



**NAMA VDI Compliant Standard
Vending Mgt System – Micro-Market System
Integration Standard**

VDI VMS – MMS Integration

Version 1.0



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Revision History

Draft	Date	Notes
1.0	4/15/15	Original Draft for field trials
1.1	7/20/15	Added Revision History section. Changed VDIXMLType for each interface to include "mms-" prefix.
1.2	10/22/15	Added @ProductCode, @CategoryCode, @Category attribute to Products. @ConsumerName attribute added to Consumer Transactions and Sales. Added @MarketID and removed @KioskID from Market element of Products message type. Added details for Bills and Coins for Consumer Transaction messages. Added XML examples in Appendix A.
1.3	12/14/15	Sale document Type: Sales @SaleID Notes changed term <i>Customer</i> to <i>Operator</i> . Sales document Summary Notes added text <i>Summarizes the item details</i> . Sales document Type: Fee @total Notes added text <i>for reference only</i> . Sales document Type: Item @price Notes text <i>Net</i> removed from <i>Price</i> .
1.3	4/12/16	NAMA VDI Task Force unanimously voted to support publication of the VMS-MMS standard as Version 1.0 with posting around May 1, 2016.

Purpose of the Standard

Developing and adhering to an industry standard for integrating MicroMarkets and Vending Management Systems provides benefits not only to operators, but also the respective MMS and VMS. Some of these benefits include:

- Specifying the system features needed to manage a Micro-Market business
- Define which system should be responsible for each feature
- Reduce cost and time when integrating new MMS or VMS providers
- Promotes interchangeability and compatibility between systems

Goals and Objectives

Our objective in this document is to identify key information and system features that are required to manage a MicroMarket business and then decide which system should "own" this information or feature. Given the difficulty of managing the same data in multiple systems and keeping this data in synch, it is a goal of ours that only *one system* manages or creates a specific set of data. It is acceptable that a set of data be shared with the other system so that the 2nd system can perform certain tasks that are required by MicroMarket operations. It is understood that both systems (and their vendors) could implement all system feature listed in this document. However, we will base this document on the fact that this single system

does not exist and we need to clearly define the one system that the operator is to use to complete a specific task.

Integrating MMS and VMS will also provide a consolidated source for both MicroMarket and vending machine management which includes:

- Full warehouse inventory accountability
- A single source for sales and inventory reporting
- A single source for product and price Information
- A single hand held for servicing both vending POS and MicroMarket POS
- Prekitting using as near to real time sales as possible
- Complete cash and inventory accountability

Overview

Below is a list of system features required to manage a MicroMarket business. There is a basic assumption that the entity operating the MicroMarket business is a vending operator and this entity has already invested in a Vending Management System to support their vending business. This Vending Management System includes information such as their customer master and product master and this system supports key processes such as warehouse inventory management and inventory replenishment at their points of sale.

In this analysis, we are considering the existence of two key systems that will be used to support the MicroMarket business for a given operator. They are:

1. **Vending Management System (VMS)** – the route accounting system typically used to support the vending business and OCS business.
2. **MicroMarket System (MMS)** – the key “system” in this solution is the kiosk and associated services that allows consumers to purchase items from the market using a self-checkout process.

Key Terms

- **Kiosk:** The self-checkout system/hardware used for purchasing products in the MicroMarket.
- **Market:** The physical room where the MicroMarket exists. The market may contain one or more kiosks.
- **Operator:** The business entity that is managing the market.
- **Client:** The client account where the market operates. The operator “sells” the MicroMarket concept to the client and then installs the store to conduct business.
- **Consumer:** The individual who actually purchases the product in the market. With prepaid accounts playing a key role in the MicroMarket business, there is a good opportunity for the operator to understand who is buying which products.

System Features

Feature	Proposed
<p>Market Profitability Ability to report individual market profitability based on sales, product cost, labor cost, commissions, fixed and variable expenses.</p>	VMS
<p>Client Account Profitability Ability to report consolidated client account profitability based vending business, OCS business, MicroMarket business for each client of the operator.</p>	VMS
<p>Physical Inventory of Market Ability to capture physical counts of products in the market to determine if there are shortages based on perpetual inventory of the market.</p>	VMS
<p>Perpetual Inventory of Market Ability to track perpetual inventory for each product in the market. This is the calculated inventory levels based on the inflow and outflow of products.</p>	VMS
<p>Route Inventory Management Ability to track inventory levels on the route truck. This includes perpetual inventory by product, transfers of products to/from the truck, truck spoilage and physical product counts on the truck.</p>	VMS
<p>Warehouse Inventory Management Ability to track inventory levels in the operator's warehouse. This includes perpetual inventory by product, purchases from suppliers, transfers of products to/from the warehouse, warehouse spoilage and physical product counts in the warehouse.</p>	VMS
<p>Market Orders for Replenishment Ability to determine products required to replenish the market. This should take into account the market sales and past inventory replenishments to arrive at a perpetual inventory count for each product. Perpetual is then compared to desired inventory levels and may trigger and order.</p>	VMS
<p>Order Delivery/Product Delivery Ability to record quantities of product delivered to the market for replenishment. Spoiled products removed from the market are also recorded. Perpetual product counts in the market are updated.</p>	VMS
<p>Client Account Master Data Ability to setup client master data in system to track key information about the client. This includes vending locations and machines, MicroMarket locations and OCS locations.</p>	VMS
<p>Sales Tax Rates Ability to setup sales tax rates by tax jurisdiction and apply to market catalogs, vending sales and OCS invoices.</p>	VMS
<p>Market Planogram Ability to define the products that are to be sold in a specific market, along with product price, sales tax, bottle deposit fees, and recommended inventory levels. Planograms are used in the ordering process to determine replenishment values based on current perpetual and the planogram desired/re-order quantity.</p>	VMS
<p>Market Sales Ability to record sales in the market. Sales should include products and their quantities, sales taxes, tender method, time of purchase, consumer (if known).</p>	MMS
<p>Prepaid Account Funding Ability for consumer to fund their prepaid account using credit card or cash in the</p>	MMS

Feature	Proposed
market.	
Tender Capture - Cash Ability to track amount of cash/coin transacted in the market. This includes bills and coins provided by consumers during the purchase process as well as bills and coins returned to consumers.	MMS
Tender Capture – Debit/Credit Ability to capture debit/credit card usage (transactions) made by consumers in the market when purchasing products or funding their prepaid accounts.	MMS
Tender Capture – Prepaid Ability to capture prepaid account usage (transactions) made by consumers in the market when purchasing products.	MMS
Tender Capture – Closed-Loop Payment Systems Ability to capture closed-loop payments such as Quickcharge (payroll deduct) and Freedom Pay.	MMS
Prepaid Account Management Ability to track prepaid consumer account balances based on consumer funding and purchases made using prepaid accounts.	MMS
Kiosk Cashout Ability to track amount of cash/coins collected by an operator (typically a driver) when cashing out a kiosk	MMS
Collections - Cash Ability to record cash collections (counted) for each market “collect”. System can provide “expected” cash using the cash tender tracking feature (Tender Capture – Cash) in the market vs. the actual cash counted in the money room.	VMS
Collections - Debit/Credit Ability to reconcile debit/credit transactions in the market with transactions settled at the bank. Actual deposits are reconciled against credit transactions and settlement fees.	VMS
Consumer Management Setup and management of consumer profile information such as username/password, e-mail, phone, preferences, etc.	MMS
Promotions/Discounts/Bundling Setup and management of promotions, discounts, bundling, etc.	MMS

Data Interfaces

Phase	Data	Flow
1	<p>Sales Market sales and payment tenders. Data will be by sales ticket and will represent the “basket” purchased and the payment methods used to purchase. Tenders (payment methods) may be a combination of cash, credit, stored value, discounts, coupons.</p> <p>FREQUENCY: As they occur / near real-time</p>	VMS ← MMS
1	<p>Kiosk Kiosks deployed in the field. Includes model and configuration data. This data represents the kiosk asset list that is managed by the MMS vendor. The VMS can use this list to reconcile its list of kiosks related to the vendor.</p> <p>FREQUENCY: As they occur</p>	VMS ← MMS
1	<p>Product Catalog Product catalog for each market that is to be used to facilitate consumer self-checkout. Data includes: Market, product, barcode, price, tax, bottle fees.</p> <p>FREQUENCY: As they occur</p>	VMS → MMS
1	<p>Market Master data describing the market as defined in the VMS. May include client/account information and address of market.</p> <p>FREQUENCY: As they occur</p>	VMS → MMS
1	<p>Consumer Transaction Cash and credit transactions that occur outside of the sales ticket activity. Most of these transactions are fundings of prepaid accounts – either by cash or by credit.</p> <p>FREQUENCY: As they occur / near real-time</p>	VMS ← MMS
1	<p>Cash Collections Values surrounding a kiosk cash out, generally initiated at the kiosk when money is removed from the kiosk.</p> <p>FREQUENCY: As they occur / near real-time</p>	VMS ← MMS
2	<p>Consumer Includes consumer names and account balances related to stored value as well as loyalty award balances. Prepaid account balances should be used to recognize their prepaid financial liability.</p> <p>FREQUENCY: Once Per Day</p>	VMS ← MMS

Data Exchange

To allow for near real time data exchange both integrating parties (i.e. VMS and MMS providers) will need to develop a web service which will accept VDITransaction messages as defined in this document. To help with the integration of new participants it is recommended that all implementation follow the following guidelines:

The web service should be implemented using SOAP 1.1 standard. Authentication should be implemented by adding standard HTTP 1.0 header as a SOAP header containing base64 encoded username and password.

The web service should expose method VDIDataExchange returning string with the parameters specified below and corresponding to the attributes in the VDITransaction XML.

The return value is 'SUCCESS' or error message in case of a failure.

Name	Type	Comments
VDIXMLVersion	string	
VDIXMLType	string	
ProviderID	string	
ApplicationID	string	
ApplicationVersion	string	
TransactionID	string	
TransactionTime	string	
OperatorID	string	
CompressionType	string	Future use. Omit if not used.
CompressionParam	string	Future use. Omit if not used.
Encoding	string	Examples: UTF-8, UTF-16
VDIXML	string	
UserData	string	Future use. It is not the same as UserData node in the VDITransaction

Interface File Definitions

Transaction Header

Each transaction is wrapped up in a standard header containing basic information about the exchange. This effectively is the root element of each XML message taking part in the exchange.

Root element: VDITransaction

Field	XML Type	Length	Req'd	Notes
@VDIXMLVersion	Positive Integer		Y	Version of VDIXML standard which was used to encode the information. For the implementation of the protocol defined in this document the value should be 1.
@VDIXMLType	Token	32	Y	Data type included in the file. It should be lowercase string as defined for each of the specific data collection in this document.
@ProviderID	Token	64	Y	ID of the provider taking part in the exchange. MMS or VMS technology provider.
@ApplicationID	Token	64	Y	Unique identifier of the application taking part in the MMS <-> VMS data exchange.
@ApplicationVersion	Token	32	Y	Version of the application which can be used to determine how the data should be processed. Actual values and their meanings will have to be discussed on the implementation level, but on the standard level we require to have non-empty value to be able to see if version has changed or not. In contrast to the VDIXMLVersion which changes with each iteration of the standard the ApplicationVersion attribute allows for changes in the implementation between the integrating parties (e.g. how the UserData is used) within the same version of the standard.
@OperatorID	Token	64	Y	ID of the top level entity owning the data in both MMS and VMS system. This value will have to allow for unique identification of a single business entity in both systems. It is the customer of MMS and VMS providers.
@TransactionID	Token	64	Y	Uniquely identifies the exchange transaction. If the value is repeated with the previous message it has to be exactly the same as the previous message.
@TransactionTime	DateTime		Y	The date, time and time zone when the transaction was created.
*	XML		Y	Single 'data collection' XML node which contains the payload exchanged as defined in this document. Acceptable nodes are: <Sales />, <Kiosks />
UserData	XML		N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs.

Sale document

Sale document represents a single sale.

Data collection element: Sales

Data item element: Sale

VDIXMLType value: mms-sales

Type: Sale

Field	Type	Length	Req'd	Notes
@MarketID	Token	64	Y	ID of the market in which the sale took place.
@KioskID	Token	64	N	ID of the kiosk, the physical machine, on which the sale took place
@ConsumerID	Token	64	N	ID of the consumer who made the purchase
@ConsumerName	Token	128	N	Human friendly name of the consumer who made the purchase.
@SaleID	Token	64	Y	ID of sale which needs to be unique in the scope of a single Operator.
@SaleTime	DateTime		Y	Date, time and time zone of the Sale.
Summary	XML		Y	Summary XML Type as defined in this document. Summarizes the item details. See Summary Type.
Items	XML		Y	Items collection containing Item type nodes as defined in this document. See ItemCollection Type.
Tenders	XML		Y	Tenders collection containing tender type nodes as defined in this document. See TenderCollection Type
UserData	XML		N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs.

Type: Summary

Field	Type	Length	Req'd	Notes
@Price	Decimal		Y	Total net price
@Discount	Decimal		N	Total discount. It should be a negative number unless it is a negative discount which increases the price
@Total	Decimal		Y	Total gross amount. It should be equal Price + Discount + Deposit + Fees + Taxes.
Fees	XML		N	Collection containing all fees. See FeeCollection.
Taxes	XML		N	Collection containing all taxes. See TaxCollection.
UserData	XML		N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs.

Fees collection name: Fees

Type: FeeCollection

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Field	Type	Length	Req'd	Notes
@Total	Decimal		Y	Total fees. Should equal to the sum all the elements
Fee	XML		Y	See Fee Type.

Fees collection element name: Fee

Type: Fee

Field	Type	Length	Req'd	Notes
@ID	Token		N	ID representing the fee
@Name	Token		Y	Name of the fee
@Count	Number		Y	How many times the fee has been applied
@Value	Decimal		Y	Value of the fee
@Total	Decimal		Y	Equal to Value*Count (for reference only)

Taxes collection name: Taxes

Type: TaxCollection

Field	Type	Length	Req'd	Notes
@Total	Decimal		Y	Total taxes. Should equal to the sum all the elements
Tax	XML		Y	See Tax Type

Taxes collection element name: Tax

Type: Tax

Field	Type	Length	Req'd	Notes
@ID	Token		N	Represents the tax
@Name	Token		Y	Name of the tax
@Rate	Decimal		Y	Rate of the tax. 6.5% tax should be represented as 0.065
@Value	Decimal		Y	Value of the tax
@Count	Number		Y	How many times the tax has been applied.
@Total	Decimal		Y	Total value of tax.

Items collection name: Items

Type: ItemCollection

Field	Type	Length	Req'd	Notes
Item	XML		Y	One or more item elements. See Item Type

Items collection element name: Item

Type: Item

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Field	Type	Length	Req'd	Notes
@ProductID	Token	32	Y	ID of the product sold
@Code	Token	32	N	Code representing the sold product. It can be barcode or any other form of product coding.
@Quantity	Positive integer		Y	Number of products sold
@Cost	Decimal		N	Optional cost of a single product for the purpose of profit analysis
@Price	Decimal		Y	Price of a single product
@Discount	Decimal		N	Total discount applied to a single product
@Deposit	Decimal		N	Total deposit applied to a single product
@Total	Decimal		Y	The total amount for a single product
Fees	XML		N	FeeCollection type
Taxes	XML		N	TaxCollection type
UserData	XML		N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs.

Tenders collection name: Tenders

Type: TenderCollection

Field	Type	Length	Req'd	Notes
Tender	XML		Y	One or more tender elements

Tenders collection element name: Tender

Type: Tender

Field	Type	Length	Req'd	Notes
@Type	Token	32	Y	Type of the tender. Valid values: <ul style="list-style-type: none"> CARD (debit or credit card) CASH EXTERNAL ACCOUNT (prepaid)
@Description	Token	64	N	Additional description of the tender type. It can specify the card type or payroll deduct system name.
@Amount	Decimal		Y	Value of the tender.
@Reference	Token	128	N	Optional reference number identifying the tender on the processor side which can be used for payment reconciliation.
Bills	XML		N	Bills type node representing bills of a specific denomination. See Bills Type
Coins	XML		N	Coins type node representing coins taken in or out of a specific denomination.
UserData	XML		N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs. See Coins Type

Element name: Bills

Type: Bills

Field	Type	Length	Req'd	Notes
Direction	Token		Y	Values: "IN" or "OUT"
Value	Decimal		Y	Denomination of bill
Count	Decimal		Y	Number of bills of the specified denomination
Amount	Decimal		Y	Total amount of bills of the specified denomination

Element name: Coins

Type: Coins

Field	Type	Length	Req'd	Notes
Direction	XML		Y	One or more tender elements
Value	Decimal		Y	Denomination of coin
Count	Decimal		Y	Number of coins of the specified denomination
Amount	Decimal		Y	Total amount of coins of the specified denomination

Consumer Transaction

Consumer transaction represents adjusting consumer account's balance

Data collection element: ConsumerTransactions

Data item element: ConsumerTransaction

VDIXMLType value: mms-transactions

Type: ConsumerTransaction

Field	Type	Length	Req'd	Notes
@MarketID	Token	64	Y	ID of the market in which the sale took place
@KioskID	Token	64	N	ID of the kiosk, the physical machine, on which the sale took place
@ConsumerID	Token	64	Y	ID of the consumer who made the purchase
@ConsumerName	Token	128	N	Human friendly name of the consumer who made the purchase.
@Type	Token	64	Y	Transaction type with the following valid values: <ul style="list-style-type: none"> CASH (cash funding) CARD (credit or debit card) EXTERNAL (external system integrations.) ADJUSTMENT (adjustment)
@Description	Token	64	N	Brief description of the payment type. Can be used to provide additional details. <p>Examples for CARD type</p> <ul style="list-style-type: none"> AMX (any Amex card) VISA DEBIT (visa debit card)

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Field	Type	Length	Req'd	Notes
				<ul style="list-style-type: none"> CREDIT (generic credit card) <p>Actual values should be agreed on the implementation level</p>
@TransactionID	Token	64	Y	Token uniquely identifying the transaction.
@TransactionTime	DateTime		Y	Date, time and time zone of the transaction.
@Amount	Decimal		Y	The amount of the transaction. In case of negative adjustments it should be a negative value.
@Reference			N	An external reference that allows reconciliation with an external processing systems.
@Reason			N	Reason for the transaction. Most likely it will be only used for ADJUSTMENT type.
@Notes	Token	256	N	Additional comments about the transaction
Bills	XML		N	Bill type. Bills taken in or out of a specific denomination
Coins	XML		N	Coin type. Coins taken in or out of a specific denomination
UserData	XML		N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs.

Product Catalog

Contains products that are for sale in the market, along with their price, sales tax rate and bottle fee.

Data collection element: MarketsCollection

Data item element: Market

VDIXMLType value: mms-products

Field	Type	Length	Req'd	Notes
@MarketID	Token	64	Y	
@CatalogVersion	Token	64	N	Any information that identifies the version of the catalog.
@CatalogSize	Token		Y	Values: "Full" or "Partial"
ProductsUpdate	XML		N	Collection containing Product type nodes with products which need to be added or updated. See Product Type.
ProductsRemove	XML		N	Collection containing Product type nodes with products which will be removed. Only used with incremental catalogs. See Product Type.

Product Detail

Type: Product

Field	Type	Req'd	Notes
@ProductID	Token	Y	Unique ID of the Product
@ProductCode	Token	N	Secondary ID. May or may not be unique depending on implementation.
@ProductName	Token	N	Short name for product (40 char).
@CategoryCode	Token	N	Product category identifier
@Category	Token	N	Product category description (40 char).
@Cost	Decimal	N	Cost of the unit of the product.
@Price	Decimal	N	Price at which the product is to be sold.
Codes	XML	N	Collection containing Code nodes which hold barcode in the inner text.
Taxes	XML	N	Collection of Tax type nodes
Fees	XML	N	Collection of Fee type nodes

Kiosk

Kiosk represents deployed and configured kiosk which is part of a market.

Data collection element: KiosksCollection

Data item element: Kiosk

VDIXMLType value: mms-kiosks

Type: Kiosk

Field	Type	Req'd	Notes
@MarketID	Token	Y	Unique ID of the market
@KioskID	Token	Y	Unique kiosk ID
@LastSync	Datetime	N	Date, time and offset of the last time kiosk sync'd data.
@LastTransaction	Datetime	N	Date, time and offset of the last time a sale or a consumer transaction was made
@CatalogVersion	Token	N	Product catalog version which is currently deployed in the kiosk. The value should be discussed on the implementation level.
UserData	XML	N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs.

Market

Market represents market details as understood by VMS

Data collection element: MarketsCollection

Data item element: Market

VDIXMLType value: mms-markets

Type: Market

Field	XML Type	Length	Req'd	Notes
@MarketID	Token	64	Y	Unique ID assigned to the market by the VMS
@MarketName	Token	128	Y	Name of the market
@MarketAddress	Token	128	N	Address of the market
@MarketLocation	Token	128	N	
@ClientId	Token	64	N	
@ClientName	Token	128	N	
Kiosks	Collection		N	Collection of kiosks associated with the market represented by type MarketKiosk
UserData	XML		N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs.

Field	XML Type	Length	Req'd	Notes
@KioskID	Token	64	Y	Kiosk/POS identifier
@KioskSN	Token	64	N	Kiosk/POS Serial Number

Consumer

Data collection element: Consumers

Data item element: Consumer

VDIXMLType value: mms-consumers

Type: Consumer

Field	Type	Req'd	Notes
ProviderID	Varchar	Y	Unique ID of provider (VDI Integration partner)
ConsumerID	Varchar	Y	Consumer identifier (MMS Customer ID)
FirstName	Varchar	Y	Consumer First Name
LastName	Varchar	Y	Consumer Last Name
Email	Varchar	N	Consumer Email Address
Balance	Money	Y	Current balance on Consumer account
BalanceDateTime	DateTime	Y	The last time the balance was updated/changed.

Cash Collection

Data collection element: CashCollections

Data item element: CashCollection

VDIXMLType value: mms-collections

Type: CashCollection

Field	Type	Req'd	Notes
@MarketId	Token	Y	Unique ID of the market
@KioskID	Token	Y	Unique kiosk ID
@CollectionTime	Datetime	Y	Date, time and offset of the collection
@Amount	Money	Y	Total value of the collection
@CollectedBy	Token	N	Any type of identifier that represents the person who collected the cash
@Reference	Token	N	Reference used for reconciliation
Bills	XML	N	Bills taken in or out of a specific denomination. See Bills Type.
Coins	XML	N	Coins taken in or out of a specific denomination. See Coins Type.
UserData	XML	N	Single XML node containing any valid XML elements which is used to extend the standard for any implementation specific needs.

Appendix A: XML Examples

Sales

```

<?xml version="1.0" encoding="utf-8"?>
<VDITransaction VDIXMLVersion="1" VDIXMLType="mms-sales" ProviderID="365" ApplicationID="smartshop"
ApplicationVersion="1902" TransactionID="C2601E9D-6688-47D2-A6A7-12AB110FBF09" TransactionTime="2015-
10-14T06:37:37.7881105-07:00" OperatorID="46">
  <Sales>
    <Sale MarketID="2008:46941" KioskID="BF9EE4B3-5908-E511-A42C-90B11C2CD708"
ConsumerID="d97e04e1-e318-e511-a42c-90b11c2cd708" SaleID="11312e2d-224c-4447-ab00-d71a4687b90e"
SaleTime="2015-10-14T09:32:26-04:00">
      <Summary Price="3.89" Discount="0.00" Total="4.16">
        <Fees Total="0.00" />
        <Taxes Total="0.27">
          <Tax Rate="0.0700" Count="2" Total="0.2700" />
        </Taxes>
      </Summary>
      <Items>
        <Item Code="894700010168" Quantity="1" Cost="1.2100" Price="1.8900"
Discount="0.00" Total="2.02">
          <Fees Total="0.0000" />
          <Taxes Total="0.1300">
            <Tax Rate="0.0700" Value="0.1300" Count="1" Total="0.1300" />
          </Taxes>
        </Item>
        <Item Code="038057500624" Quantity="1" Cost="0.9000" Price="2.0000"
Discount="0.00" Total="2.14">
          <Fees Total="0.0000" />
          <Taxes Total="0.1400">
            <Tax Rate="0.0700" Value="0.1400" Count="1" Total="0.1400" />
          </Taxes>
        </Item>
      </Items>
      <Tenders>
        <Tender Type="ACCOUNT" Amount="4.16" />
      </Tenders>
    </Sale>
    <Sale MarketID="2008:46941" KioskID="BF9EE4B3-5908-E511-A42C-90B11C2CD708"
ConsumerID="16142a8b-e718-e511-a42c-90b11c2cd708" SaleID="fff3995e-69b9-4904-bc1e-11c958977ad3"
SaleTime="2015-10-14T09:31:07-04:00">
      <Summary Price="0.50" Discount="0.00" Total="0.50">
        <Fees Total="0.00" />
        <Taxes Total="0.00" />
      </Summary>
      <Items>
        <Item Code="" Quantity="1" Cost="0.2900" Price="0.5000" Discount="0.00"
Total="0.50">
          <Fees Total="0.0000" />
          <Taxes Total="0.0000" />
        </Item>
      </Items>
      <Tenders>
        <Tender Type="ACCOUNT" Amount="0.50" />
      </Tenders>
    </Sale>
  </Sales>
</VDITransaction>

```

```

    </Sale>
  </Sales>
</VDITransaction>

```

Consumer Transactions

```

<?xml version="1.0" encoding="utf-8"?>
<VDITransaction VDIXMLVersion="1" VDIXMLType="mms-transactions" ProviderID="365"
ApplicationID="smartshop" ApplicationVersion="1803" TransactionID="24636B8C-B196-4196-B50E-9E9EE438C500"
TransactionTime="2015-08-26T09:07:34.0907520-07:00" OperatorID="46">
  <ConsumerTransactions>
    <ConsumerTransaction MarketID="3371:35358" KioskID="945DFC23-5DD2-4022-8032-
A4BF8746FFF9" ConsumerID="c425d5ce-2c26-e511-a42c-90b11c2cd708" Type="CASH" Description="Cash"
TransactionID="653b0fd8-0a24-41cf-9122-2b83dc916463" TransactionTime="2015-08-26T11:45:00-04:00"
Amount="10.0000">
      <Bills Direction="IN" Value="10.0000" Count="1" Amount="10.0000" />
    </ConsumerTransaction>
    <ConsumerTransaction MarketID="3371:35358" KioskID="945DFC23-5DD2-4022-8032-
A4BF8746FFF9" ConsumerID="c425d5ce-2c26-e511-a42c-90b11c2cd708" Type="CASH" Description="Cash"
TransactionID="ce427cf1-b304-4548-b782-cf7e33ab6fa9" TransactionTime="2015-08-26T11:45:00-04:00"
Amount="5.0000">
      <Bills Direction="IN" Value="5.0000" Count="1" Amount="5.0000" />
    </ConsumerTransaction>
    <ConsumerTransaction MarketID="3371:35358" KioskID="945DFC23-5DD2-4022-8032-
A4BF8746FFF9" ConsumerID="c425d5ce-2c26-e511-a42c-90b11c2cd708" Type="CASH" Description="Cash"
TransactionID="d517d03b-ea0c-4e84-bfa8-938f40c2c2d3" TransactionTime="2015-08-26T11:45:00-04:00"
Amount="10.0000">
      <Bills Direction="IN" Value="10.0000" Count="1" Amount="10.0000" />
    </ConsumerTransaction>
  </ConsumerTransactions>
</VDITransaction>

```

Products Catalog

```

<VDITransaction VDIXMLVersion="1" TransactionID="03CE060E-435F-4132-B458-010EE4A4AF5D"
VDIXMLType="mms-products" TransactionTime="2015-10-01T14:18:06.520-04:00" ProviderID="Crane"
OperatorID="894" ApplicationID="VendMAX" ApplicationVersion="5.0.8.1084">
  <MarketsCollection>
    <Market MarketID="5330:46707" CatalogSize="Partial">
      <ProductsUpdate>
        <Product ProductID="1:3583" ProductCode="54001" ProductName="8oz 2%"
CategoryCode="540" Category="Milk" Price="0.0000" Cost="0.2100">
          <Codes>
            <Code>043119005375</Code>
          </Codes>
          <Codes>
            <Code>044100100550</Code>
          </Codes>
          <Codes>
            <Code>078800110625</Code>
          </Codes>
          <Taxes>
            <Tax ID="5330:5063" Name="Test Market Tax" Rate="0.0800"
IncludedInPrice="0" />
          </Taxes>
        </Product>
      </ProductsUpdate>
    </Market>
  </MarketsCollection>
</VDITransaction>

```

```

        </Product>
        <Product ProductID="5330:31929" ProductCode="51530" ProductName="RP
Caprese Salad" CategoryCode="510" Category="Packaged Foods" Price="0.0000" Cost="2.7183">
            <Codes>
                <Code>077745296654</Code>
            </Codes>
            <Taxes>
                <Tax ID="5330:5063" Name="Test Market Tax" Rate="0.0800"
IncludedInPrice="0" />
            </Taxes>
        </Product>
    </ProductsUpdate>
</Market>
</MarketsCollection>
</VDITransaction>

```

Kiosks

```

<?xml version="1.0" encoding="utf-8"?>
<VDITransaction VDIXMLVersion="1" VDIXMLType="mms-kiosks" ProviderID="365" ApplicationID="smartshop"
ApplicationVersion="1902" TransactionID="9699F845-C4BD-448E-B4EF-270A72772215" TransactionTime="2015-10-
23T07:52:31.1649762-07:00" OperatorID="46">
    <KiosksCollection>
        <Kiosk MarketID="2008:46941" KioskID="BF9EE4B3-5908-E511-A42C-90B11C2CD708"
KioskSN="VSH312309" LastSync="2015-10-23 10:50:32.8500000 -04:00" LastTransaction="2015-10-23
10:37:40.0000000 -04:00" CatalogVersion="2015-10-23 07:37:31.8451114 -07:00" />
        <Kiosk MarketID="3371:35358" KioskID="945DFC23-5DD2-4022-8032-A4BF8746FFF9"
KioskSN="VSH312369" LastSync="2015-10-15 13:02:35.2400000 -04:00" LastTransaction="2015-10-08
08:47:50.0000000 -04:00" CatalogVersion="2015-10-22 10:27:32.1075657 -07:00" />
        <Kiosk MarketID="3371:40560" KioskID="B6487518-4C66-E511-8759-90B11C2CD708"
KioskSN="VSH312944" LastSync="2015-10-23 10:50:38.8100000 -04:00" CatalogVersion="2015-10-23
05:42:32.2661055 -07:00" />
    </KiosksCollection>
</VDITransaction>

```

Markets

```

<VDITransaction VDIXMLVersion="1" TransactionID="321CADD4-2EFB-4F43-A4F5-DEE08F0678CF"
VDIXMLType="mms-markets" TransactionTime="2015-10-22T18:39:00.277-04:00" ProviderID="Crane"
OperatorID="46" ApplicationID="VendMAX" ApplicationVersion="5.0.8.1088">
    <MarketsCollection>
        <Market MarketID="3371:40560" MarketName="Acme Market" LocationID="3371:7321"
LocationName="297 Somewhere Road" CustomerID="3371:6074" CustomerName="Looney Tunes"
MarketAddress="297 Somewhere Road Troy MI 48084">
            <Kiosks>
                <Kiosk KioskID="B6487518-4C66-E511-8759-90B11C2CD708" KioskSN="VSH312944"
/>
            </Kiosks>
        </Market>
    </MarketsCollection>
</VDITransaction>

```

Collections

```
<?xml version="1.0" encoding="utf-8"?>
<VDITransaction VDIXMLVersion="1" VDIXMLType="mms-collections" ProviderID="365"
ApplicationID="smartshop" ApplicationVersion="1902" TransactionID="35C1E8A4-4DE1-42C3-A07D-
30B3BBBA97F7" TransactionTime="2015-10-23T07:07:33.9505665-07:00" OperatorID="46">
  <CashCollections>
    <CashCollection MarketID="2008:46941" KioskID="BF9EE4B3-5908-E511-A42C-90B11C2CD708"
CollectionTime="2015-10-23T10:04:38-04:00" Amount="208.0000" CollectedBy="ljenkins">
      <Bills Direction="OUT" Value="208.0000" Count="1" Amount="208.0000" />
    </CashCollection>
  </CashCollections>
</VDITransaction>
```

Consumers

```
<?xml version="1.0" encoding="utf-8"?>
<VDITransaction VDIXMLVersion="1" VDIXMLType="mms-consumers" ProviderID="365"
ApplicationID="smartshop" ApplicationVersion="1901" TransactionID="4D4371BD-9108-4635-9BF5-
80724FC3EC03" TransactionTime="2015-10-23T08:02:32.2011817-07:00" OperatorID="894">
  <Consumers>
    <Consumer MarketID="5330:46707" KioskID="31D4F875-1526-495A-B437-650EE1DC9F53"
ProviderID="TODO: PROVIDER" ConsumerID="95bdb5cd-4668-e511-8759-90b11c2cd708" FirstName="CHAD"
LastName="YOUNG" Email="CHAD.YOUNG@ACMEVENDING.COM" Balance="33.3100" BalanceDateTime="2015-
10-23T15:02:32.160" />
  </Consumers>
</VDITransaction>
```

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