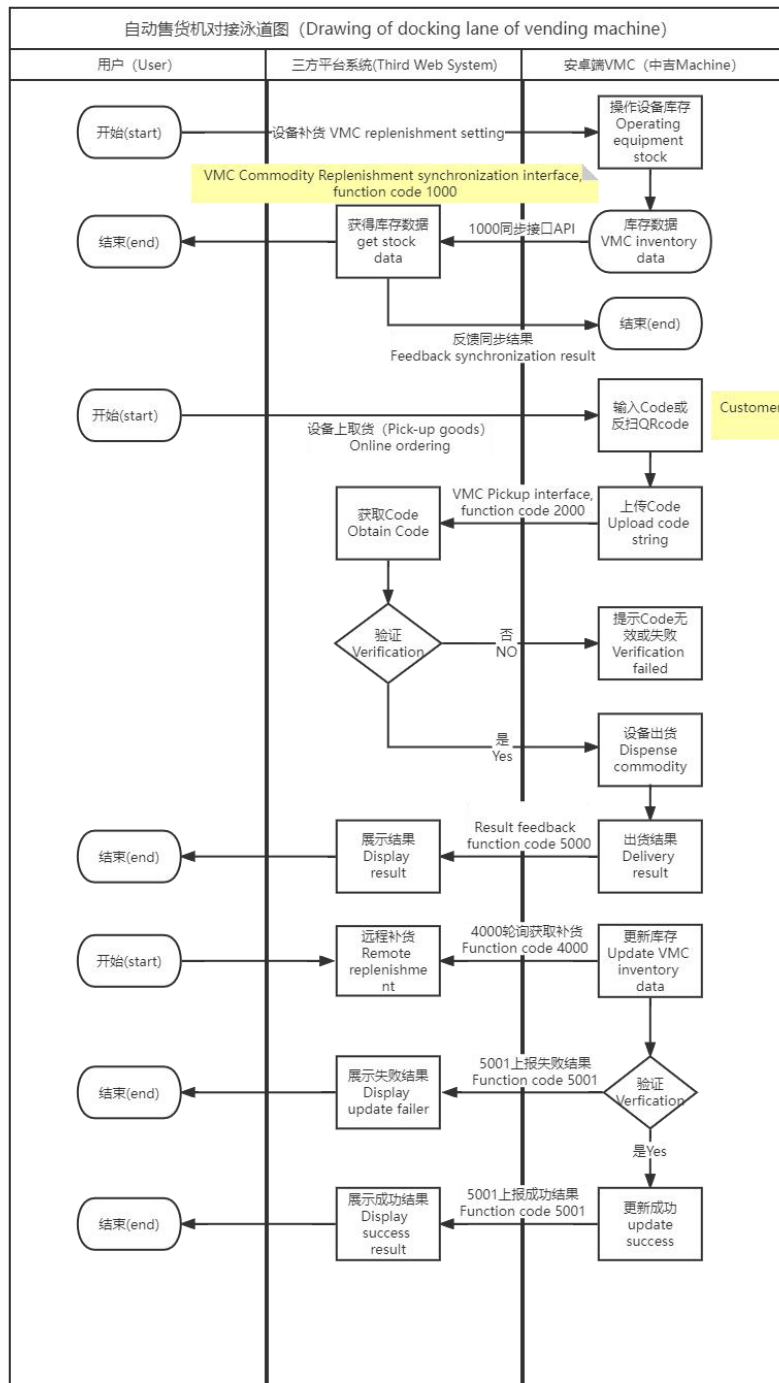


业务流程:

Vending Machine Integration Process:



概要设计:

Outline Design:

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 做成可配置如定义的接口：
[Https://www.xxx.com/api](https://www.xxx.com/api)。接口内容需第三方平台按照以下协议约束规定定义，提供给中吉安卓设备端进行配置，具体接口字段定义和规范要求可由双方技术沟通后稍微调整，但是整体协议约束保持不变。

All interfaces send in the form of http Post and the returned results are in json data. The request address VMC is made into a configurable interface as defined: [Https://www.xxx.com/api](https://www.xxx.com/api). The content of the interface needs to be defined by the third-party platform in accordance with the following agreement constraints and provided to the TCN vending machine Android device side for configuration. The specific interface field definitions and specification requirements can be slightly adjusted after technical communication between two parties but the overall protocol constraints remain unchanged.

1.1.1 SetStock 商品上架接口

SetStock Commodity Being Put on Sale Interface

1.1.1.1 设备端补货时触发库存同步接口 请求报文:

The inventory synchronization interface is triggered when vending machine replenishes. Send requests below:

字段名	类型	说明
Field Name	Type	Comments

FunCode	String	接口编号 1000 Interface code 1000
MachineID	String	机器编号 Vending Machine ID
TradeNo	String	序列号，原样返回 Order number returned, as is its original state
SlotNo	String	货道号 Slot #
KeyNum	Int	按键号（用于有按键对应的机器） Button number (uses as machine that has keyp button) We can skip this as we do not have keybutton mechanisms on these vending machines
Status	Int	货道状态（0：正常 其它：故障） Slot status (0: normal other. Others: faulty)
Quantity	Int	上货/配送 数量 Quantity needs to replenish
Stock	Int	现存（上货/配送后） Existing stock (after replenishing)
Capacity	Int	容量 Capacity

ProductID	String	商品 ID Commodity ID
Price	String	单价 (1.5) Unit Price
Type	String	商品类型 Commodity Type
Introduction	String	商品介绍 Commodity Description
Name	String	商品名称 Commodity Name
Locknumber	Int	已锁定数量 Locked quantity

机器端商品数据有任何变动，都会触发这个接口上报。

Any change in the commodity data on the machine will trigger this interface to report

1.1.1.2 应答方式

Response Mode

Server 返回 json 数据:

Server returns json data:

```
{
  "Status": "0",
  "SlotNo": "22",
  "TradeNo": "20170802193446876",
  "Err": "success",
  "ImageUrl": "http://xxx.com/201708029502889.png",
  "ImageDetailUrl": "http://xxx.com/2017080124323318.png"
}
```

说明:

Comments:

字段名	说明
-----	----

Field Name	Comments
Status	<p>0: 表示上货成功 1: 重新上传 其他: 失败(必填)</p> <p>0: means replenishment has been successfully</p> <p>1: means re-uploading (after failing)</p> <p>Others: Failed (required)</p>
SlotNo	<p>货道号(必填)</p> <p>Slot Number (required)</p>
TradeNo	<p>上传序列号, 原样返回</p> <p>Uploading order number, returned as is original state</p>
ImageUrl	<p>商品图片地址</p> <p>Commodity Picture URL</p>
ImageDetailUrl	<p>商品详情图片地址</p> <p>Commodity Detailed Picture URL</p>
Err	<p>故障描述</p> <p>Error Description</p>

1.1.2 SetBill 取货接口

SetBill Pickingup Interface

1.1.2.1 用户通过输入取餐码出货 请求报文:

The purchaser enters picking-up code to get commodity from machine. Send requests below:

字段名 Field Name	类型 Type	说明 Comments
FunCode	String	接口编号 2000 Interface number: 2000
SessionCode	String	取货码 Picking up code
MachineID	String	机器编号 (统一标识) Vending machine ID (unified identification)

1.1.2.2 应答方式

Response Mode

返回 json 数据:

Returns json data:

```
{"Status": "0", "SlotNo": "23", "ProductID": "1002356", "TradeNo": "20170609123523569", "Err": "成功 (success)"}
```

说明:

Comments:

类型 Type	字段名 Field Name	说明 Comments
String	Status	0 表示成功 其他 失败 (必填) 0 means success Others mean 'fail' (required)
String	SlotNo	需要出货的货道编号,多个货道用 隔开,比如出 23 和 28 货道, 写成 23 28。(必填) For the slot that needed to be vending for product, the multiple slots are separated by .,

		for example, the slots 23 and 28 are written as 23 28(required)
String	ProductID	<p>需要出货的商品 ID，如果 SlotNo>0，则优先按照 SlotNo 出货。如果要按照商品 ID 出货，SlotNo 请填写小于 1 的数字；多个商品出货用 隔开，比如出 1002356 货道，写成 1002356。 (必填)</p> <p>For the ID of the product to be vended, if the Slot No is >0, the product will be vended according to SlotNo. If you want to dispense according to the product ID, please fill in a number less than 1 for SlotNo, multiple product vendings are separated by . For example: if we want to let 1002356 commodity slot vend, write as 1002356. (required)</p>
String	TradeNo	<p>订单号, 原样返回 (必填)</p> <p>Order number, returned as is its original state (required)</p>
String	Err	<p>故障描述</p> <p>Errors Description</p>

1.1.3 Polling 轮询接口

Polling Interface

1.1.3.1 主要是保持心跳 请求报文:

Mainly to keep heartbeat in polling the result (you can set interval of several seconds). Send request:

字段名 Field Name	类型 Type	说明 Comments
FunCode	String	接口编号 4000 Interface Number 4000
MachineID	String	机器编号 Vending Machine ID

1.1.3.2 应答方式

Resonse Mode:

1、MsgType 为 0 时，代表 Server 控制 VMC 出货，返回 json 数据如下：

When “MsgType” is 0, it means the server controls VMC vending and the returned json date is as follows:

```
{"Status": "0", "MsgType": "0", "TradeNo": "20170609123523569", "SlotNo": "25", "ProductID": "1005678692", "Err": "成功(success)"}
```

说明:

Comments:

字段名 Field Name	说明 Comments
Status	0 表示成功 其他 失败 0 means success Others mean 'fail'
MsgType	消息类型 Message Type
TradeNo	订单号

	Order number
SlotNo	需要出货的货道编号。 The number of the slot that needed to be vended
Product ID	需要出货的商品 ID，如果 SlotNo>0，则优先按照 SlotNo 出货。如果要按照商品 ID 出货，SlotNo 请填写小于 1 的数字。 For the ID of the product to be vended. If the SlotNo's >0, the product will be vended according to SlotNo. If you want to vend according to the product ID, please fill in a number less than 1 for SlotNo.
Err	故障描述 Error description

备注：此功能一般用于对接 APP 等电商的一键取货，VMC 需要定时调用此接口。建议请求间隔时间 3 秒。

Note: This function is generally used for one-click pick-up of e-commerce companies such as APP. VMC needs to call this interface regularly. The recommended interval between requests is 3 seconds.

2、MsgType 为 1 时，代表电商或 APP 上货通知 VMC，返回 json 数据如下：

When MsgType is 1, it represents the e-commerce or APP notification that you need to replenish the VMC, and the returned json data is as follows:

```
{ " 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": "成功(success)" }
```

说明：

Comments:

字段名 Field Name	说明 Comments
Status	0: 表示需要上货 其他: 不需要 0 means replenishment in needing Others: it doesn't need
MsgType	消息类型 为 1 Message type as 1 (remotely uploading items' information)
SlotNo	货道号 Slot number
Err	故障描述 Error Description
Capacity	容量 Capacity
Quantity	上货 / 配送 数量 Quantity of replenishment
ProductID	商品 ID Commodity ID
Name	商品名称 Commodity name
Price	价格 Price
Type	商品类型 Commodity type
Introduction	商品介绍 Commodity description
ImageUrl	商品图片地址 Commodity picture URL
ImageDetailUrl	商品详情图片地址 Commodity detailed picture URL

3、MsgType 为 9 时，代表电商远程锁定或解锁指定货道中的一个商品，返回 json 数据如下：

When MsgType is 9, it means that the e-commerce company remotely locks or unlocks a product in the specified commodity slot, and the returned json data is as follows:

```
{" Status ": "0","MsgType":"9","SlotNo":"25"," TradeNo":"202112544242110001","Lockcount":"1"}
```

说明:

Comments

字段名 Field Name	说明 Comments
Status	0 表示成功 其他 失败

	<p>0 means success</p> <p>Others mean 'fail'</p>
MsgType	<p>消息类型 为 9，代表货道商品锁定或解锁</p> <p>The message type is 9, which means the commodity(s) in the slot is locked or unlocked</p>
SlotNo	<p>要锁定的货道号 The slot that needs to be locked</p>
TradeNo	<p>服务器提供 Server provides</p>
Lockcount	<p>锁定个数值。正数为锁定，负数为解锁。</p> <p>Lock a number. A positive number is locked, a negative number is unlocked.</p>

备注：上货成功之后需要调用上货结果反馈接口，由于每 3 秒请求一次，机器收到消息后，开始修改商品信息，这个过程需要时间，所以服务端可以在发送之后，适当等一段时间再看有没有收到上货成功或失败的反馈。这中间的等待时间可以返回 Server 控制 VMC 出货的内容。

Remarks: After the replenishment is successful, you need to call the replenishment result feedback interface. Since the request is made every 3 seconds, after the machine receives the message, it starts to modify the product information. This process takes time, so the server can wait for an appropriate period of time after sending, seeing if there is any feedback on the success or failure of the replenishment. The waiting time

in the middle can be returned to the server to control the content of VMC vending.

1.1.4 ShipmentResults 出货结果反馈接口

Vending Result Feedback Interface

1.1.4.1 设备出货成功都需要同步出货结果 请求报文:

If the equipment is dispensed successfully, the vending result needs to be synchronized. Send request:

字段名	类型	说明
Field Name	Type	Comments
FunCode	String	接口编号 5000 Interface number 5000
MachineID	String	设备编号 (统一标识) Machine ID (unified identification)
PayType	Int	支付类型 Payment type
TradeNo	String	订单号 Order number
SlotNo	String	货道号 Slot number
Status	Int	0: 出货成功 0 means successful 1: 出货失败 1 means failed 2: 出货成功, 但是找不到订单号或订单号格式不对 2: The dispensing was successful, but the order number couldn't be found or the format of the order number was incorrect 3: 出货失败, 但是找不到订单号或订单号格式不对 3: Vending failed. But the order number could not be found or the format of the order number was incorrect 4: 出货结果未知 4: vending result unknown
Time	String	出货时间 Vending time
Amount	String	金额 Amount
ProductID	String	商品编码 Commodity ID
Name	String	商品名称 Commodity name

Type	String	商品类型 Commodity type
------	--------	---------------------

1.1.4.2 应答方式

Response Mode

返回 json 数据:

Return json data:

```
{ "Status": "0", "TradeNo": "20170609123523569", "SlotNo": "25", "Err": "成功(success)" }
```

说明:

Comments

字段名 Field Name	说明 Comments
Status	0: 确认成功反馈 0: confirms suces in feedback 其他失败 Others mean failed
TradeNo	订单号 Order number
SlotNo	货道号 Slot number
Err	故障描述 Error description

1.1.5 ReplenishmentResults App 上货结果反馈接口 Replenishment results feedback interface

1.1.5.1 主要针对于 4000 远程上货接口对应的结果反馈 请求报文:

It's mainly for the result feedback corresponding to the 4000 remote replenishment interface.

Send request:

字段名 Field Name	类型 Type	说明 Comments
FunCode	String	接口编号 5001 Interface code 5001
MachineID	String	设备编号 (统一标识) Machine ID (unitfied identification)
SlotNo	String	货道号 Slot number
Status	Int	0 成功 0 means success 其他失败 Others failed

1.1.5.2 应答方式

Reponse Mode

返回 json 数据:

Returns json data:

```
{ "Status": "0", "SlotNo": "25", "TradeNo": "20170609123523569", "Err": "成功(success)" }
```

说明:

Comments

字段名 Field Name	说明 Comments
Status	0: 确认成功反馈 0 confirms success in feedback 其他失败 Others mean failed
SlotNo	货道号 Slot number
TradeNo	订单号,原样返回 Order number, returned as is its original state
Err	故障描述 Error description

1.1.5.3 FunCode 为 5002 接口针对 4000 远程锁定接口：锁定成功或失败

FunCode 5002 is the interface for the 4000 remote lock interface:
locks successfully or failed

请求数据:

Request Data:

字段名 Field Name	类型 Type	说明 Comments
FunCode	String	接口编号 5002 Interface code 5002
MachineID	String	设备编号 (统一标识) Machine ID (unified identification)
SlotNo	String	货道号 Slot number
Status	Int	0 成功 0 means success 其他失败 Others mean failed

应答方式:

Response mode

机器上报: status:1 锁定成功 status:-1 锁定失败

The machine reports: "status: 1" means locked successfully
"status: -1" means locking failed

{ " Status ": "1", "SlotNo": "25", " TradeNo": "202112544242110001", "Err": "成功(success)" }

字段名 Field Name	说明 Comments
Status	1 表示成功 -1 失败 '1' means success '-1' means failed
MsgType	消息类型 Message type
TradeNo	原样返回 Order number, returned as is original state
SlotNo	货道编号。 Slot number
Err	故障描述 Error description