

Protocol

(V2.5)

TCN R & D Center
2014.3

Profile Audit Information

Item	Develop	Date	Audit	Date	Pass	Date	Remark

Profile update record

Version	Date	Person	Specification
V2.0	2014-03-14	HANRU	Original
V2.1	2015-04-10	HANRU	上货增加单价, 验证取货增加会员功能
V2.2	2023/4/10	HANRU	Add APP load products feature
V2.3			
V2.4			
V2.5	2023/4/10	SONGJIANCHEN	Revise load, delivery products feature and download advertising feature by remote control

1 引言

1.1 编写目的

说明对程序系统的设计考虑，包括程序系统的基本处理流程，程序系统的组织结构、模块划分、功能分配、接口设计、数据结构设计等。

备注：不同的用户根据不同的需求，实现各自的接口。如不涉及可不实现接口。扫描二维码需要加装硬件设置。

1.2 术语与缩略语

术语	解释	备注
上货（配送）	上货（配送）人员用来存货时开箱的标识，可以在触摸屏输入或者扫描二维码输入	长度为 8 位的阿拉伯数字
取货密码	用户取货时密码，可以在触摸屏输入或者扫描二维码输入	长度为 8 位的阿拉伯数字
缩略语	全称	备注

2 后台概要设计

所有接口都是采用 http 的 Post 形式发送请求，返回结果都是 json 格式的数据。请求地址 VMC 做成可配置。

2.1 接口设计

2.1.1 Load (delivery)

2.1.1.1 Request message

FIELD NAME	TYPE	SPECIFICATION
FunCode	String	Function code no 1000
MachineID	String	Machine ID
TradeNo	String	Trade NO, return as original
SlotNo	String	Slot NO
KeyNum	Int	Key No (Use for have keyboard machine)
Status	Int	Slot status (0: ok other: fail)
Quantity	Int	Load / delivery quantity
Stock	Int	stock (after load/ delivery)
Capacity	Int	capacity
ProductID	String	Product ID
Price	String	Unit price (1.5)
Type	String	Product type
Introduction	String	Product introduction
Name	String	Product name

2.1.1.2 Answering

Server return json data:

```
{ "Status": "0", "SlotNo": "22", "TradeNo": "20170802193446876",
  "Err": "success", "ImageUrl": "http://xxx.com/201708029502889.png", "ImageDetailUrl": "http://xxx.com/20170801124323318.png" }
```

说明:

FIELD NAME	SPECIFICATION
Status	0: Suc 1: upload again other: fail(must fill in)
SlotNo	Slot no (must fill in)
TradeNo	Upload trade no, return as original
ImageUrl	Products image URL
ImageDetailUrl	Products detail image URL
Err	Err description

2.1.2 Identify password

2.1.2.1 Request message

FIELD NAME	TYPE	SPECIFICATION
FunCode	String	Function code no 2000
TradeNo	String	Trade no, return as original
SessionCode	String	Delivery password, customer by input password on touch screen or scan QR CODE
MachineID	String	Machine ID (Unified logo)
SlotNo	String	Slot No
Price	String	Unit price (1.5)
Account	String	Account (can't use together with SessionCode, choose one of them)
PWD	String	password

2.1.2.2 Answering

Return json data:

```
{ "Status": "0", "SlotNo": "23", "ProductID": "1002356", "TradeNo": "20170609123523569", "Err": "Suc" }
```

Specification :

FIELD NAME	SPECIFICATION
Status	0: Suc Other: fail (must fill in)
SlotNo	Slot no which need delivery product, if more than 1 slot use to separate. For example: delivery 23 and 28 slot products in the same time, need to write 23 28. (must fill in)
ProductID	Product ID which need delivery product, if SlotNo > 0, then delivery products based on SlotNo. If delivery products based on products ID, then the SlotNo have to < 1.
TradeNo	Trade NO, return as original (must fill in)
Err	Error description

2.1.3 Return cycle interface

2.1.3.1 :Request

FIELD NAME	TYPE	SPECIFICATION
FunCode	String	Function code no 4000
MachineID	String	Machine ID

2.1.3.2 Answering

1、When MsgType is 0, means Server control VMC to delivery products, return json data as below:

```
{ "Status": "0","MsgType":"0","TradeNo":"20170609123523569","SlotNo":"25","ProductID":"1005678692","Err":"SUC"}
```

Specification :

FIELD NAME	SPECIFICATION
Status	0: Suc Other: Fail
MsgType	Message type
TradeNo	Trade NO
SlotNo	The slot no which need delivery products
ProductID	Product ID which need delivery produc , if SlotNo>0 , then delivery products based on SlotNo. If delivery products based on products ID, than the SlotNo have to < 1
Err	Err description

Remark: The function is use for connecting with delivery products by APP, VMC need to use this interface timing。 Suggest the request Intervals time is 3 second。

2、When MsgType is 1, means the APP loading inform VMC, return json data as below:

```
{ " Status ": "0","MsgType":"1","SlotNo":"25"," TradeNo":"111111"," Capacity":"1"," Quantity ":"1"," ProductID":"111111"," Name":"dsff"," Price":"2.0"," Type":"yinl"," Introduction":"ssfsf"," ImageUrl":"http://xxx.com/201708029502889.png"," ImageDetailUrl":"http://xxx.com/201708029502889.png"," GoodsAdUrl":"ssfsf","Err":"Suc"}
```

Specification :

FIELD NAME	SPECIFICATION
Status	0: means need load others: don't need
MsgType	Message type is 1
SlotNo	Slot no
Err	Err description
Capacity	Capacity
Quantity	Load/delivery quantity
ProductID	Product ID
Name	Produce name
Price	Product price
Type	Product type
Introduction	Production introduction
ImageUrl	Product image Url
ImageDetailUrl	Produce detail image Url

Remarl: After load product successfully, need use load result feedback the interface. As the request is every 3 second, so after machine received message, it start to revise product message, this process need enough time. So after server sent send request, pls wait some times first, then you can check if have received load suc or fail news. During waiting time, you can return Server to control the VMC delivery content.

3、when MsgType is 2, means release advertising by remote control, return json data ([json data,json data ,json data]) :

```
{
  "MsgType":"2",
  "AdInfo":[
    {
      "Status":"1",
      "MachingID":"1234567890",
      "Ftp":"host|user|password",
      "PlayTime":"08:30~17:30|19:30~21:30",
      "AdFiles":"s123.png|m98.jpg",
      "AdType":"1"
    },
    {
      "Status":"0",
      "MachingID":"1234567890",
      "Ftp":"host|zhang|123",
      "PlayTime":"08:30~21:30",
      "AdFiles":"s653.mp4",
      "AdType":"0"
    }
  ]
}
```

Specification :

FIELD NAME	SPECIFICATION
MsgType	Message type is 2
AdInfo	Status 0:need download others: don't need
	MachingID machine ID
	Ftp form : "host user password"
	PlayTime if more than 1 play time, use to separate
	AdFiles if more than 1 adverting files, use to separate
AdType 0: normal advertising 1: standby advertising 2: background picture 3: help 4: word advertising	

Remark: After download, need use download result feedback the interface. As the request is every 3 second, download need time, so after server send message, pls wait some time, then check if have received any news about download suc or fail. During the waiting time, can return Server to control the content of VMC delivery. Besides when return the advertising connect, pls return all adverting content which have been released, included downloaded adverting content. Because local will compare with the return advertising content, which not exist content will be deleted.

2.1.4 Resule feedback

2.1.4.1 Delivery result feedback

FIELD NAME	TYPE	SPECIFICATION
FunCode	String	Interface ID 5000
MachineID	String	Machine ID (Unified logo)
PayType	Int	Pay type
TradeNo	String	Trade no
SlotNo	String	Slot no
Status	Int	0:delivery suc 1: delivery fail 2:delivery suc, but can't find trade no or trade no is not correct 3:delivery failed,but can't find trade no or trade no is not correct 4: don't know delivery result
Time	String	Delivery time
Amount	String	Amount
ProductID	String	Product ID
Name	String	Product name
Type	String	Product type

2.1.4.2 Answering type

Return json data:

```
{ "Status": "0", "TradeNo": "20170609123523569", "SlotNo": "25", "Err": "Suc" }
```

Specification:

FIELD NAME	SPECIFICATION
Status	0: confirm feedback suc Others: fail
TradeNo	Trade no
SlotNo	Slot no
Err	Err description

2.1.4.3 APP load result feedback request

FIELD NAME	TYPE	SPECIFICATION
FunCode	String	Interface ID 5001
MachineID	String	Machine ID (Unified logo)
SlotNo	String	Slot no
Status	Int	0 suc Others : fail

2.1.4.4 Answering type

Return json data:

```
{ "Status": "0", "SlotNo": "25", "TradeNo": "20170609123523569", "Err": "suc" }
```

specification:

FIELD NAME	SPECIFICATION
Status	0: confirm feedback suc Others: fail
SlotNo	Slot no
TradeNo	Trade no, return as original

Err	Err description
-----	-----------------

2.1.4.5 Download advertising result to request message

FIELD NAME	TYPE	SPECIFICATION
FunCode	String	Interface no 5002
MachineID	String	Machine ID (Unified logo)
FileName	String	Advertising file name
Status	Int	0: Suc 1: advertising type don't match 2: fail

2.1.4.6 Answering

Return json data:

```
{ "Status": "0", "MachineID": "1234567890", "AdFiles": "d123.png", "Err": "suc" }
```

specification:

FIELD NAME	SPECIFICATION
Status	0: confirm feedback successfully others:failed
MachineID	Machine ID
AdFiles	Advertising file name
Err	Err description

2.1.5 Integral exchange

2.1.5.1 Request message

FIELD NAME	TYPE	SPECIFICATION
FunCode	String	Interface no 8000
MachineID	String	Machine ID (Unified logo)
TradeNo	String	Trade NO
SlotNo	String	Slot NO
Price	String	Unit price (1.5)
NotityUrl	String	Return Url, pay result inform Url, content is 2.1.9.2

2.1.5.2 answering

```
{ "Status": "0", "Err": "suc", "CodeUrl": "123456789", "TradeNo": "20170609123523569" }
```

specification:

FIELD NAME	SPECIFICATION
Status	0: SUC Others: Fail
Err	Err description
CodeUrl	The only logo for Server return, generate QR code
TradeNo	Trade no

2.1.6 Checking integral exchange pay result

2.1.6.1 Request message

FIELD NAME	TYPE	SPECIFICATION
FunCode	String	Interface no 9000
MachineID	Machine ID	Machine ID (Unified logo)
TradeNo	Trade no	

2.1.6.2 Answering

```
{ "Status": "0", "Err": "suc", "MachineID": "123456789", "TradeNo": "20170609123523569" }
```

specification:

FIELD NAME	SPECIFICATION
Status	0: suc Others: fail
MachineID	Machine ID
Err	Err description
TradeNo	Machine iD