TLD Badge(s) to MPD with the memo. Thank you!				
Group No.: G-048				
UserName	TLD Badge From RHU To User	Receive (Signature)	Return of TLD used in Previous Month (Signature)	
/	0020460			
/	0028896			
/	0004143			
/	0010226			
/	0015081			
/	0004142			
/	0029177			

*TLD Management System collect all data of the badge from Department of Health and generate the receipt for staff to easily handle the follow up duties.

System function: Exchange

1. "Awaiting" page will store all of the badges just scanned in the "Receive" page

The screenshot shows the 'TLD Management System' interface. At the top, there are five main function buttons: 'Receive' (with a blue arrow icon), 'Exchange' (with a black double-headed arrow icon), 'Manage' (with a person and gear icon), 'Status' (with a blue 'i' icon), and 'Report' (with a document icon). Below these is a sub-menu with 'Awaiting' and 'Scan to Confirm' options. The main area contains a table with columns A, B, and C. The table data is as follows:

	A	B	C
1	Batch ID	Staff ID	Expiry Date
2	15047 (G1308)	G654613	7-Nov-17
3	15894 (F3223)	A654631	7-Nov-17
4	16846 (F12312)	W68431	7-Nov-17
5	18413 (A23920)	A632311	7-Nov-17
6	16321 (B89283)	Q984612	7-Nov-17
7			
8			
9			
10			
11			
12			
13			
14			

At the bottom of the interface, there are two buttons: 'Reprint Receipt of LTD (All)' and 'Reprint Receipt of LTD (Selected)'. An arrow from the second callout points to the 'Reprint Receipt of LTD (Selected)' button.

2. User can choose to reprint the receipt of selected TLD

System function: Exchange

1. User can switch to “Scan to Confirm” to scan the badge returned from the badge holders, the scan result will be shown below

TLD Management System

Receive Exchange Manage Status Report

Awaiting Scan to Confirm

Please scan the TLD barcode returned from the staff:

15047 (G1308)
15894 (F3223)
16846 (F12312)
18413 (A23920)
16321 (B89283)

Do not return another badge more than 3 months

Staff ID	Current Badge	Required Badge
Q984612	16321 (B89283)	16861(B66131)

Reject invalid Returns Confirm

2. If somebody returns the same badge as last month(s), a report will be immediately shown here to alarm the reception

3. User can choose to reject those invalid returns (incorrect badge). Still, user can click “Confirm” to allow those returning actions.

System function: Manage

1. Choose "Staff", "TLD Badge" or "Department Group"

The screenshot displays the 'TLD Management System' window. At the top, there are five main function buttons: 'Receive', 'Exchange', 'Manage', 'Status', and 'Report'. The 'Manage' button is highlighted with a dotted border. Below these buttons are three tabs: 'Staff', 'TLD Badge', and 'Department Group'. The 'Staff' tab is active, showing a search field for 'Staff ID' with the value 'Q23135301'. Below the search field are several input fields for record details: 'Ref. No.' (1664), 'Ord. No.' (10011664), 'Group ID' (G-201), 'User Name' (Chan Tai Man), 'TLD ID' (0015971), 'Green' (1), 'Yellow' (0), and 'Remark'. At the bottom of the form are three buttons: 'Add', 'Edit', and 'Cancel'. A callout box points to the 'Add' and 'Edit' buttons.

Field	Value
Staff ID	Q23135301
Ref. No.	1664
Ord. No.	10011664
Group ID	G-201
User Name	Chan Tai Man
TLD ID	0015971
Green	1
Yellow	0
Remark	

2. User can add or edit the corresponding record

System function: Status

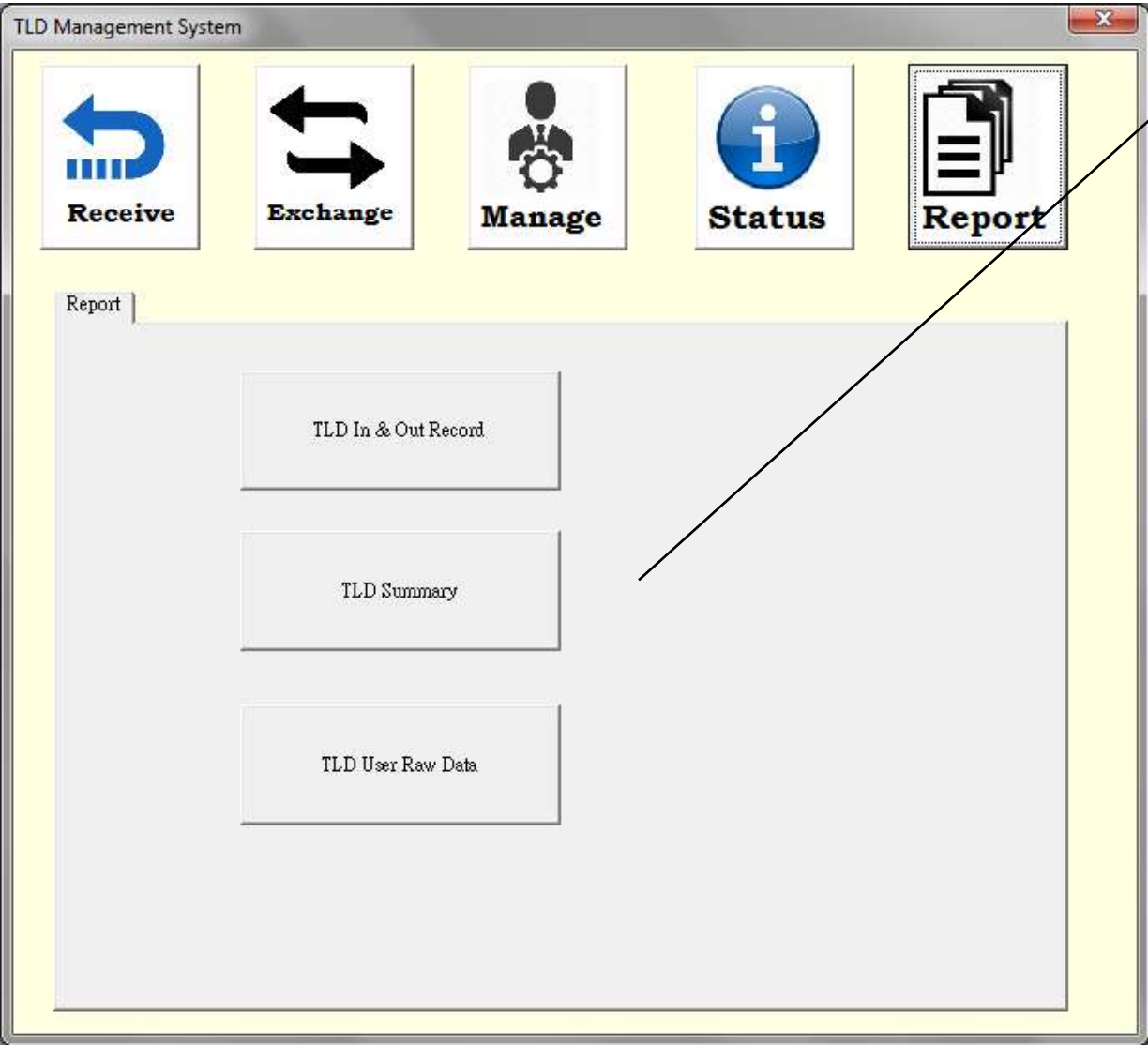
1. Scan on the Badge ID

The screenshot displays the 'TLD Management System' interface. At the top, there are five main function buttons: 'Receive', 'Exchange', 'Manage', 'Status', and 'Report'. The 'Status' button is highlighted. Below the buttons, a 'Staff' tab is active. A text prompt 'Please insert the Badge ID' is followed by a text box containing '15047 (G1308)'. Below this, the current status is shown as 'Status: Held by Staff Q658616321'. A 'History' section contains a table with the following data:

	STAFF_ID	GROUP_ID	START_DATE	END_DATE
1	Q613216513	G12315	07/08/2009	08/12/2013
2	F765136554	K16421	12/29/2013	11/08/2017

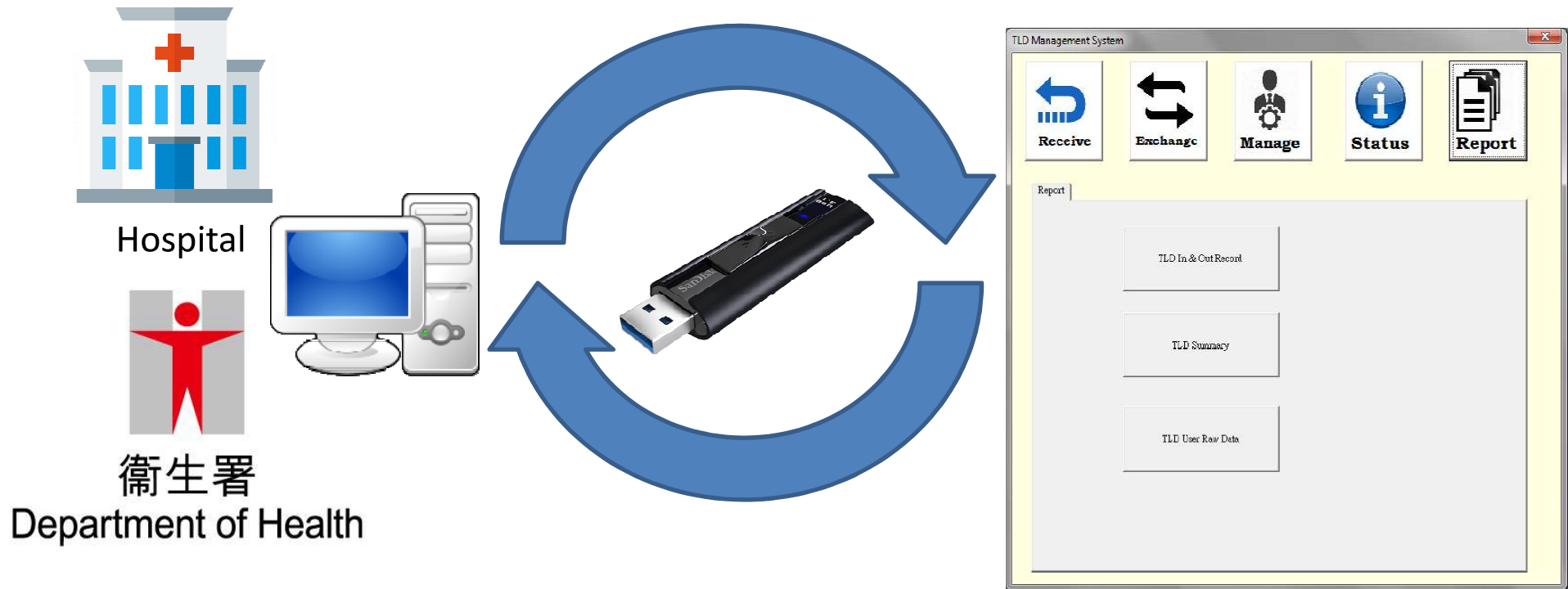
2. Current status and previous records of the badge will all be shown

System function: Status



Generate different type of report

Supplementary Reading I.



Please be noted that the communication tools in between our Program and HA program should use USB flash.