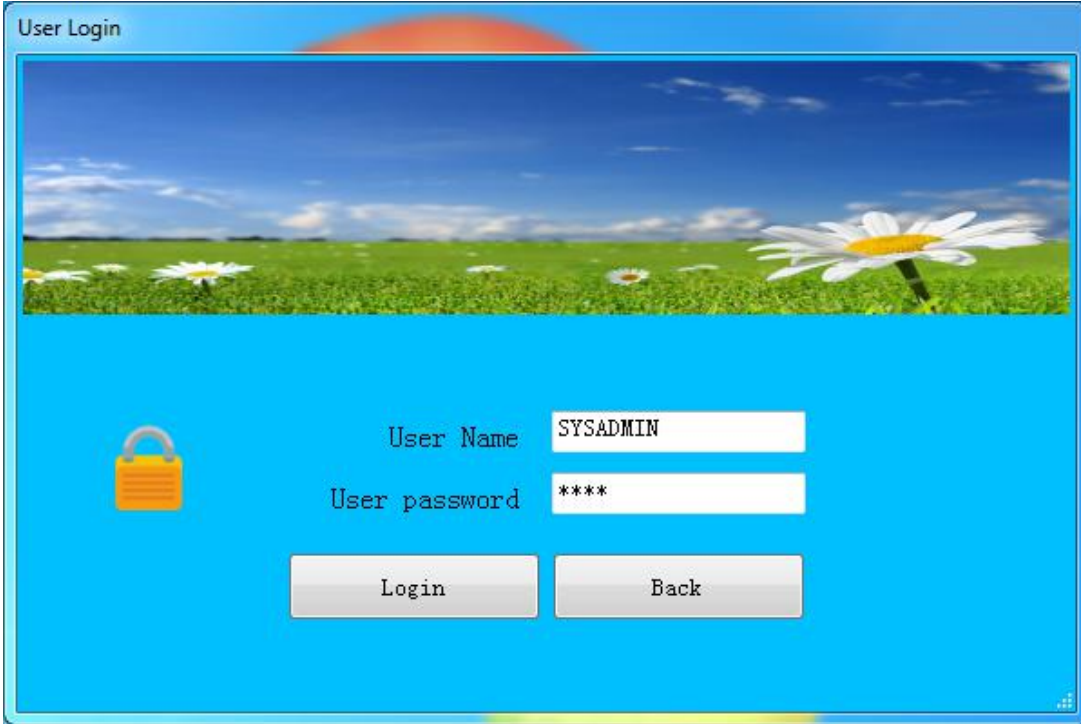


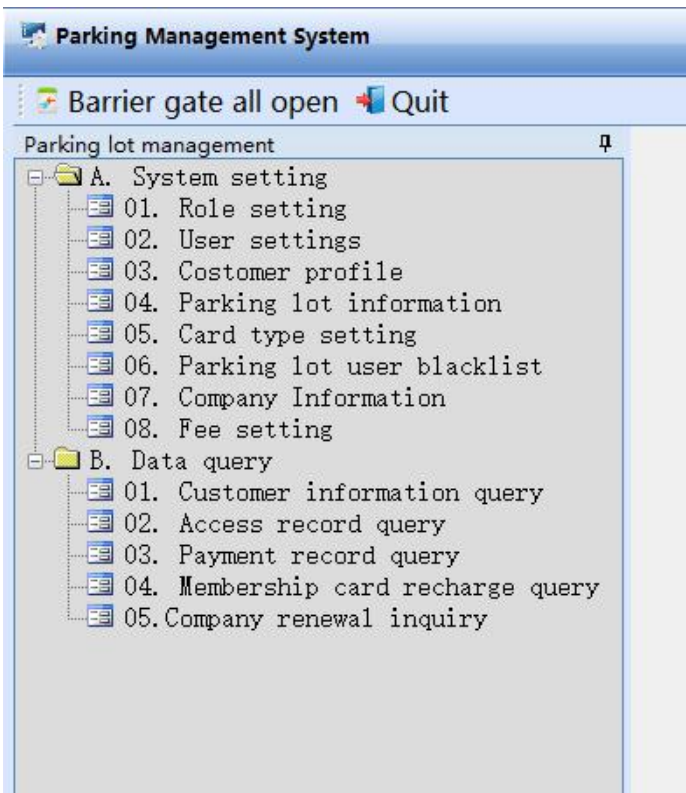


COMA PARKING SYSTEM V2022

Login backend data base management software



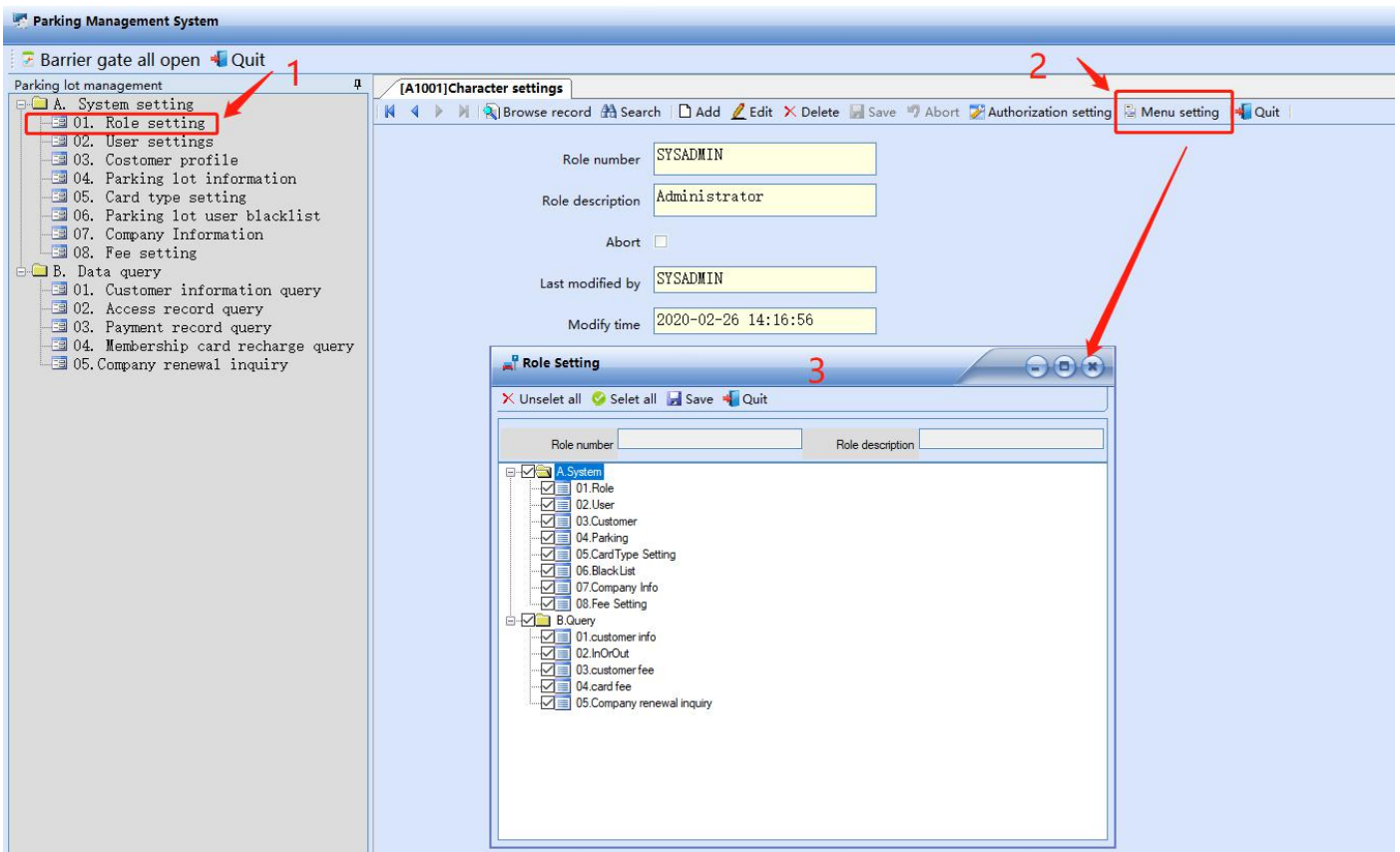
System setting and Data query



## A) System setting

### A-01 Role setting

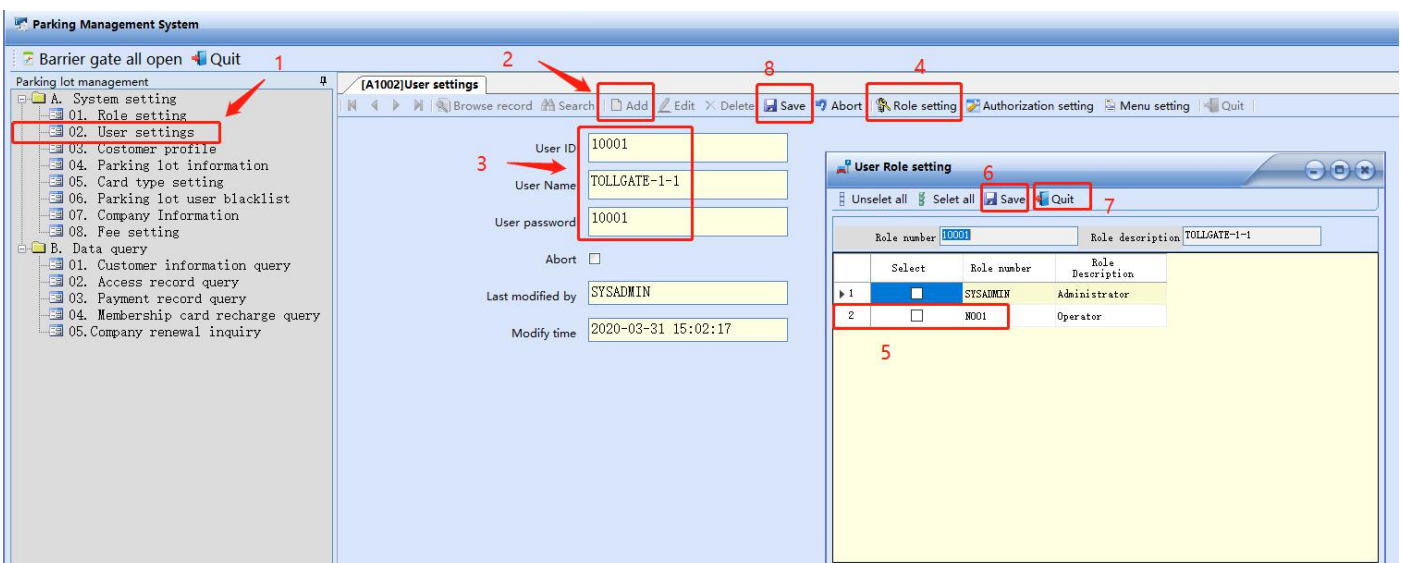
Here we can add, delete or modify user regulation and authorization. For example, click “role setting”, click “add” input a administrator role “SYSADMIN” and related information. Click “Menu setting”, select all authorization.



### A-02 User setting

Add a new user and release authorization.

1. Click “User setting”, click “add”, input user ID, user name and password. Click “Role setting”, choose the role you want, click “save”, then click “quit”, and then click no. 8 “save”. After above setting, we successfully set a new user. Now we can login management software by this user ID to verify its authorization.



## A-03 Customer profile

The screenshot shows the 'Parking Management System' window. On the left, a tree view under 'Parking lot management' has '03. Customer profile' selected and highlighted with a red box. The main window displays the 'Member profile' for customer [B1001].

**Member profile details:**

- Customer number: 20210812093044268
- Card number: E200001A721001662310893B
- Customer name: VIP1
- Begin date: 2021-12-12 00:00:00
- Plate: VIP1
- Validity: 2021-12-12 23:59:59
- Phone:
- Customer Balance: 1000.0000
- Fee Type: VIP-1
- Vehicle type: NA

Buttons include 'card reader closed' and 'Card query' (checked). Below the profile is a 'Card operation' section with tabs for 'Batch sign up', 'Card replace', 'Replacement card', 'Renew (issue new card)', and 'Membership reserve'. A 'Batch issue' checkbox is present, along with a 'Customer number' field and a 'Begin date' dropdown set to '2022-02-10'.

A log table at the bottom shows a successful event:

Time	Event	Description
2022-02-10 16:...	card reader opened s...	card reader opened successfully

User: SYSADMIN

Connect desktop card issuer to computer, when appear "Serial port open successfully ", start to issue parking card.

The screenshot shows the same 'Parking Management System' window. In the left tree view, '03. Customer profile' is still selected, but a red arrow points from it to the log table at the bottom. The main window displays the same 'Member profile' as in the previous screenshot.

**Member profile details:**

- Customer number: 20210812093044268
- Card number: E200001A721001662310893B
- Customer name: VIP1
- Begin date: 2021-12-12 00:00:00
- Plate: VIP1
- Validity: 2021-12-12 23:59:59
- Phone:
- Customer Balance: 1000.0000
- Fee Type: VIP-1
- Vehicle type: NA

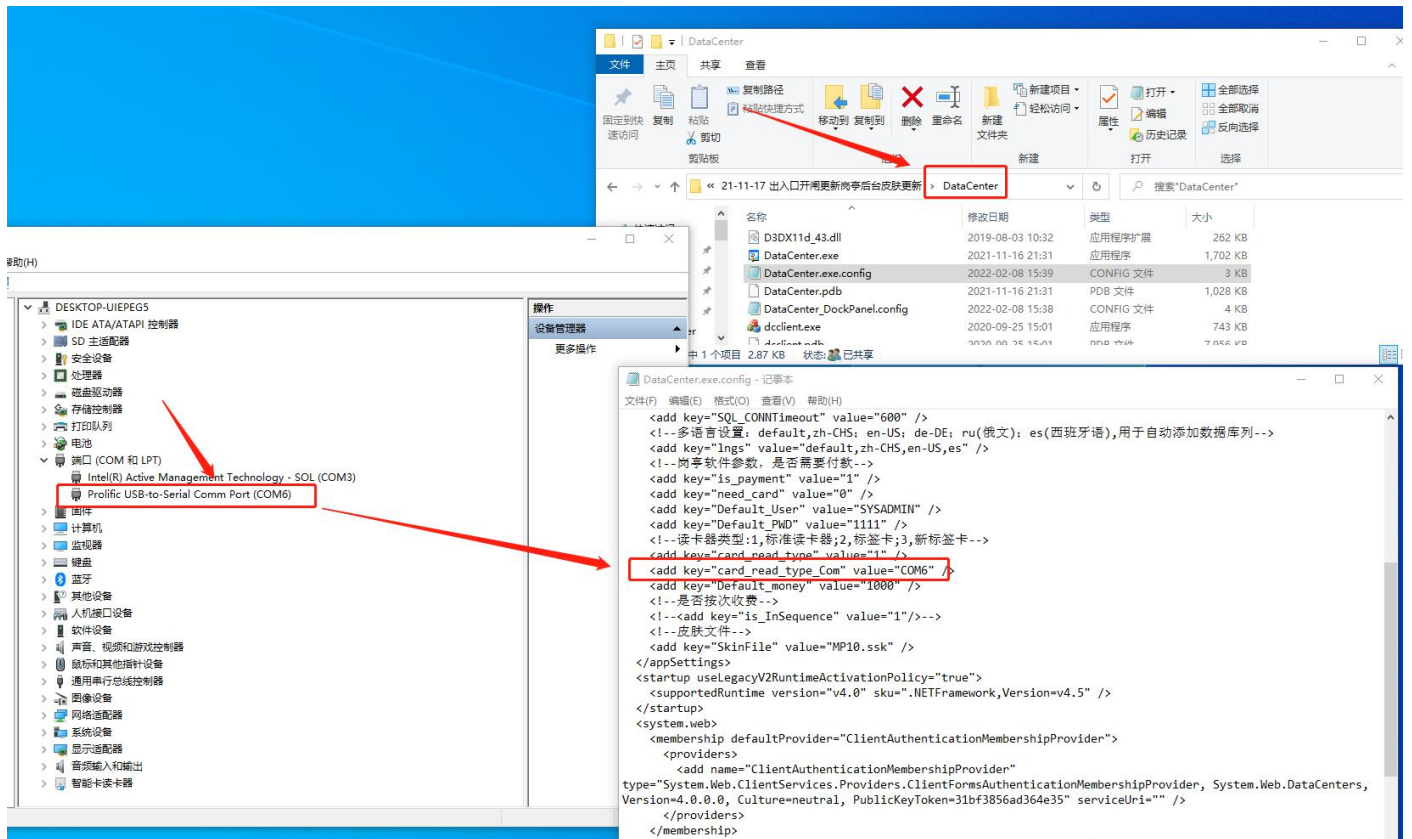
Buttons include 'Open card reader' and 'Card query' (checked). The 'Card operation' section is the same as in the previous screenshot, but the 'Begin date' dropdown is now set to '2022-02-08'.

A log table at the bottom shows a failed event:

Time	Event	Description
2022-02-08 15:...	card reader opened f...	card reader opened failed

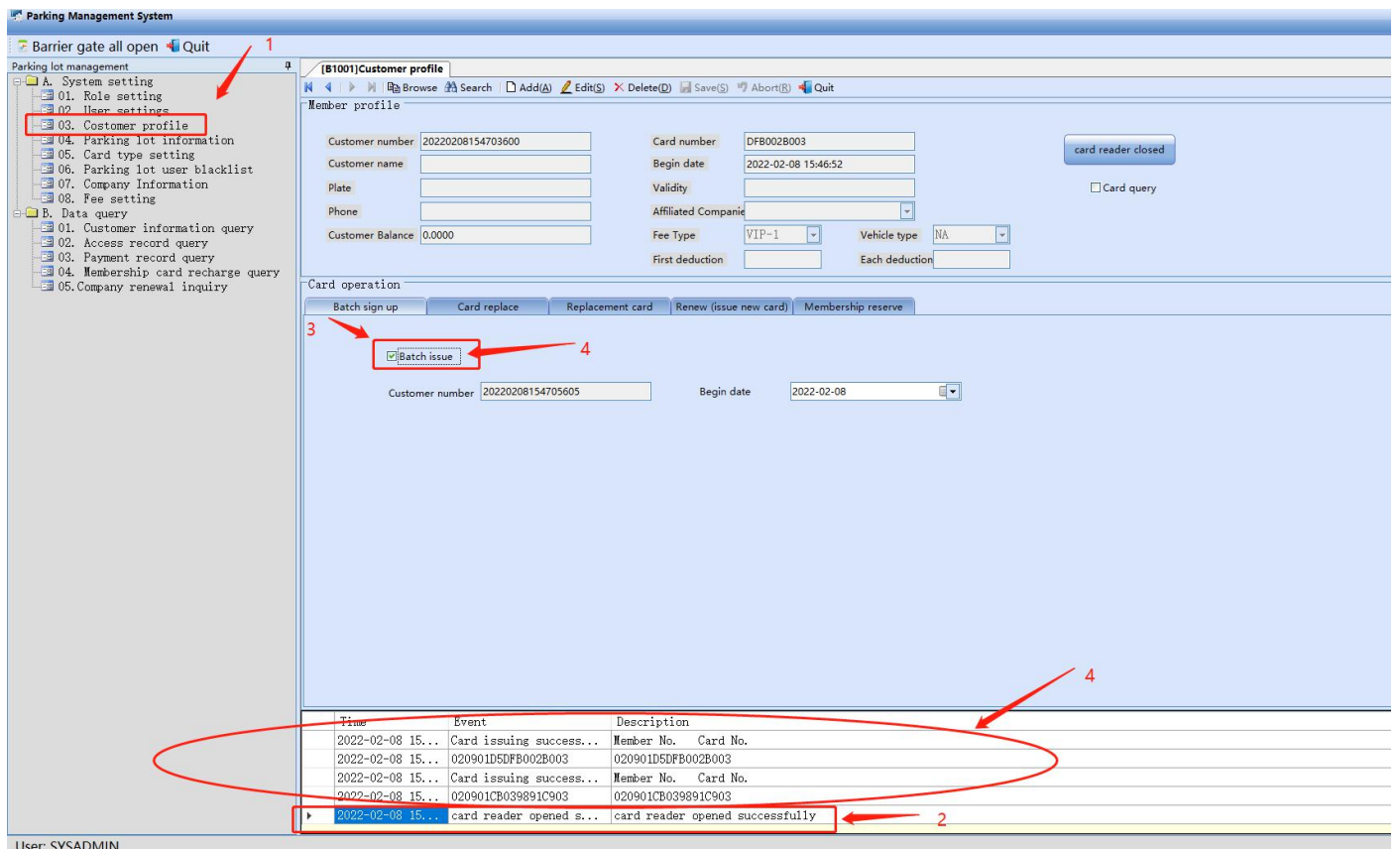
User: SYSADMIN

If shows "card reader opened failed", pls check whether desktop card issuer connected properly and port no. is correct or not



### \* Batch issue parking card

Make sure desktop card issuer is right connected, click "customer profile", when appear "card reader opened successfully", select "batch issue", read card continuously, card information display, click "batch issue" again or "Quit", card authorization completed.



# Monthly parking card authorization

The screenshot shows the 'Customer profile' window with the following fields:

- Customer number: 20220208154656686
- Card number: 039891C903
- Begin date: 2022-02-08 15:46:52
- Customer name: [Empty]
- Plate: [Empty]
- Phone: [Empty]
- Customer Balance: 0.0000
- Fee Type: VIP-1
- Vehicle type: NA

The log table at the bottom contains the following entries:

Time	Event	Description
2022-02-08 15:...	Swipe card to query ...	Swipe card to query user info successfully
2022-02-08 15:...	020901CB039891C903	020901CB039891C903
2022-02-08 15:...	Swipe card to query ...	Invalid card(card no. 2DB0850C03)
2022-02-08 15:...	0209011C2DB0850C03	0209011C2DB0850C03
2022-02-08 15:...	card reader opened s...	card reader opened successfully

Click "customer profile", make sure desktop card issuer connect properly. When it shows "card reader opened successfully", click "card query", then read card. If appear "invalid card", please follow up above procedure (refer to " 6. Batch issue ID card") to pre-authorize the parking card.

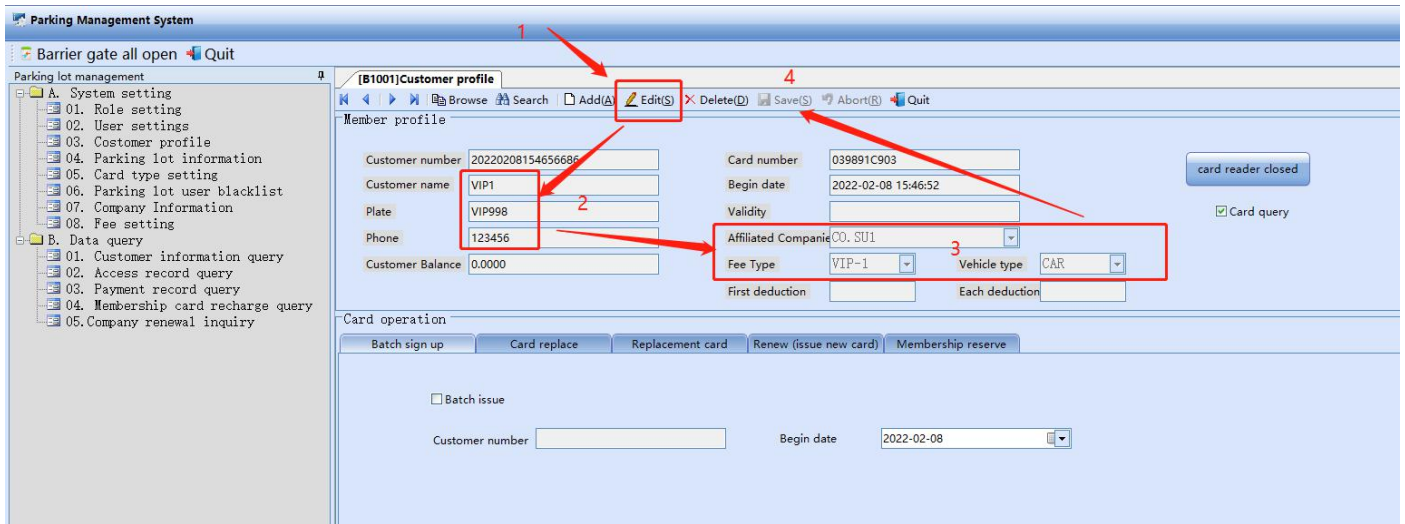
The screenshot shows the 'Customer profile' window with the following fields:

- Customer number: 20220208154656686
- Card number: 039891C903
- Begin date: 2022-02-08 15:46:52
- Customer name: [Empty]
- Plate: [Empty]
- Phone: [Empty]
- Customer Balance: 0.0000
- Fee Type: VIP-1
- Vehicle type: NA

The log table at the bottom contains the following entries:

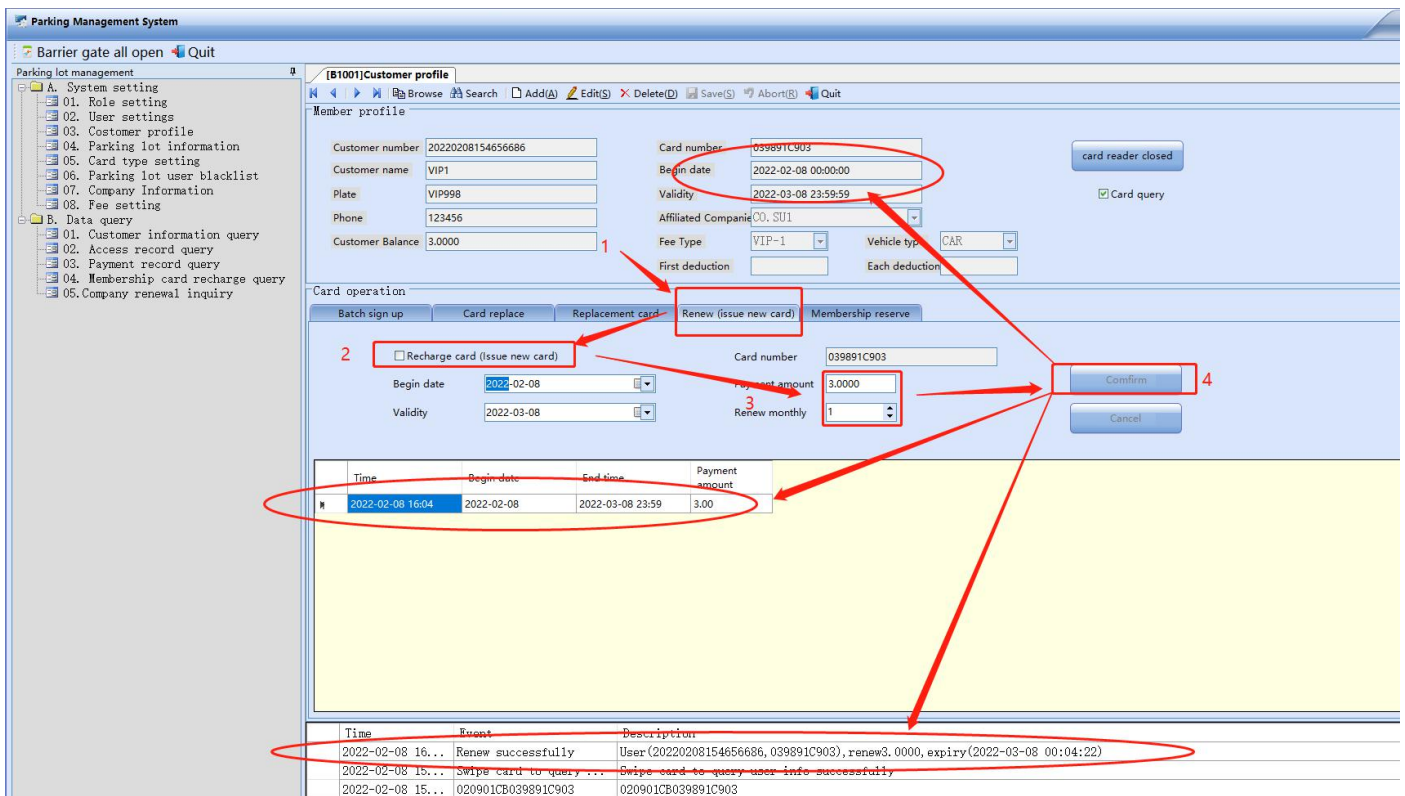
Time	Event	Description
2022-02-08 15:...	Swipe card to query ...	Swipe card to query user info successfully
2022-02-08 15:...	020901CB039891C903	020901CB039891C903
2022-02-08 15:...	Swipe card to query ...	Invalid card(card no. 2DB0850C03)
2022-02-08 15:...	0209011C2DB0850C03	0209011C2DB0850C03
2022-02-08 15:...	card reader opened s...	card reader opened successfully

As square 4 shows, if this parking card is available, we can authorize it as monthly parking card.

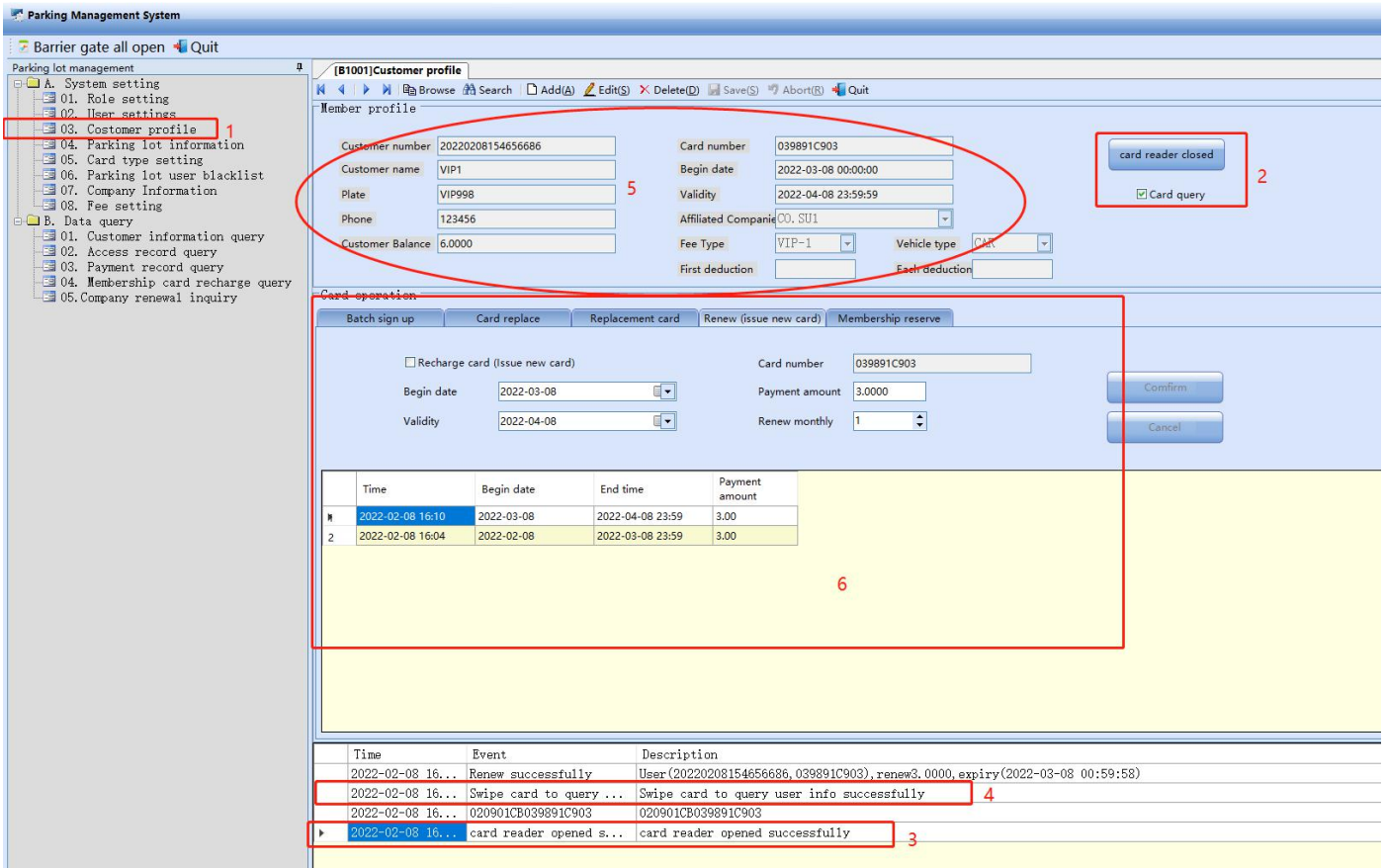


Click "Edit" to input customer name, plate No., phone No., vehicle type etc. and save it.

### Monthly parking card renew and extension

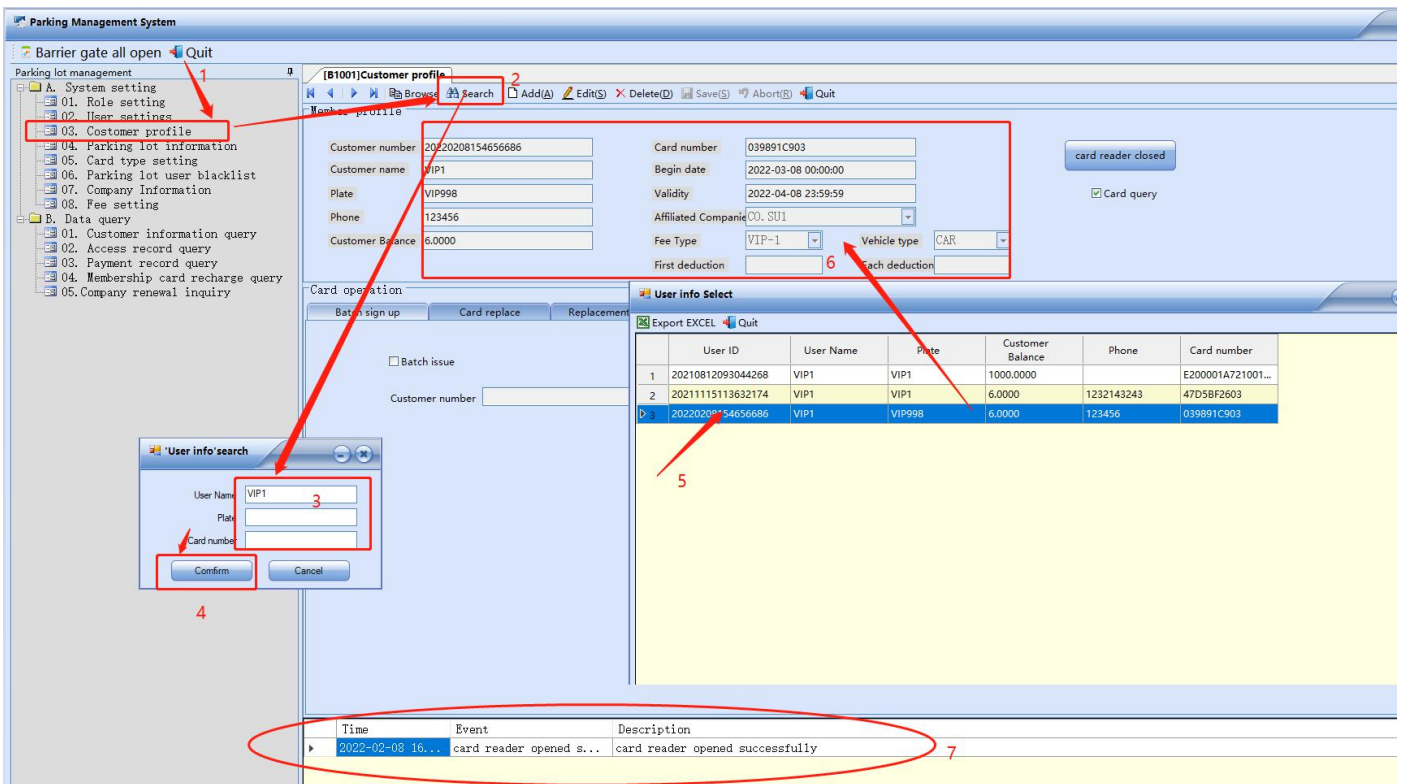


Click "Renew", select "recharge card", input "payment amount and renew month" , and then click "confirm", begin date and validity will update,extension process is finished.



Check "1","2","3",make sure it works, then read card "4",confirm"5" and"6" to complete the renew process.

### 9, Monthly parking card replacement after lost



Click "customer profile", connect desktop card issuer to computer, make sure system shows "card reader opened successfully". Click "search" and input keywords, select exact user information you need.

[B1001]Customer profile

Member profile

Customer number: 20220208154656686  
 Customer name: VIP1  
 Plate: VIP998  
 Phone: 123456  
 Customer Balance: 6.0000

Card number: 039891C903  
 Begin date: 2022-03-08 00:00:00  
 Validity: 2022-04-08 23:59:59  
 Affiliated Company: CO. SU1  
 Fee Type: VIP-1  
 Vehicle type: CAR

card reader closed  
 Card query

Card operation

Batch sign up | Card replace | **Replacement card** | Renew (issue new card) | Membership reserve

Start card replace

New card number: 9EEBA08E03  
 Card replacement fee: 0

Confirm  
 Cancel

Time	Event	Description
2022-02-08 16...	020901539EEBA08E03	020901539EEBA08E03
2022-02-08 16...	Swipe card to query ...	Swipe card to query user info successfully
2022-02-08 16...	020901CB039891C903	020901CB039891C903
2022-02-08 16...	card reader opened s...	card reader opened successfully

**[B1001]Customer profile**

Member profile

Customer number: 20220208154656686  
 Customer name: VIP1  
 Plate: VIP998  
 Phone: 123456  
 Customer Balance: 6.0000

Card number: 9EEBA08E03  
 Begin date: 2022-03-08 00:00:00  
 Validity: 2022-04-08 23:59:59  
 Affiliated Company: CO. SU1  
 Fee Type: VIP-1  
 Vehicle type: CAR  
 First deduction:   
 Each deduction:   
 card reader closed  
 Card query

new

Card operation

Batch sign up | Card replace | Replacement card | Renew (issue new card) | Membership reserve

Start card replace

New card number:   
 Card replacement fee: 0

Confirm  
 Cancel

4

5

Time	Event	Description
2022-02-08 16...	Replace card success...	User 20220208154656686)replace card successfully(9EEBA08E03->0)
2022-02-08 16...	020901839EEBA08E03	020901839EEBA08E03
2022-02-08 16...	Swipe card to query ...	Swipe card to query user info successfully
2022-02-08 16...	020901CB039891C903	020901CB039891C903
2022-02-08 16...	card reader opened s...	card reader opened successfully

Click "Card replacement", select "start card replace", click "confirm", new card is issued. After replacement, all information will keep the same as that of before except card no. See picture as below:

Member profile

Customer number: 20220208154656686  
 Customer name: VIP1  
 Plate: VIP998  
 Phone: 123456  
 Customer Balance: 6.0000

Card number: 039891C903  
 Begin date: 2022-03-08 00:00:00  
 Validity: 2022-04-08 23:59:59  
 Affiliated Company: CO. SU1  
 Fee Type: VIP-1  
 Vehicle type: CAR  
 First deduction:   
 Each deduction:   
 update

Customer number: 20220208154656686  
 Customer name: VIP1  
 Plate: VIP998  
 Phone: 123456  
 Customer Balance: 6.0000

Card number: 9EEBA08E03  
 Begin date: 2022-03-08 00:00:00  
 Validity: 2022-04-08 23:59:59  
 Affiliated Company: CO. SU1  
 Fee Type: VIP-1  
 Vehicle type: CAR  
 First deduction:   
 Each deduction:   
 update

## Card replace (original card is on hand but card can not be read sensitively. You can replace a new card too)

The screenshot displays the 'Parking Management System' interface. On the left, a tree view under 'Parking lot management' has '03. Customer profile' selected, indicated by a red box and arrow labeled '1'. The main window shows the 'Member profile' for customer [B1001]. Fields include Customer number (20220208154656686), Card number (9EEBA08E03), Customer name (VIP1), Begin date (2022-03-08 00:00:00), Plate (VIP998), Validity (2022-04-08 23:59:59), Phone (123456), Affiliated Company (CO. SU1), Fee Type (VIP-1), and Vehicle type (CAR). A 'card reader closed' button and a checked 'Card query' checkbox are highlighted with a red box and arrow labeled '2'. Below, the 'Card operation' section has the 'Card replace' tab selected. A 'Batch issue' checkbox is unchecked, and the 'Begin date' is set to 2022-02-08. At the bottom, a log table shows two entries: one for 'Swipe card to query user info successfully' (Time: 2022-02-08 16:00:00, Event: Swipe card to query ...) and another for 'card reader opened successfully' (Time: 2022-02-08 16:00:00, Event: card reader opened s...). Red arrows labeled '3' and '4' point to these log entries.

Time	Event	Description
2022-02-08 16:00:00	Swipe card to query ...	Swipe card to query user info successfully
2022-02-08 16:00:00	card reader opened s...	card reader opened successfully

Follow step 1, 2,3,4, double check customer's information.

[B1001]Customer profile

Member profile

Customer number: 20220208154656686      Card number: 9EEBA08E03

Customer name: VIP1      Begin date: 2022-03-08 00:00:00

Plate: VIP998      Validity: 2022-04-08 23:59:59

Phone: 123456      Affiliated Company: CO. SU1

Customer Balance: 6.0000      Fee Type: VIP-1      Vehicle type: CAR

First deduction:      Each deduction:       Card query

Card operation

Batch sign up    **Card replace**    Replacement card    Renew (issue new card)    Membership reserve

Start card replace

Original card number: 9EEBA08E03      Confirm

New card number:      Cancel

Time	Event	Description
2022-02-08 16...	Please swipe new card	Please swipe new card
2022-02-08 16...	020901539EEBA08E03	020901539EEBA08E03
2022-02-08 16...	Please read original...	Please read original card
2022-02-08 16...	Swipe card to query ...	Swipe card to query user info successfully
2022-02-08 16...	020901539EEBA08E03	020901539EEBA08E03

Click "card replace", system appears " please read original card" and "please swipe new card", follow the instructions, then you see new card No., click confirm to complete replacement.

**[B1001]Customer profile**

Member profile

Customer number: 20220208154656686      Card number: 9EEBA08E03

Customer name: VIP1      Begin date: 2022-03-08 00:00:00

Plate: VIP998      Validity: 2022-04-08 23:59:59

Phone: 123456      Affiliated Company: CO. SU1

Customer Balance: 6.0000      Fee Type: VIP-1      Vehicle type: CAR

First deduction:      Each deduction:

Card operation

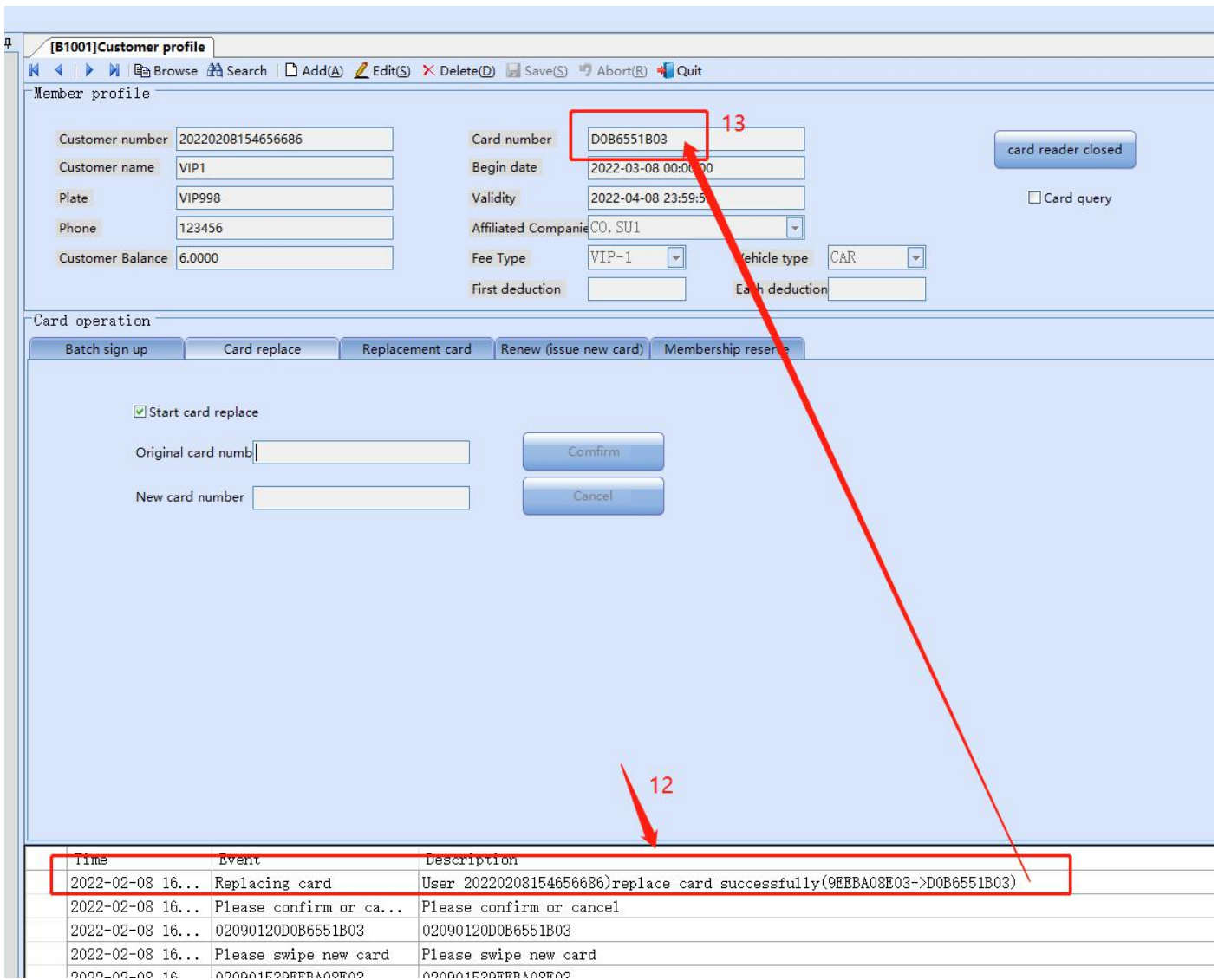
Batch sign up    Card replace    Replacement card    Renew (issue new card)    Membership reserve

Start card replace

Original card number: 9EEBA08E03      **Confirm** 11

New card number: **DOB6551B03** 10      **Cancel**

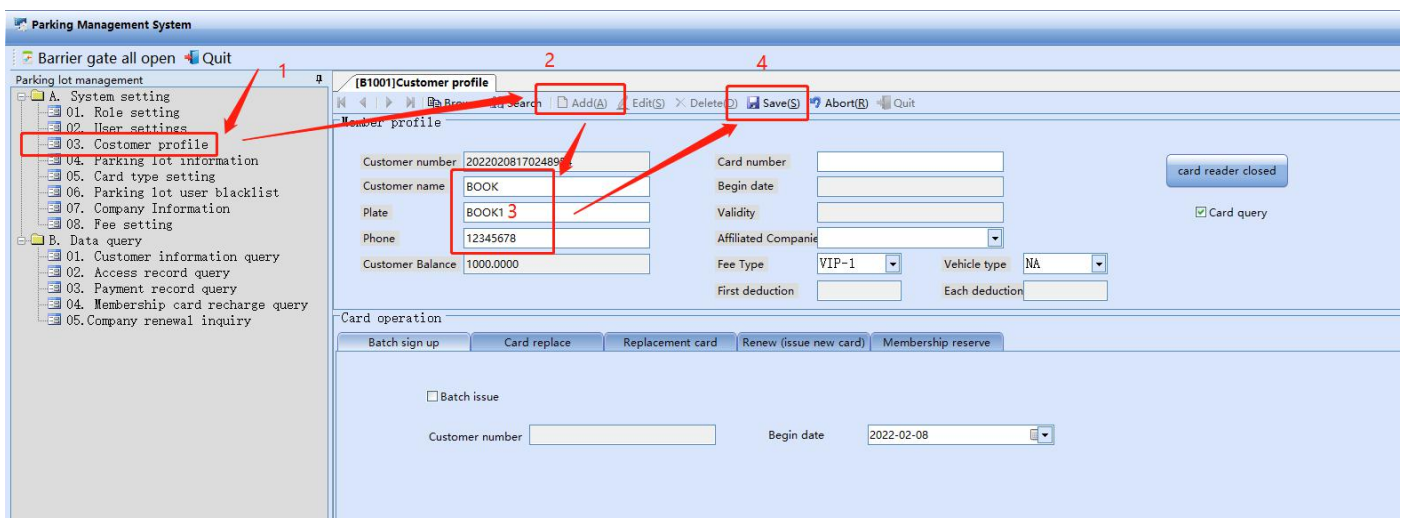
Time	Event	Description
2022-02-08 16...	Please confirm or ca...	Please confirm or cancel
2022-02-08 16...	02090120DOB6551B03	02090120DOB6551B03
2022-02-08 16...	Please swipe new card	Please swipe new card
2022-02-08 16...	020901539EEBA08E03	020901539EEBA08E03
2022-02-08 16...	Please read original...	Please read original card
2022-02-08 16...	Swipe card to mem...	Swipe card to mem...



See step 12, it's saying "user replace card successfully..."

### Membership booking (For LPR system only)

For example, click "customer profile", click "add", input customer name, plate No. phone No. etc. and save it. Make sure plate No. is correct.



**[B1001]Customer profile**

Member profile

Customer number	20220208170248954	Card number	
Customer name	BOOK	Begin date	
Plate	BOOK1	Validity	
Phone	12345678	Affiliated Company	
Customer Balance	1000.0000	Fee Type	VIP-1
		Vehicle type	NA
		First deduction	
		Each deduction	

Card operation

Batch sign up   Card replace   Replacement card   Renew (issue new card)   **Membership reserve**

Payment amount: 100   **Fresh**

Validity: 2022-02-08 17:07:58   **Comfirm**

Fill in payment amount and validity time, barrier gate will open automatically after plate recognition within validity time.

[B1001]Customer profile

Member profile

Customer number: 20220208171037668  
 Customer name: BOOK  
 Plate: BOOK1  
 Phone: 23356564  
 Customer Balance:

Card number:   
 Begin date:   
 Validity: 2022-02-16 17:10:56  
 Affiliated Company:   
 Fee Type: VIP-1  
 Vehicle type: NA  
 First deduction:   
 Each deduction:

card reader closed  
 Card query

Card operation

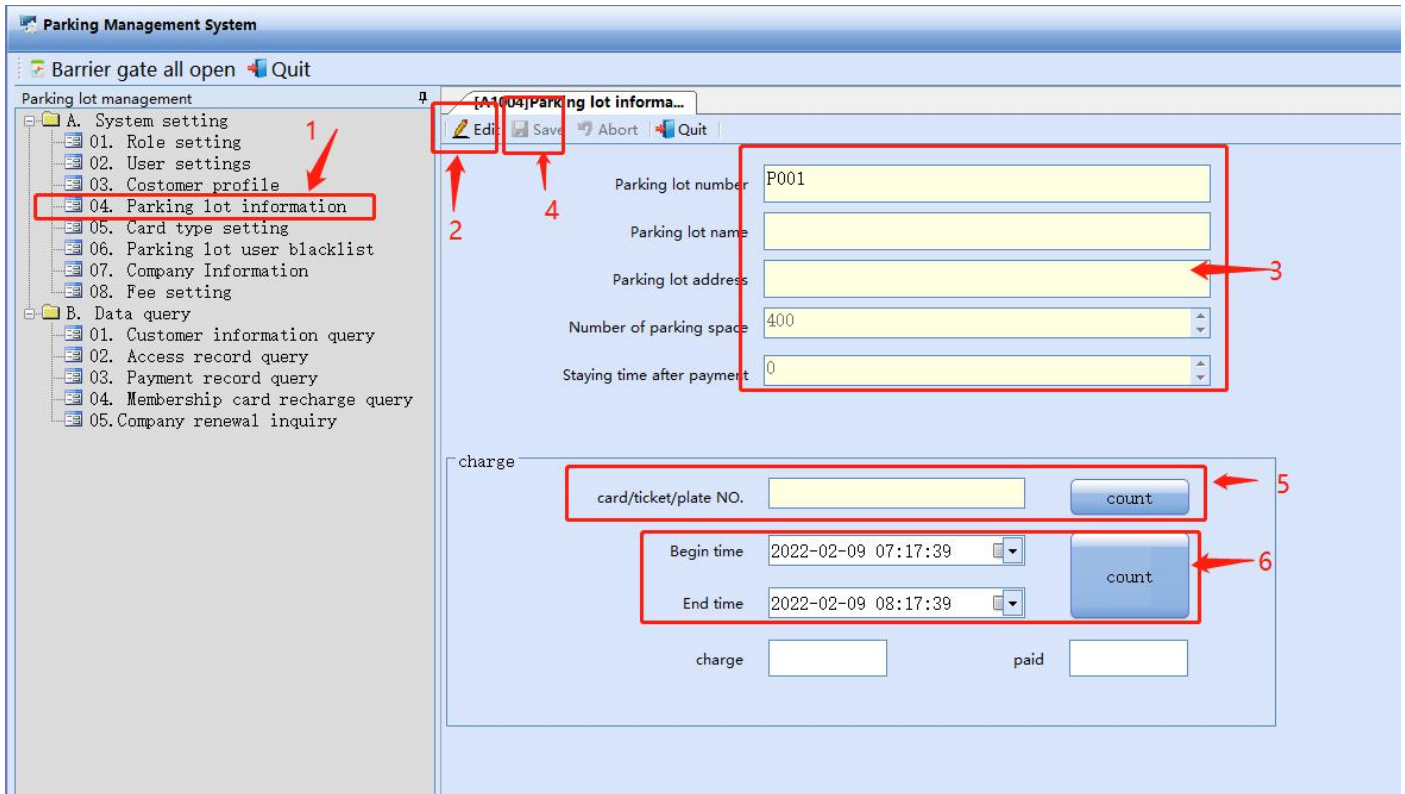
Batch sign up | Card replace | Replacement card | Renew (issue new card) | Membership reserve

Payment amount:   
 Validity: 2022-02-16 17:10:56

Fresh  
 Confirm

Time	Event	Description
2022-02-08 17...	Booking successfully	User(20220208171037668), booking fee (100), will valid to(2022-02-16 17:10:56)
2022-02-08 17...	Booking successfully	User(20220208170248954), booking fee (100), will valid to(2022-02-08 17:07:58)
2022-02-08 17...	card reader opened s...	card reader opened successfully

## A-04 Parking lot information edition

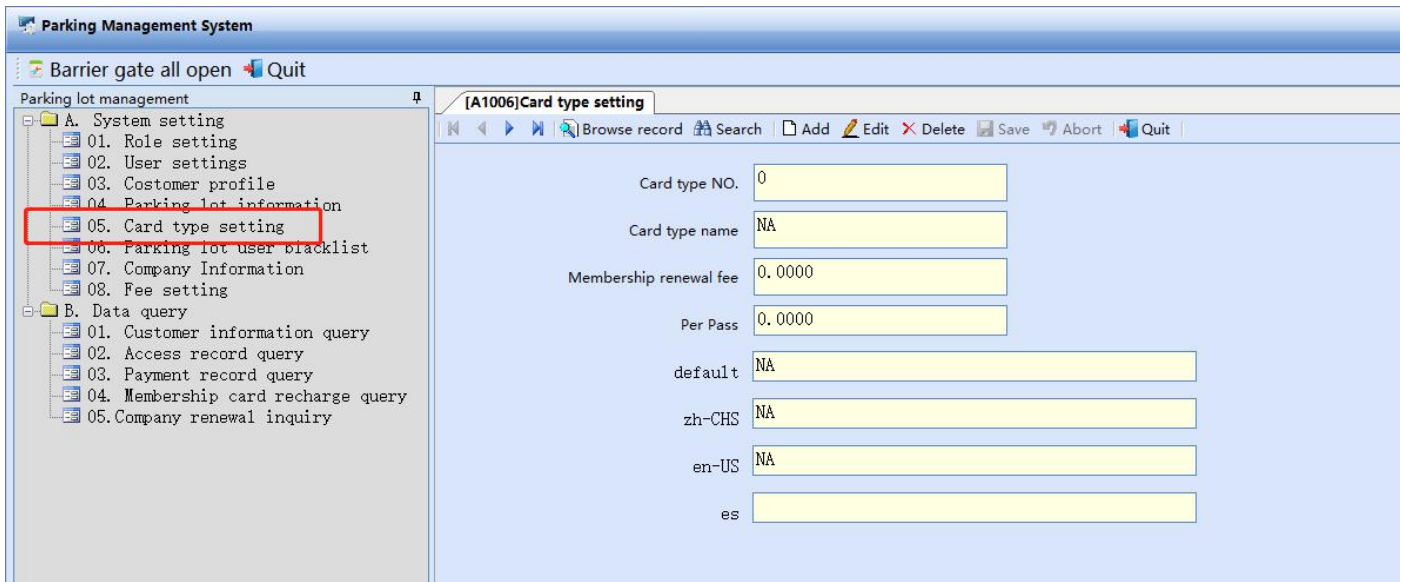


Click " parking lot information", click " edit" and input related information, click " save"

Two ways to test charge standard, one as per card No., ticket No. to calculate, the other as per time.

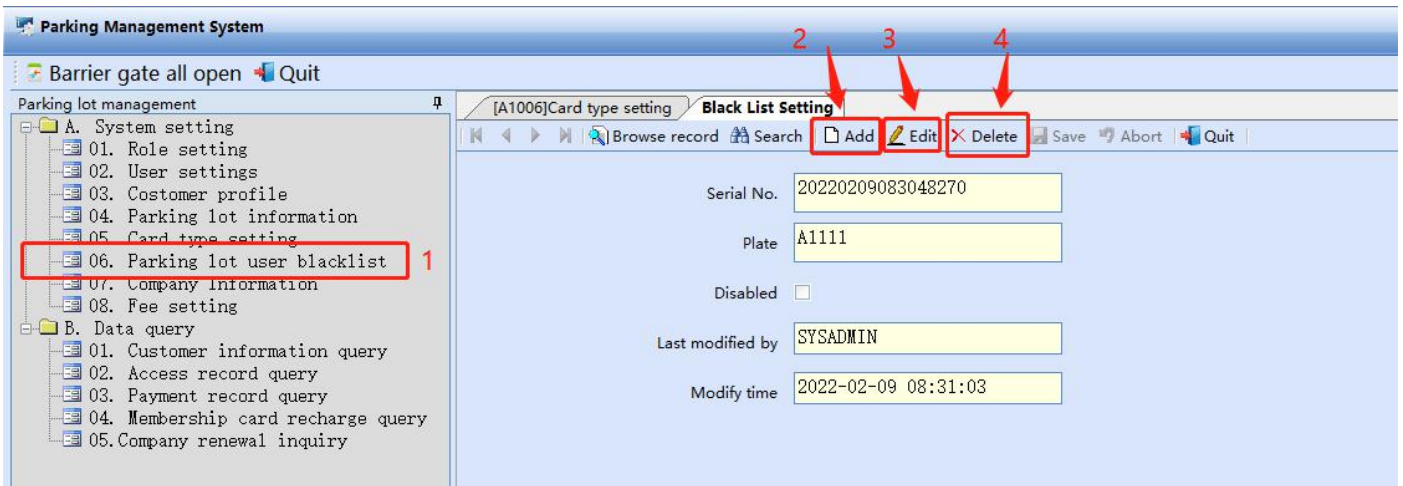
## A-05 Card type setting ( This function can be valid when work with toll payment software)

Customer can set different charge according to vehicle type.



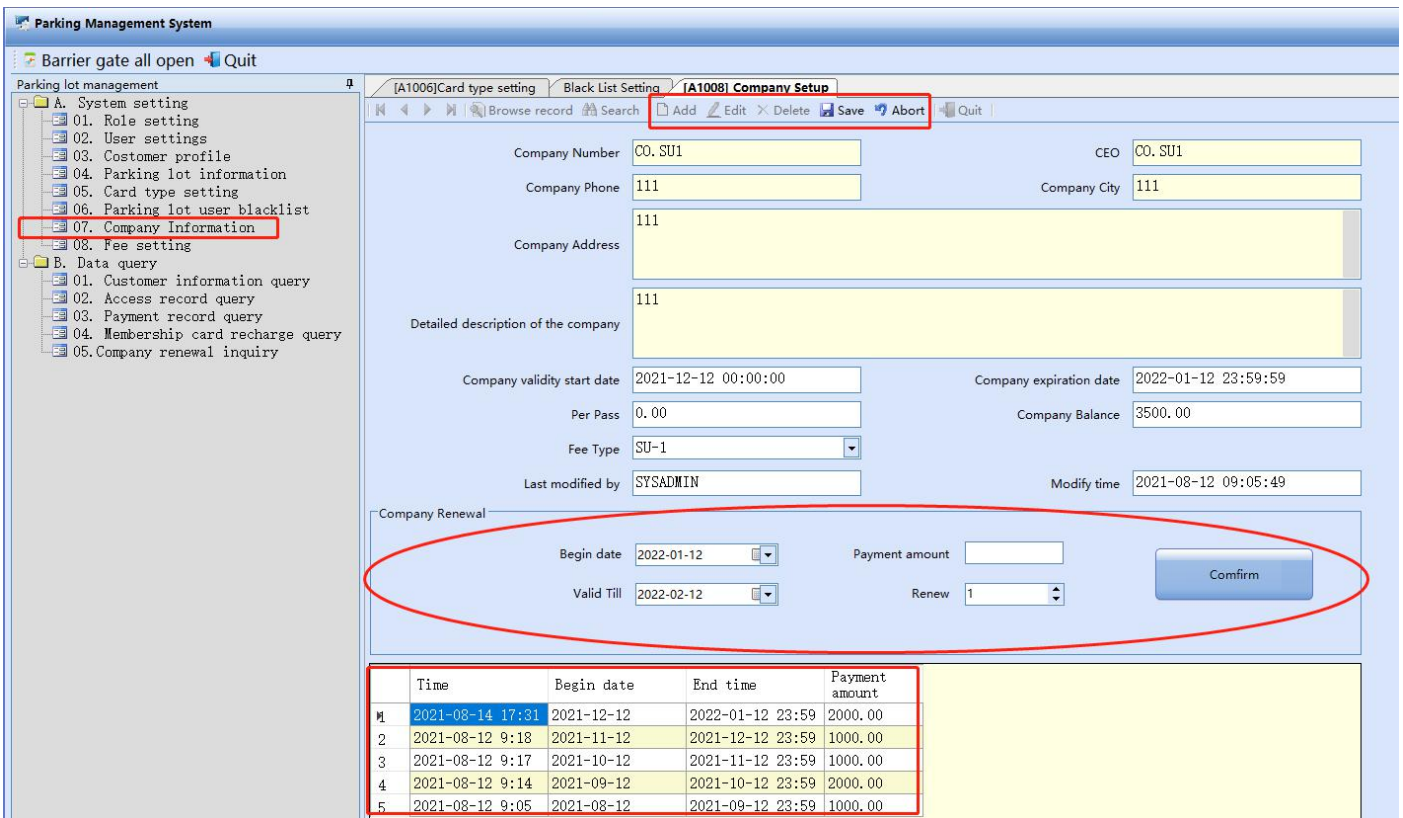
## A-06 Blacklist (This function is especially for LPR system)

--Plate No. in black list will be not allowed to enter.

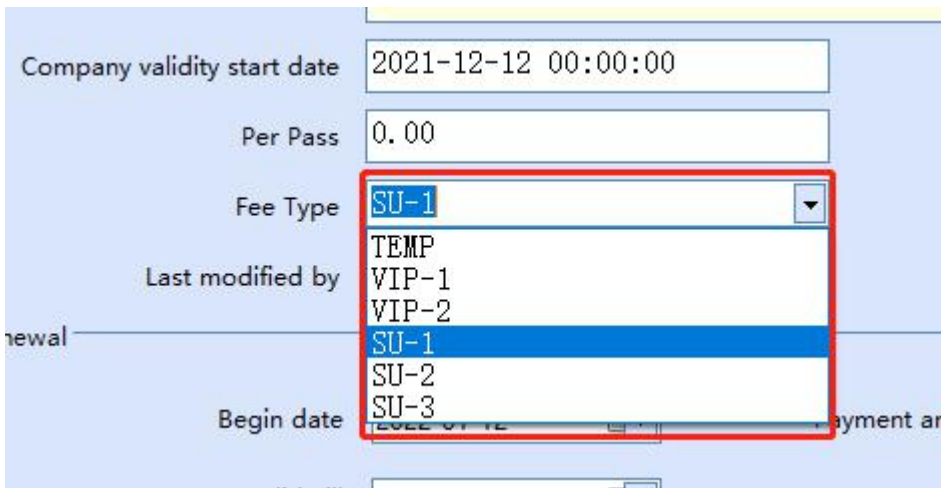


Click "parking lot user blacklist" to add, edit or delete the plate no.

## A-07 Edit company information and recharge operation



Click "company information", can add, edit and delete company information.



**Company type explanation:**

VIP-1: Individual account, can select different validity time, no need to choose car type, no need to pay. Car will be not allowed to enter after validity.

VIP-2: Individual account, can select different validity time, no need to choose car type, need to pay. Car will be not allowed to enter after validity.

SU-1: company pre-paid account, many different car types under the account, deduct each parking fee from account.

\* Within validity date, vehicle can entry and exit, though no money in the account.

\* Exceed validity date, vehicle can not entry and exit, though account still has money.

(vehicle type includes car, SUV, bus)

SU-2: Personal pre-paid account, many different car types under the account, deduct each parking fee from account.

\* Within validity date, vehicle can entry and exit, though no money in the account.

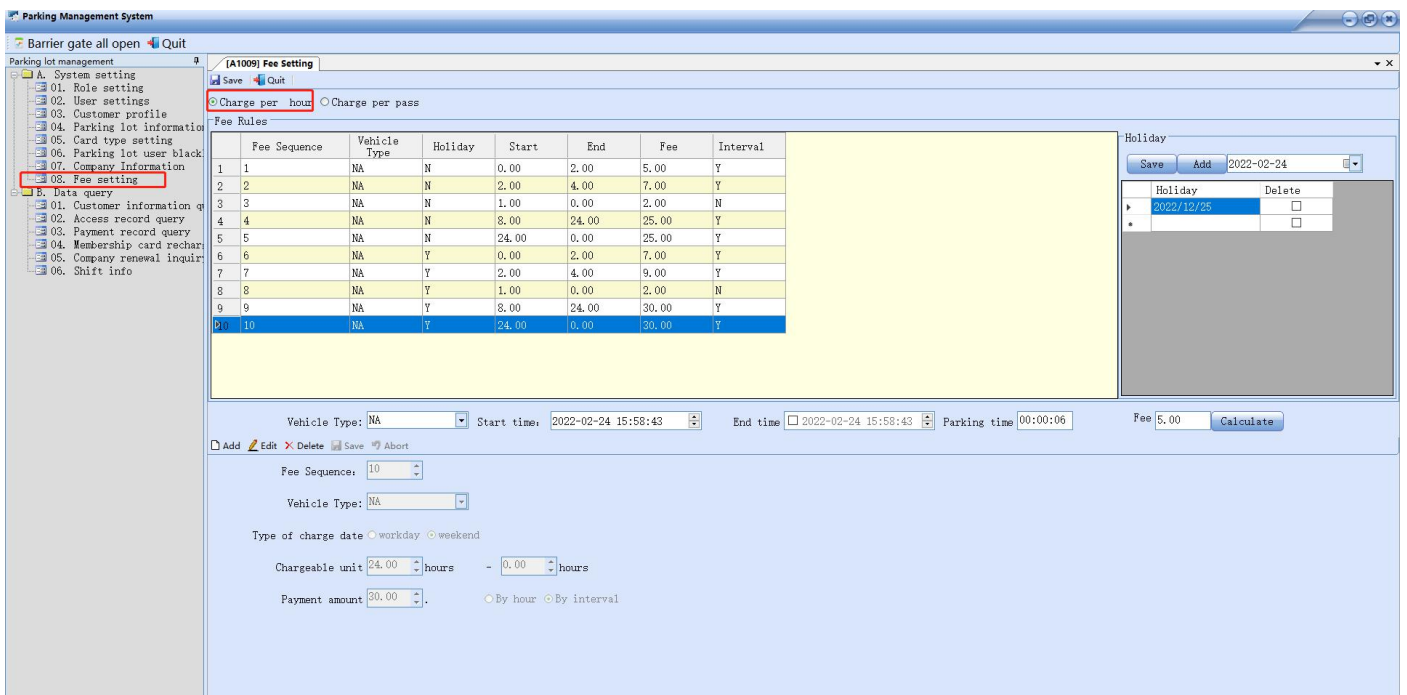
\* Exceed validity date, vehicle can not entry and exit, though account still has money.

(vehicle type includes car, SUV, bus)

SU-3, Others. There are many different vehicle types, each parking fee will be deducted from account. Whether vehicle can enter or exit the lot will depends on account balance.

**A-08 Fee setting**

Click "Fee setting", select "charge per hour", see below interface:



For example:

Monday to Friday:

0--2	:	5
2--4	:	7
4--5	:	9
5--6	:	11
6--7	:	13
7--8	:	15
8--24	:	25

0--2 h, charge: 5

2--4 h, charge: 7

4--8 h, add 2 per hour

8--24h, charge 25

---

Weekend and holiday:

0--2	:	7
2--4	:	9
4--5	:	11
5--6	:	13
6--7	:	15
7--8	:	17
8--24	:	30

0--2h, charge 7

2--4h, charge 9

4--8h, add 2 per hour

8--24h, charge 30

Charge standard will subject to the exact date you leave the parking lot.

If there is 30 minutes grace time, set grace time as below:

0--0.50 h	:	0
0.50---2h	:	5

For example, we set one parking interval as below:

9	9	NA	Y	8.00	24.00	30.00	Y
10	10	NA	Y	24.00	0.00	30.00	Y
11	11	NA	N	0.00	0.50	0.00	Y

Vehicle Type:  Start time:  End time:

1 Fee Sequence:

Vehicle Type:  2

Type of charge date:  workday  weekend 3

Chargeable unit:  hours  hours 4 5

Payment amount:   By hour  By interval 6 7

8

9

1. Click “add”
2. Create fee sequence no. “11”
3. If it’s temporary vehicle, not specify vehicle type, choose “NA”
4. Choose workday or weekend according to your needs, here to choose “workday”
5. Grace time: 30min, as picture shows 0.5h=30min
6. Under chargeable unit, input 0.00 and 0.50 separately, input “0” to payment amount.
7. Here add one parking period, so choose “ by interval”
8. Click “Save”

Setting and setting explanation:

7	7	NA	Y	2.00	4.00	9.00	Y
8	8	NA	Y	1.00	0.00	2.00	N
9	9	NA	Y	8.00	24.00	30.00	Y
10	10	NA	Y	24.00	0.00	30.00	Y
11	11	NA	N	0.00	0.50	0.00	Y

Vehicle Type: NA Start time: 2022-02-24 15:58:43 End time: 2022-02-24 15:58

Add Edit Delete Save Abort

Fee Sequence: 11

Vehicle Type: NA

Type of charge date:  workday  weekend

Chargeable unit: 0.00 hours - 0.50 hours

Payment amount: 0.00  By hour  By interval

Add holiday, for example, select Jan. 1<sup>st</sup>, follow below step 1-4 to add and click “save”, holiday setting is finished.

Holiday

Save Add 2022年 1月 1日

2022年1月

27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

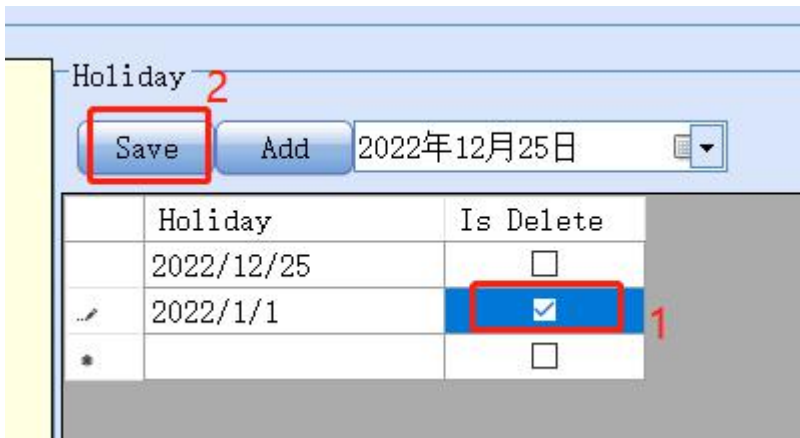
今天: 2022/2/22

Holiday

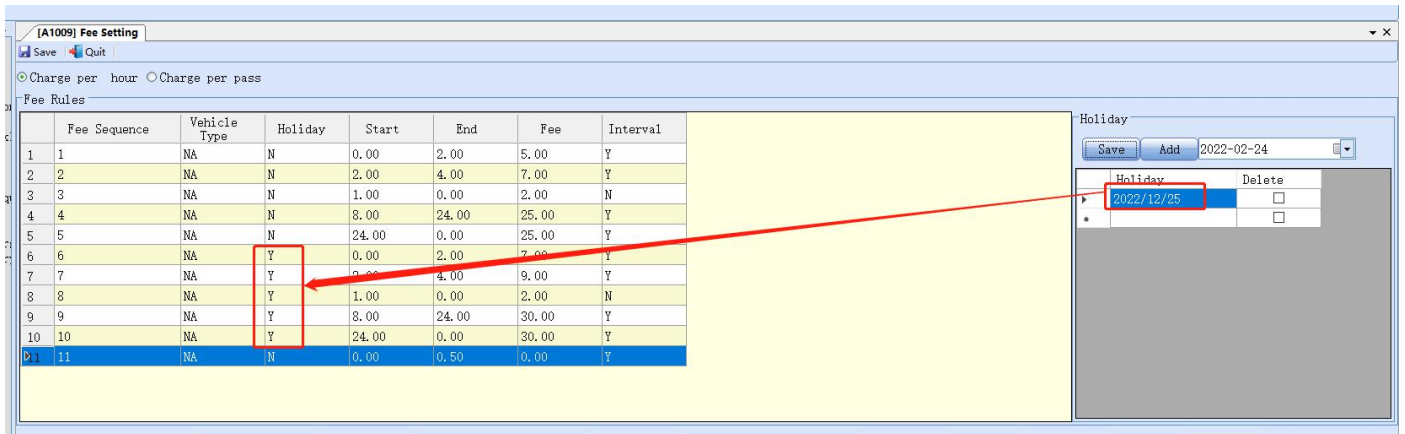
Save Add 2022-02-24

Holiday	Delete
2022/12/25	<input type="checkbox"/>
2022/1/1	<input checked="" type="checkbox"/>
	<input type="checkbox"/>

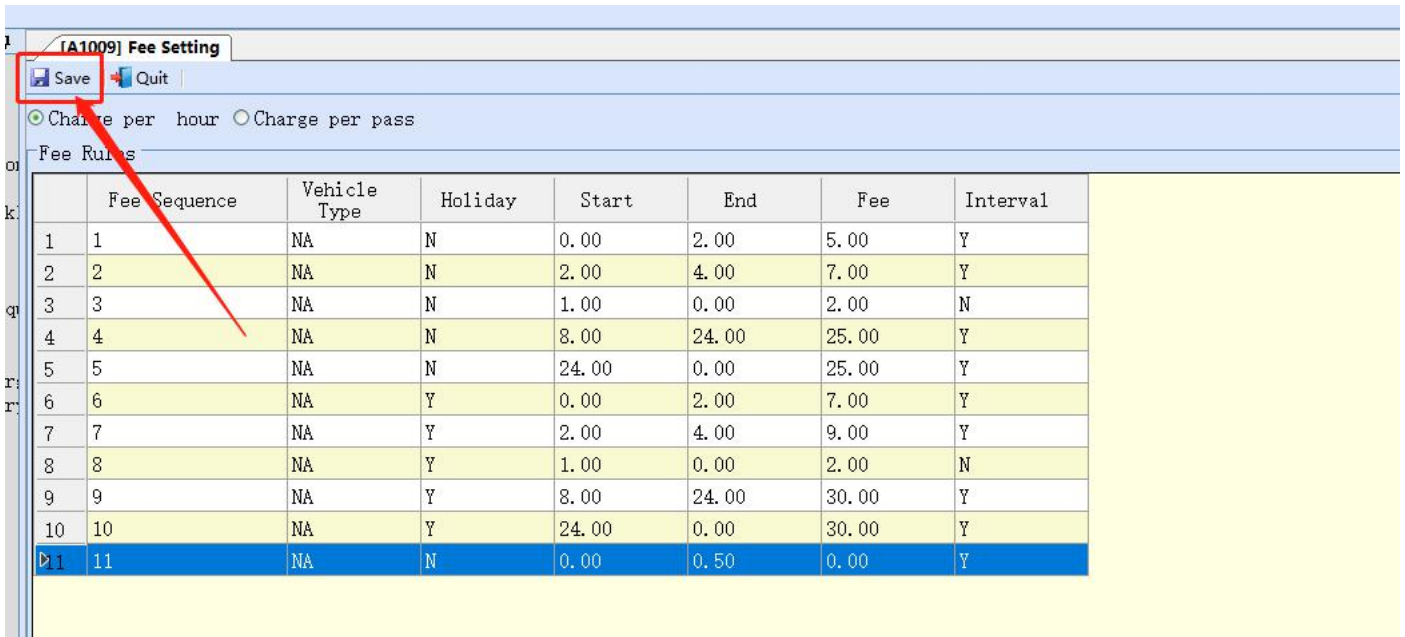
Click “ delete ” , then click “save” , can delete holiday setting which you don’t want.

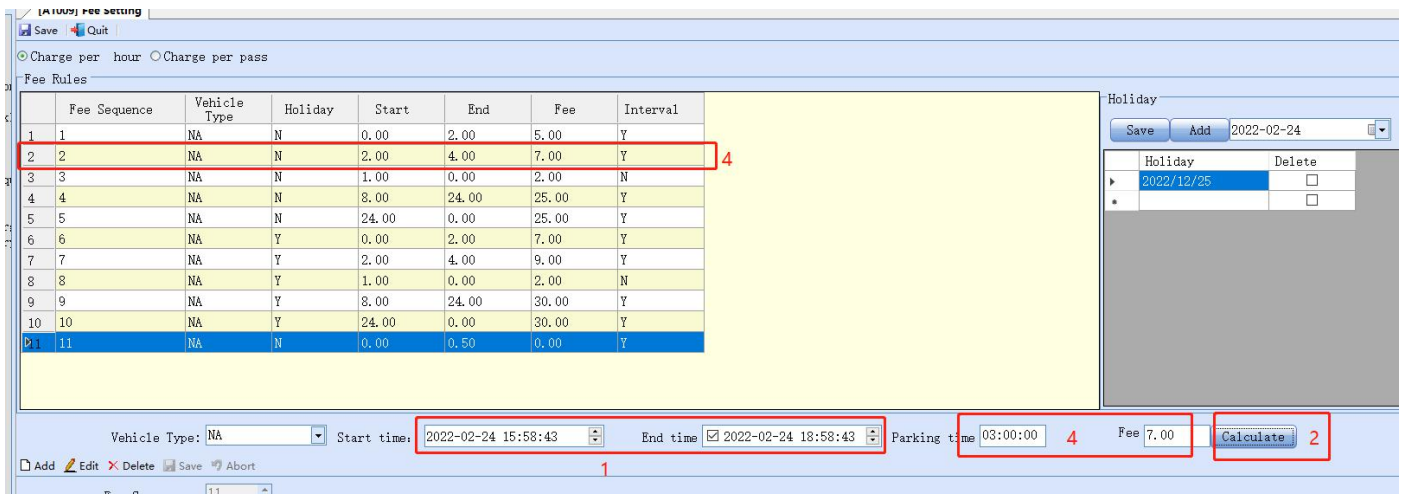


Holiday charge standard is same as weekend's one



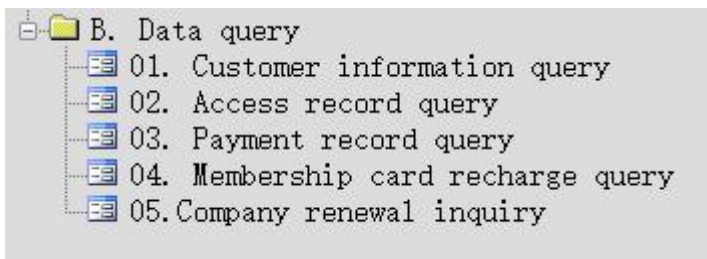
Any modification on charge stand should click "save" to make it effective.



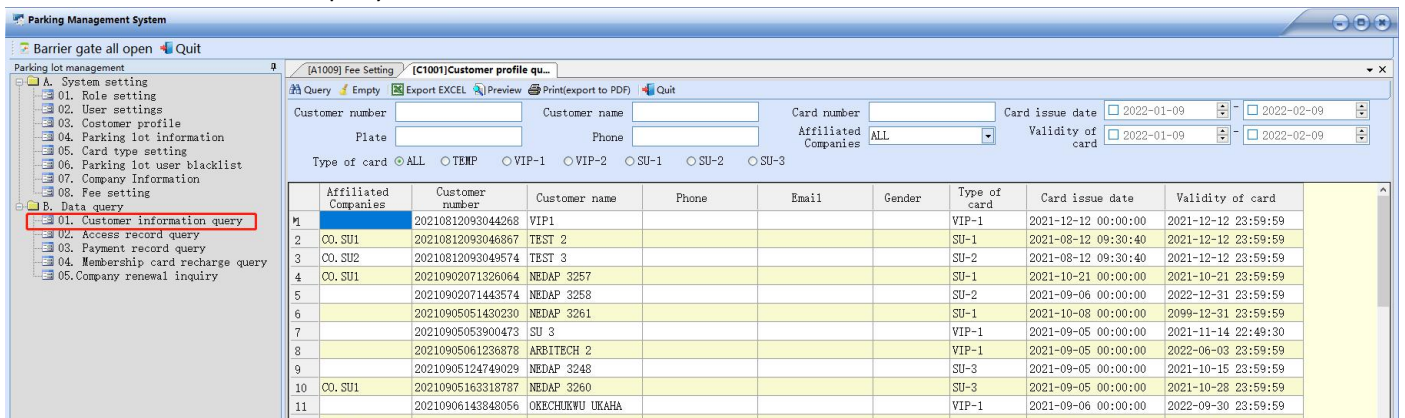


Select start time and end time, click “ calculate” to check whether the parking fee is correct or not. As we can see from fee rule, you pay 7 between 2-4 hours, so test result is good.

## B) Data Query

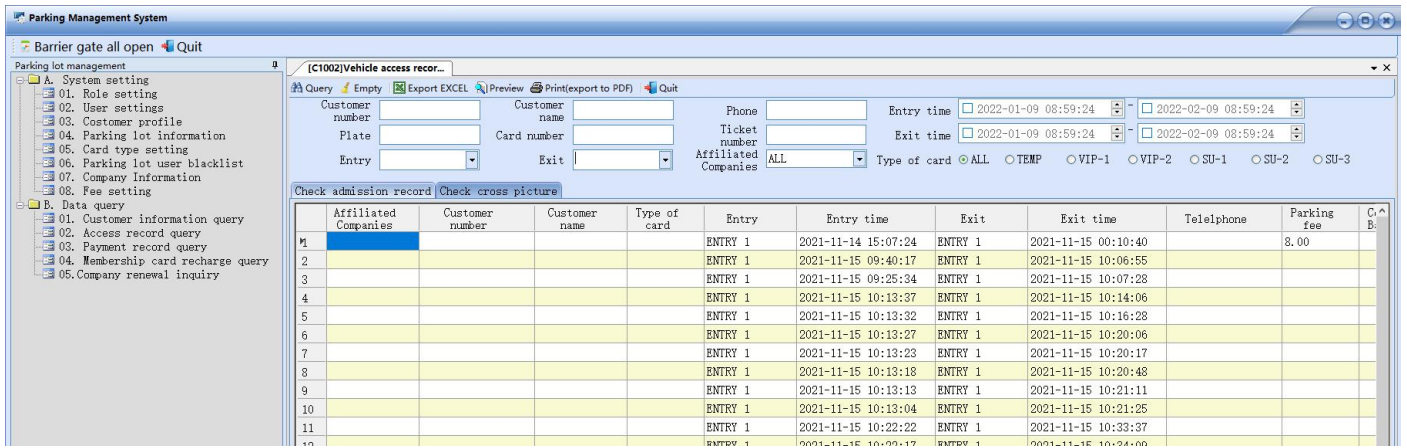


### B-01 Customer information query

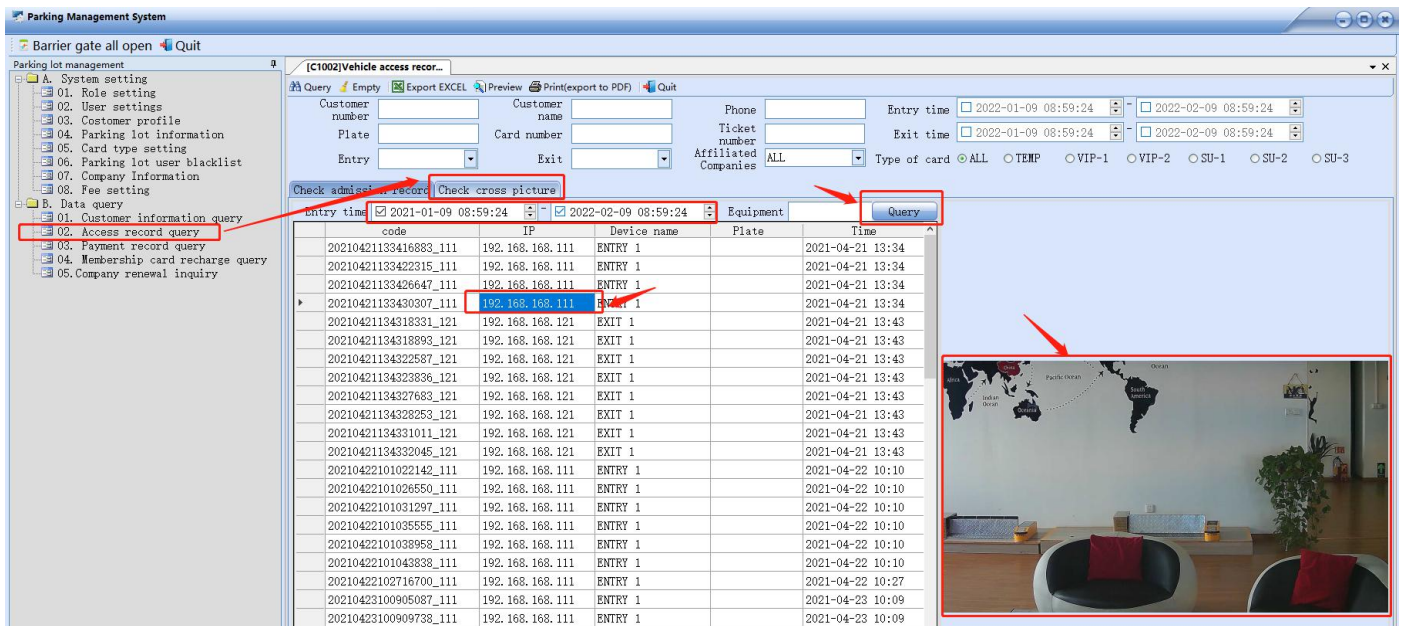


Condition query, can output excel, PDF file and preview.

### B-02 Parking access records query

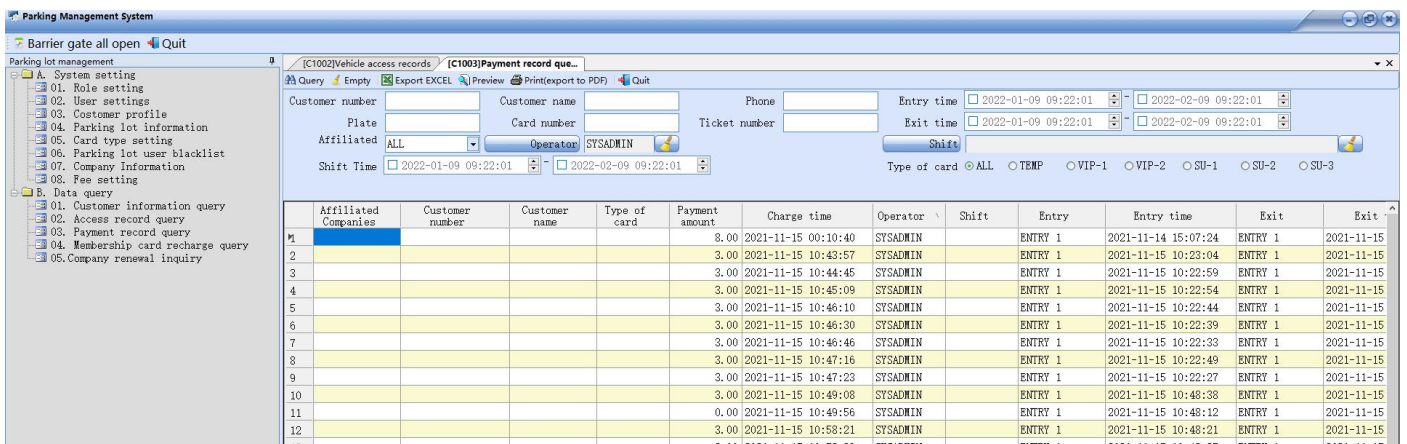


You can enquire by user name, license plate, phone number,time and car type. The information results can be exported too



Check vehicle passing picture

### B-03 Payment records query



Can query information by customer name, plate No., phone No., time, vehicle type, toll collector etc. Result can be exported to excel or PDF format.

### B-04 Membership card recharge record query:

Input customer name to check recharge record, see below picture.

	Affiliated Companies	Customer number	Customer name	Card number	Operator	Type of card	Renew(card no.)	Renew(begin date)	Renew(End date)	Renew(fee)	Replace card(original card no.)	Replace card(new card no.)
1	CO.SU1	20210902071326064	NEDAP 3257	4E20193C06...	SYSADMIN	SU-1	4E20193C...	2021-09-02 00:00:00	2021-09-02 23:59:59	0.00		
2	CO.SU1	20210902071326064	NEDAP 3257	4E20193C06...	SYSADMIN	SU-1	4E20193C...	2021-09-05 00:00:00	2021-10-21 23:59:59	2000.00		
3	CO.SU1	20210902071326064	NEDAP 3257	4E20193C06...	SYSADMIN	SU-1	4E20193C...	2021-10-21 00:00:00	2021-10-21 23:59:59	1000.00		
4	CO.SU1	20210902071326064	NEDAP 3257	4E20193C06...	SYSADMIN	SU-1	4E20193C...	2021-10-21 00:00:00	2021-10-21 23:59:59	1000.00		

### B-05 Company recharge query

	Company Number	CEO	Company Phone	Company City	Company validity start date	Company expiration date	Per Pass	Company Balance	Recharge Start Date	Recharge End Date	Recharge Fee	Recharge time	Company Address
1	CO.SU1	CO.SU1	111	111	2021-12-12	2022-01-12...	0.0000	3500.0000	2021-08-...	2021-09-...	1000.00		111
2	CO.SU1	CO.SU1	111	111	2021-12-12	2022-01-12...	0.0000	3500.0000	2021-09-...	2021-10-...	2000.00		111
3	CO.SU1	CO.SU1	111	111	2021-12-12	2022-01-12...	0.0000	3500.0000	2021-10-...	2021-11-...	1000.00		111
4	CO.SU1	CO.SU1	111	111	2021-12-12	2022-01-12...	0.0000	3500.0000	2021-11-...	2021-12-...	1000.00		111
5	CO.SU1	CO.SU1	111	111	2021-12-12	2022-01-12...	0.0000	3500.0000	2021-12-...	2022-01-...	2000.00		111
6	CO.SU2	CO.SU2	222	222	2021-11-12	2021-12-12...	0.0000	6000.0000	2021-08-...	2021-09-...	2000.00		222
7	CO.SU2	CO.SU2	222	222	2021-11-12	2021-12-12...	0.0000	6000.0000	2021-09-...	2021-11-...	2000.00		222
8	CO.SU2	CO.SU2	222	222	2021-11-12	2021-12-12...	0.0000	6000.0000	2021-11-...	2021-12-...	2000.00		222

### Remarks

- \* System work with Microsoft SQL 2012 database
- \* System support LPR, RFID(card),barcode ticket, toll station system
- \* Using as toll station system,support offline model
- \* COMA system can integrate with other existing systems to achieve more complicate functions.
- \* More customized functions can be developed as your requested
- \* Provide English, Russia, Spanish system language, also can translate to yours if need.