



VIRTUAL INCENTIVES

Reward better.™

Rest API for Real-Time Ordering of Prepaid Rewards Version 4.0

Have an API question, please email: api@virtualincentives.com

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Introduction

This document defines a format and process for ordering prepaid rewards through Virtual Incentives. Its intended audience is a software developer responsible for integrating with the Virtual Incentives REST API. This document is meant to be used in conjunction with the Virtual Incentives SKU document, delivered separately to the client.

Overview

The Virtual Incentives Rest API allows for real-time processing of prepaid virtual rewards. Upon successfully processing, a redemption link will be returned to the sending application. A redemption link is a unique URL that allows a single recipient to redeem a prepaid virtual reward. The redemption link allows the reward recipient to access the Virtual Reward Center (VRC), wherein the reward earner begins the redemption process. The Virtual Reward Center can be customized on a Program ID basis to allow for a customized and brand-able reward redemption experience. To learn more about customizing your Virtual Reward Center, please contact your Relationship Manager.

Security

The Virtual Incentives REST API utilizes a combination of Authorization, Authentication, and Encryption to secure its endpoints. Only pre-approved and qualified partners are permitted access to the REST API.

Authorization

The client must provide their IP address(es) from which the Virtual Incentives REST API will be accessed. If the client subsequently changes their IP address(es) from which it accesses the web service, the connection will be refused with a 403.6 error. Please notify Virtual Incentives at api@virtualincentives.com in advance of changing your sending IP address(es).

Note: Multiple IP addresses and ranges are supported.

Authentication

Each client will be provided with a unique Username and Password that must be specified with each request. The REST API utilizes Basic Authentication over SSL.

Encryption

Any attempts to access the API without SSL will result in a 403.4 error.

Implementation

Virtual Incentives supports two modes of operation, Development and Production. Upon successful creation of a REST API account, you will receive credentials for both environments.

Development

The development environment serves as a sandbox for testing the API functionality. Any requests executed against the development environment will return a simulated API response. No actual orders will be placed against the account. If you require end-to-end production testing prior to go-live, please contact your relationship manager.

Production

Once your development work has been completed, you can simply switch to your production credentials. All requests that are executed using production credentials will be processed as production orders and will be fully completed.

NOTE: Your development credentials will always stay active.

Authentication

The REST API uses Basic Authentication over SSL to secure each request. In order to successfully authenticate, the client sets the request Authorization header to Basic, and transmits the Username and Password, separated by a colon (":") and encoded as a Base64 string.

For example:

Username: testuser

Password: testpassword

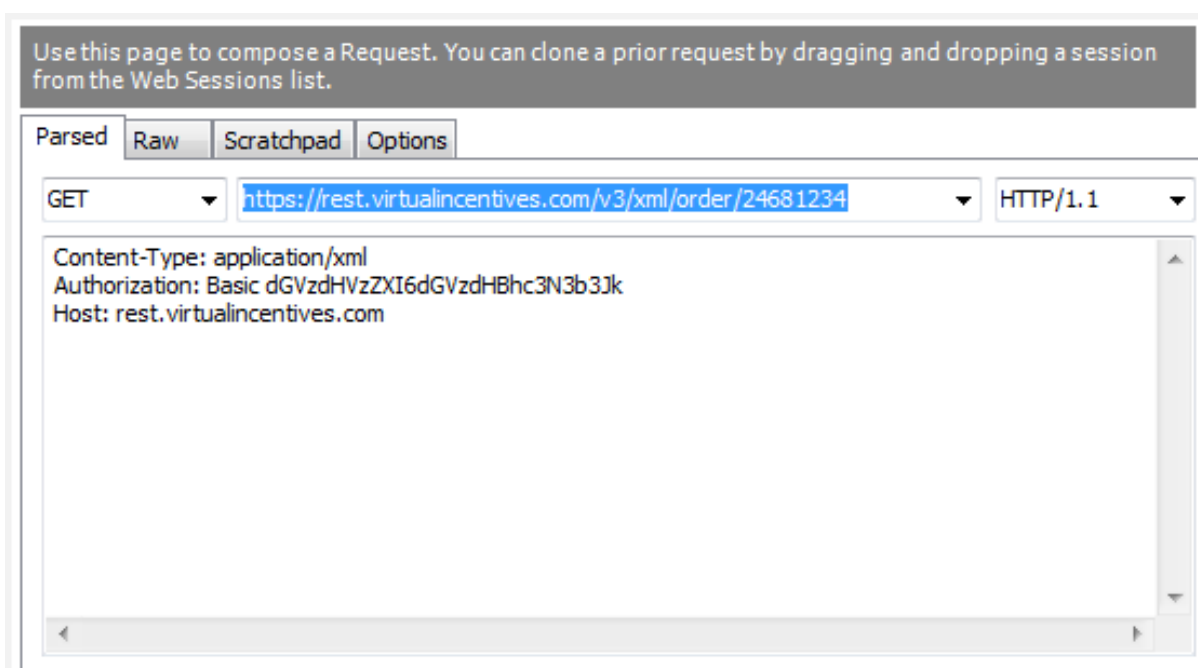
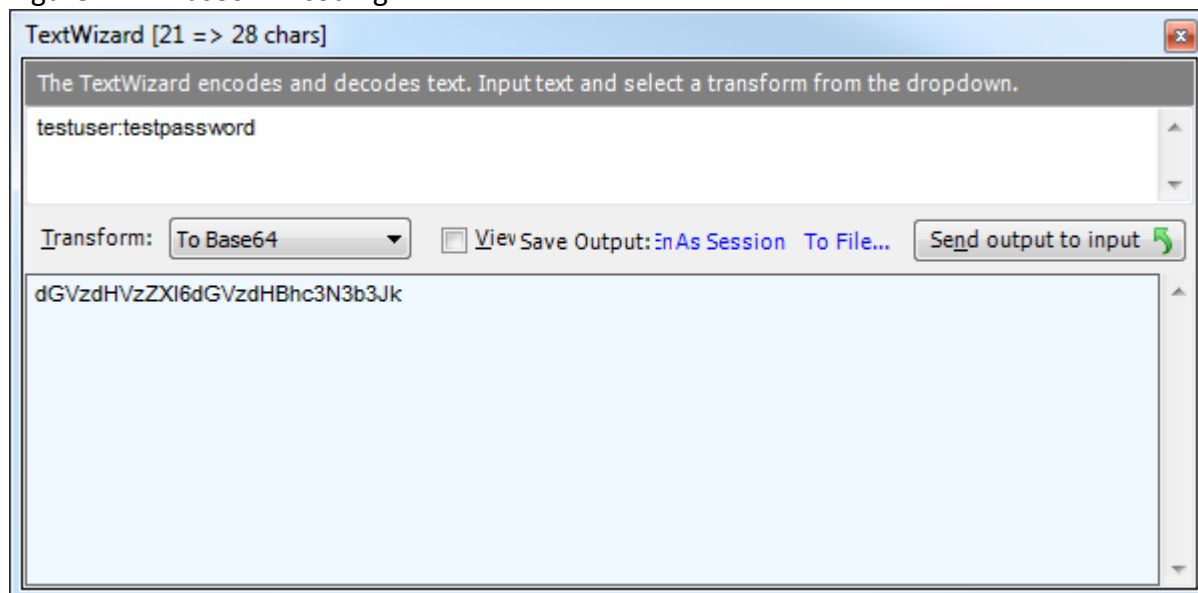
Formatted: testuser:testpassword

Base64 Encoded: dGVzdHVzZXI6dGVzdHBhc3N3b3Jk

Authorization Header: Authorization: Basic dGVzdHVzZXI6dGVzdHBhc3N3b3Jk

See Figures 1.1 and 1.2 for additional illustration

Figure 1.1 – Base64 Encoding



API Reference

The Virtual Incentives REST API can be accessed at the following URL:

<https://rest.virtualincentives.com/{version}/{format}/{endpoint}>

URL Attributes

Version

Specifies the version of the API to access. Current API Version is **v4**.

Format

Specifies the requested message format for the current API call. Available formats are XML and JSON.

Endpoint

Specifies the API Resource to access.

Formats

XML

Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.

JSON

JSON or JavaScript Object Notation is a text-based open standard designed for human-readable data interchange. It is derived from the JavaScript scripting language for representing simple data structures and associative arrays, called objects.

Endpoints

Placing an order

Endpoint: <https://rest.virtualincentives.com/{version}/{format}/orders>

Method: POST

Definitions:

Field	Type	Description
programid	<i>integer, required</i>	The programid servers an identifier that determines the funding account and branding to use for this request.
clientid	<i>string(50), required (empty)</i>	Client provided unique identifier for the request. This field also serves as a duplicate transaction check. After a successful transaction is placed using this identifier, all subsequent requests using the same identifier are rejected as duplicate orders.
number	<i>Integer</i>	Order number generated upon successful creation. RESPONSE ONLY
status	<i>string(50)</i>	Order status for the requested order. See Appendix A for definitions RESPONSE ONLY
id	<i>integer</i>	Unique Account Holder ID RESPONSE ONLY
firstname	<i>string(50), required</i>	Account holder first name <i>NOTE: This field is displayed in the email and VRC salutation. For anonymous rewards, please use a generic name such as "Participant" or "Recipient".</i>
lastname	<i>string(50), required</i>	Account holder last name. <i>NOTE: For anonymous rewards, please use a generic name such as "Participant" or "Recipient".</i>
address1	<i>string(100), optional</i>	Account holder address line 1.
address2	<i>string(50), optional</i>	Account holder address line 2.
city	<i>string(50), optional</i>	Account holder city.
state	<i>string(20), optional</i>	Account holder state abbreviation. (ISO 3166-2, subdivision)

Field	Type	Description
zip	string(10), optional	Account holder zip.
country	string(2), optional	Account holder country abbreviation. (ISO 3166-2)
email	string(200), required	Account holder email address. Note: For anonymous rewards, please use a generic support email address, such as support@virtualrewardcenter.com.
sku	string(50), required	Virtual prepaid product sku requested. <i>NOTE: Sku document delivered separately</i>
amount	decimal, required	Denomination of the reward being issued. <i>NOTE: Currency is determined by the sku requested</i>
udf1	string(100), optional	User Defined Field (UDF) to associate with the account holder. This field can be order, user, or transaction specifier. Also, these fields can be passed through
udf2	string(100), optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
udf3	string(1000) , optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
udf4	string(1000) , optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
udf5	string(1000) , optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
udf6	string(4000) , optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
udf7	string(4000) , optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
udf8	string(4000) , optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
udf9	string(4000) , optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
udf10	string(4000) , optional	Additional User Defined field. <i>NOTE: See 'udf1' for definition.</i>
link	string(250)	Redemption link returned upon successful account creation. RESPONSE ONLY

Single reward

XML (REQUEST)

```
<order>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <accounts>
    <account>
      <firstname>John</firstname>
      <lastname>Doe</lastname>
      <email>john.doe@example.com</email>
      <sku>UVC-V-A06</sku>
      <amount>10.00</amount>
    </account>
  </accounts>
</order>
```

XML (RESPONSE)

```
<order>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <number>24681234</number>
  <status>completed</status>
  <accounts>
    <account>
      <id>88523</id>
      <firstname>John</firstname>
      <lastname>Doe</lastname>
      <email>john.doe@example.com</email>
      <sku>UVC-V-A06</sku>
      <amount>10.00</amount>
      <link>
        https://www.virtualrewardcenter.com/
        Landing.aspx?id=88523&sid=093677BA-71FA-
        4137-B435-C17B1748E725
      </link>
    </account>
  </accounts>
</order>
```

JSON (REQUEST)

```
{
  "order":{
    "programid":"26490",
    "clientid":"56258125",
    "accounts":[
      {
        "firstname":"John",
        "lastname":"Doe",
        "email":"john.doe@example.com",
        "sku":"UVC-V-A06",
        "amount":"10.00"
      }
    ]
  }
}
```

JSON (RESPONSE)

```
{
  "order":{
    "programid":"26490",
    "clientid":"56258125",
    "number":"24681234",
    "status":"completed",
    "accounts":[
      {
        "id":"85425",
        "firstname":"John",
        "lastname":"Doe",
        "email":"john.doe@example.com",
        "sku":"UVC-V-A06",
        "amount":"10.00",
        "link":"https://www.virtualrewardcenter.com/Landing.aspx?id=85425&sid=b173b47f-228c-4a97-8d68-e5835ca4ac66"
      }
    ]
  }
}
```

Anonymous reward

XML (REQUEST)

```
<order>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <accounts>
    <account>
      <firstname>Participant</firstname>
      <lastname>Participant</lastname>
      <email>support@virtualrewardcenter.com</email>
      <sku>UVC-V-A06</sku>
      <amount>10.00</amount>
    </account>
  </accounts>
</order>
```

XML (RESPONSE)

```
<order>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <number>24681234</number>
  <status>completed</status>
  <accounts>
    <account>
      <id>88523</id>
      <firstname>Participant</firstname>
      <lastname>Participant</lastname>
      <email>support@virtualrewardcenter.com</email>
      <sku>UVC-V-A06</sku>
      <amount>10.00</amount>
      <link>
        https://www.virtualrewardcenter.com/
        Landing.aspx?id=88523&sid=093677BA-71FA-
        4137-B435-C17B1748E725
      </link>
    </account>
  </accounts>
</order>
```

JSON (REQUEST)

```
{
  "order":{
    "programid":"26490",
    "clientid":"56258125",
    "accounts":[
      {
        "firstname":"Participant",
        "lastname":"Participant",
        "email":"support@virtualrewardcenter.com",
        "sku":"UVC-V-A06",
        "amount":"10.00"
      }
    ]
  }
}
```

JSON (RESPONSE)

```
{
  "order":{
    "programid":"26490",
    "clientid":"56258125",
    "number":"24681234",
    "status":"completed",
    "accounts":[
      {
        "id":"85425",
        "firstname":"Participant",
        "lastname":"Participant",
        "email":"support@virtualrewardcenter.com",
        "sku":"UVC-V-A06",
        "amount":"10.00",
        "link":"https://www.virtualrewardcenter.com/Landing.aspx?id=85425&sid=b173b47f-228c-4a97-8d68-e5835ca4ac66"
      }
    ]
  }
}
```

Multiple rewards

XML (REQUEST)

```
<order>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <accounts>
    <account>
      <firstname>John</firstname>
      <lastname>Doe</lastname>
      <email>john.doe@example.com</email>
      <address1>123 Any Street</address1>
      <address2>Apt 212</address2>
      <city>Any City</city>
      <state>CA</state>
      <zip>98625</zip>
      <country>US</country>
      <sku>UVC-V-A06</sku>
      <amount>10.00</amount>
    </account>
    <account>
      <firstname>Jane</firstname>
      <lastname>Doe</lastname>
      <email>jane.doe@example.com</email>
      <sku>UVC-V-A06</sku>
      <amount>25.00</amount>
    </account>
  </accounts>
</order>
```

XML (RESPONSE)

```
<order>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <number>24681234</number>
  <status>completed</status>
  <accounts>
    <account>
      <id>88523</id>
      <firstname>John</firstname>
      <lastname>Doe</lastname>
      <email>john.doe@example.com</email>
      <address1>123 Any Street</address1>
      <address2>Apt 212</address2>
      <city>Any City</city>
      <state>CA</state>
      <zip>98625</zip>
      <country>US</country>
      <sku>UVC-V-A06</sku>
      <amount>10.00</amount>
      <link>
        https://www.virtualrewardcenter.com/
        Landing.aspx?id=88523&sid=093677BA-71FA-
        4137-B435-C17B1748E725
      </link>
    </account>
    <account>
      <id>88524</id>
      <firstname>Jane</firstname>
      <lastname>Doe</lastname>
      <email>jane.doe@example.com</email>
      <sku>UVC-V-A06</sku>
      <amount>25.00</amount>
      <link>
        https://www.virtualrewardcenter.com/
        Landing.aspx?id=88524&sid=0E6464C9-3D62-4C60-
        8741-8BFA18EC187A
      </link>
    </account>
  </accounts>
</order>
```

JSON (REQUEST)

```
{
  "order":{
    "programid":"26490",
    "clientid":"56258125",
    "accounts":[
      {
        "firstname":"John",
        "lastname":"Doe",
        "email":"john.doe@example.com",
        "address1":"123 Any Street",
        "address2":"Apt 212",
        "city":"Any City",
        "state":"NY",
        "zip":"98625",
        "country":"US",
        "sku":"UVC-V-A06",
        "amount":"10.00",
        "udf1":"",
        "udf2":""
      },
      {
        "firstname":"Jane",
        "lastname":"Doe",
        "email":"jane.doe@example.com",
        "sku":"UVC-V-A06",
        "amount":"25.00",
        "udf1":"",
        "udf2":""
      }
    ]
  }
}
```


JSON (RESPONSE)

```
{
  "order": {
    "programid": "26490",
    "clientid": "56258125",
    "number": "24681234",
    "status": "completed",
    "accounts": [
      {
        "id": "85425",
        "firstname": "John",
        "lastname": "Doe",
        "email": "john.doe@example.com",
        "address1": "123 Any Street",
        "address2": "Apt 212",
        "city": "Any City",
        "state": "NY",
        "zip": "98625",
        "country": "US",
        "sku": "UVC-V-A06",
        "amount": "10.00",
        "udf1": "",
        "udf2": "",
        "link": "https://www.virtualrewardcenter.com/Landing.aspx?id=85425&sid=b173b47f-228c-4a97-8d68-e5835ca4ac66"
      },
      {
        "id": "85426",
        "firstname": "Jane",
        "lastname": "Doe",
        "email": "jane.doe@example.com",
        "sku": "UVC-V-A06",
        "amount": "25.00",
        "udf1": "",
        "udf2": "",
        "link": "https://www.virtualrewardcenter.com/Landing.aspx?id=85426&sid=1c2ce48f-8e27-43a4-948a-e4a05e612dab"
      }
    ]
  }
}
```

Listing all orders

Endpoint: <https://rest.virtualincentives.com/{version}/{format}/orders>

Method: GET

Definitions

Field	Type	Description
programid	<i>Integer</i>	The programid the order was placed under. RESPONSE ONLY
number	<i>Integer</i>	Order number for the requested order. RESPONSE ONLY
clientid	<i>string(50)</i>	Client supplied unique identifier for the order. RESPONSE ONLY
status	<i>string(50)</i>	Order status for the requested order. See Appendix A for definitions RESPONSE ONLY

*Examples***XML (RESPONSE)**

```
<orders>
  <order>
    <programid>26490</programid>
    <number>24681234</number>
    <clientid>56258125</clientid>
    <status>completed</status>
  </order>
  <order>
    <programid>26491</programid>
    <number>24681235</number>
    <clientid>56258126</clientid>
    <status>pending</status>
  </order>
</orders>
```

JSON (RESPONSE)

```
{
  "orders":{
    "order":[
      {
        "programid":"26490",
        "number":"24686669",
        "clientid":"56258125",
        "status":"completed"
      },
      {
        "programid":"26490",
        "number":"24686670",
        "clientid":"56258126",
        "status":"completed"
      },
      {
        "programid":"26490",
        "number":"24686671",
        "clientid":"56258127",
        "status":"completed"
      },
      {
        "programid":"26490",
        "number":"24686672",
        "clientid":"56258128",
        "status":"pending"
      }
    ]
  }
}
```

Listing orders by status

URL: <https://rest.virtualincentives.com/{version}/{format}/orders?status={status}>

Method: GET

Definitions

Field	Type	Description
programid	<i>Integer</i>	The programid the order was placed under. RESPONSE ONLY
number	<i>Integer</i>	Order number for the requested order. RESPONSE ONLY
clientid	<i>string(50)</i>	Client supplied unique identifier for the order. RESPONSE ONLY
status	<i>string(50)</i>	Order status for the requested order. See Appendix A for definitions

Examples

XML (RESPONSE)

```
<orders>
  <order>
    <programid>26491</programid>
    <number>24688913</number>
    <clientid>1219</clientid>
    <status>pending</status>
  </order>
  <order>
    <programid>26491</programid>
    <number>24688914</number>
    <clientid>1220</clientid>
    <status>pending</status>
  </order>
  <order>
    <programid>26491</programid>
    <number>24688915</number>
    <clientid>1221</clientid>
    <status>pending</status>
  </order>
</orders>
```

JSON (RESPONSE)

```
{
  "orders":{
    "order":[
      {
        "programid":"26490",
        "number":"24688913",
        "clientid":"1219",
        "status":"pending"
      },
      {
        "programid":"26490",
        "number":"24688914",
        "clientid":"1220",
        "status":"pending"
      },
      {
        "programid":"26490",
        "number":"24688915",
        "clientid":"1221",
        "status":"pending"
      }
    ]
  }
}
```

Viewing order by order number**URL:** <https://rest.virtualincentives.com/{version}/{format}/orders/{number}>**Method:** GET**Definitions**

Field	Type	Description
number	<i>Integer</i>	Order number generated upon successful creation.
programid	<i>integer</i>	The Program Id that the order was placed against.
clientid	<i>string(50)</i>	Client supplied unique identifier for the order.
status	<i>string(50)</i>	Order status for the requested order. See Appendix A for definition.
id	<i>integer</i>	Unique Account Holder ID
firstname	<i>string(50)</i>	Account holder first name
lastname	<i>string(50)</i>	Account holder last name.
address1	<i>string(100)</i>	Account holder address line 1.
address2	<i>string(50)</i>	Account holder address line 2.
city	<i>string(50)</i>	Account holder city.
state	<i>string(20)</i>	Account holder state abbreviation. (ISO 3166-2, subdivision)
zip	<i>string(10)</i>	Account holder zip.
country	<i>string(2)</i>	Account holder country abbreviation. (ISO 3166-2)
email	<i>string(200)</i>	Account holder email address.
sku	<i>string(50)</i>	Prepaid product sku.
amount	<i>decimal</i>	Denomination of the reward being issued.
udf1	<i>string(100)</i>	User Defined Field (UDF)
udf2	<i>string(100)</i>	User Defined Field (UDF)
udf3	<i>string(1000)</i>	User Defined Field (UDF)
udf4	<i>string(1000)</i>	User Defined Field (UDF)
udf5	<i>string(1000)</i>	User Defined Field (UDF)
udf6	<i>string(4000)</i>	User Defined Field (UDF)
udf7	<i>string(4000)</i>	User Defined Field (UDF)
udf8	<i>string(4000)</i>	User Defined Field (UDF)
udf9	<i>string(4000)</i>	User Defined Field (UDF)
udf10	<i>string(4000)</i>	User Defined Field (UDF)
link	<i>string(250)</i>	Redemption link returned upon successful account creation.

Examples

XML (RESPONSE)

```
<order>
  <number>24681234</number>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <status>completed</status>
  <accounts>
    <account>
      <id>88523</id>
      <firstname>John</firstname>
      <lastname>Doe</lastname>
      <email>john.doe@example.com</email>
      <sku>UVC-V-A06</sku>
      <amount>10.00</amount>
      <udf1></udf1>
      <udf2></udf2>
      <link>https://www.virtualrewardcenter.com/
      Landing.aspx?id=88523&sid=093677BA-71FA-4137-
      B435-C17B1748E725</link>
    </account>
    <account>
      <id>88524</id>
      <firstname>Jane</firstname>
      <lastname>Doe</lastname>
      <email>jane.doe@example.com</email>
      <sku>UVC-V-A06</sku>
      <amount>25.00</amount>
      <udf1></udf1>
      <udf2></udf2>
      <link>https://www.virtualrewardcenter.com/
      Landing.aspx?id=88524&sid=0E6464C9-3D62-4C60-
      8741-8BFA18EC187A</link>
    </account>
  </accounts>
</order>
```

JSON (RESPONSE)

```
{
  "order":{
    "programid":"26490",
    "clientid":"56258125",
    "number":"24681234",
    "status":"completed",
    "accounts":[
      {
        "id":"85425",
        "firstname":"John",
        "lastname":"Doe",
        "email":"john.doe@example.com",
        "sku":"UVC-V-A06",
        "amount":"10.00",
        "udf1":"",
        "udf2":"",
        "link":"https://www.virtualrewardcenter.com/Landing.aspx?id=85425&sid=b173b47f-228c-4a97-8d68-e5835ca4ac66"
      },
      {
        "id":"85426",
        "firstname":"Jane",
        "lastname":"Doe",
        "email":"jane.doe@example.com",
        "sku":"UVC-V-A06",
        "amount":"25.00",
        "udf1":"",
        "udf2":"",
        "link":"https://www.virtualrewardcenter.com/Landing.aspx?id=85426&sid=1c2ce48f-8e27-43a4-948a-e4a05e612dab"
      }
    ]
  }
}
```


Listing all products

URL: <https://rest.virtualincentives.com/{version}/{format}/products>

Method: GET

Definitions

Field	Type	Description
name	<i>string(250)</i>	Description of the product
sku	<i>string(50)</i>	Prepaid product sku.
currency	<i>string(10)</i>	Order status for the requested order. See Appendix A for definition.
denomination	<i>object</i>	List of fixed and ranged denominations.
value	<i>decimal</i>	Fixed denomination of the product.
min	<i>decimal</i>	Minimum product denomination of the range.
max	<i>decimal</i>	Maximum product denomination of the range.
redemptions	<i>array</i>	List of redemption options. (e.g. In-Store, Online)
base-url	<i>String(255)</i>	Optional url

Examples

XML (RESPONSE)

```
<products>
  <product>
    <name>
      Virtual Visa® Reward (US), 3-Month
    </name>
    <sku>UVC-V-A03</sku>
    <currency>USD</currency>
    <denomination>
      <range min="5.00" max="2000.00" />
    </denomination>
    <base-url />
    <redemptions />
  </product>
  <product>
    <name>
      Virtual Visa® Reward (US), 6-Month
    </name>
    <sku>UVC-V-A06</sku>
    <currency>USD</currency>
    <denomination>
      <range min="5.00" max="2000.00" />
    </denomination>
    <base-url />
    <redemptions />
  </product>
</products>
```

JSON (RESPONSE)

```
{
  "products": [
    {
      "name": "Virtual Visa® Reward (US), 3-Month",
      "sku": "UVC-V-A03",
      "currency": "USD",
      "denomination": {
        "range": [
          {
            "min": 5,
            "max": 2000
          }
        ]
      },
      "base-url": "",
      "redemptions": []
    },
    {
      "name": "Virtual Visa® Reward (US), 6-Month",
      "sku": "UVC-V-A06",
      "currency": "USD",
      "denomination": {
        "range": [
          {
            "min": 5,
            "max": 2000
          }
        ]
      },
      "base-url": "",
      "redemptions": []
    }
  ]
}
```

Viewing product by sku

URL: `https://rest.virtualincentives.com/{version}/{format}/products/{sku}`

Method: GET

Definitions

Field	Type	Description
name	<i>string(250)</i>	Description of the product
sku	<i>string(50)</i>	Prepaid product sku.
currency	<i>string(10)</i>	Order status for the requested order. See Appendix A for definition.
denomination	<i>object</i>	List of fixed and ranged denominations.
value	<i>decimal</i>	Fixed denomination of the product.
min	<i>decimal</i>	Minimum product denomination of the range.
max	<i>decimal</i>	Maximum product denomination of the range.
redemptions	<i>array</i>	List of redemption options. (e.g. In-Store, Online)
base-url	<i>String(255)</i>	Optional url

Examples

XML (RESPONSE)

```
<products>
  <product>
    <name>
      Virtual Visa® Reward (US), 3-Month
    </name>
    <sku>UVC-V-A03</sku>
    <currency>USD</currency>
    <denomination>
      <range min="5.00" max="2000.00" />
    </denomination>
    <base-url />
    <redemptions />
  </product>
</products>
```

JSON (RESPONSE)

```
{
  "product": {
    "name": " Virtual Visa® Reward (US), 3-Month",
    "sku": "UVC-V-A03",
    "currency": "USD",
    "denomination": {
      "range": [
        {
          "min": 5,
          "max": 2000
        }
      ]
    },
    "base-url": "",
    "redemptions": []
  }
}
```

Viewing product faceplate

URL: <https://rest.virtualincentives.com/{version}/{format}/products/{sku}/faceplate>

Method: GET

Definitions

Field	Type	Description
sku	string(50)	Prepaid product sku.
faceplate	string(50)	Client supplied unique identifier for the order.

Examples

XML (RESPONSE)

```
<product>
  <faceplate>
    https://www.virtualrewardcenter.com/images/cards
    /Virtual_Visa.png
  </faceplate>
</product>
```

JSON (RESPONSE)

```
{
  "product": {
    "faceplate": "https://www.virtualrewardcenter.com/
    images/cards/Virtual_Visa.png"
  }
}
```

Viewing product marketing

URL:

<https://rest.virtualincentives.com/{version}/{format}/products/{sku}/marketing>

Method: GET**Definitions**

Field	Type	Description
sku	string(50)	Prepaid product sku.
marketing	string(500)	Marketing reward information.

Examples

XML (RESPONSE)

```
<product>
  <marketing>
    The Visa® Reward Card can be used to buy what you want,
    when you want it. Because it is so flexible and
    convenient, the Visa Reward Card makes it easy to treat
    yourself to something special or to help cover your
    everyday expenses. The decision is yours.
  </marketing>
</product>
```

JSON (RESPONSE)

```
{
  "product": {
    "marketing": "The Visa® Reward Card can be used to
    buy what you want, when you want it.
    Because it is so flexible and
    convenient, the Visa Reward Card makes
    it easy to treat yourself to something
    special or to help cover your everyday
    expenses. The decision is yours."
  }
}
```

Viewing product terms

URL: <https://rest.virtualincentives.com/{version}/{format}/products/{sku}/terms>

Method: GET

Definitions

Field	Type	Description
sku	string(50)	Prepaid product sku.
terms	string(500)	Terms and Conditions for utilizing the product.

Examples

XML (RESPONSE)

```
<product>
  <terms>
    Cards are issued by Citibank, N.A. pursuant to a
    license from Visa U.S.A. Inc. and managed by Citi
    Prepaid Services. This card can be used everywhere Visa
    debit cards are accepted.
  </terms>
</product>
```

JSON (RESPONSE)

```
{
  "product": {
    "terms":
      "Cards are issued by Citibank, N.A. pursuant
      to a license from Visa U.S.A. Inc. and managed
      by Citi Prepaid Services. This card can be
      used everywhere Visa debit cards are accepted.
    }
}
```


Viewing master account balances

URL: <https://rest.virtualincentives.com/{version}/{format}/balances>

Method: GET

Examples

XML (RESPONSE)

```
<balances>
  <balance>
    <balance>61.15</balance>
    <currency>USD</currency>
    <symbol>$</symbol>
  </balance>
  <balance>
    <balance>0.0000</balance>
    <currency>CAD</currency>
    <symbol>$</symbol>
  </balance>
</balances>
```

JSON (RESPONSE)

```
{
  "balances": [
    {
      "balance": 61.15,
      "currency": "USD",
      "symbol": "$"
    },
    {
      "balance": 0.00,
      "currency": "CAD",
      "symbol": "$"
    }
  ]
}
```

Viewing program balances

URL: <https://rest.virtualincentives.com/{version}/{format}/balances/programs>

Method: GET

Examples

XML (RESPONSE)

```
<programs>
  <program>
    <name>Survey Incentives</name>
    <programid>26209</programid>
    <balance>-27.35</balance>
    <currency>USD</currency>
    <type>Physical Reward</type>
  </program>
  <program>
    <name>Loyalty Rewards</name>
    <programid>34307</programid>
    <balance>530.00</balance>
    <currency>USD</currency>
    <type>Gift Cards</type>
  </program>
</programs>
```

JSON (RESPONSE)

```
{
  "program": [
    {
      "name": "Survey Incentives",
      "programid": 26209,
      "balance": -27.35,
      "currency": "USD",
      "type": "Physical Reward"
    },
    {
      "name": "Loyalty Rewards",
      "programid": 34307,
      "balance": 530.00,
      "currency": "USD",
      "type": "Gift Cards"
    }
  ]
}
```

Viewing program balance by program Id

URL:

<https://rest.virtualincentives.com/{version}/{format}/balances/programs/{programid}>

Method: GET

Field	Type	Description
programid	integer	The programid identifies the program.

Examples

XML (RESPONSE)

```
<program>
  <name>Survey Incentives</name>
  <programid>26209</programid>
  <balance>-27.35</balance>
  <currency>USD</currency>
  <type>Physical Reward</type>
</program>
```

JSON (RESPONSE)

```
{
  "program": [
    {
      "name": "Survey Incentives",
      "programid": 26209,
      "balance": -27.35,
      "currency": "USD",
      "type": "Physical Reward"
    }
  ]
}
```

Listing of all products for a program

URL:

https://rest.virtualincentives.com/{version}/{format}/programs/{programid}/products

Method: GET

Definitions

Field	Type	Description
programid	integer	The programid identifies the program.

Examples

XML (RESPONSE)

```
<products>
  <product>
    <name>
      Virtual Visa® Reward (US), 3-Month
    </name>
    <sku>UVC-V-A03</sku>
    <currency>USD</currency>
    <denomination>
      <range min="5.00" max="2000.00" />
    </denomination>
    <base-url />
    <redemptions />
  </product>
  <product>
    <name>
      Virtual Visa® Reward (US), 6-Month
    </name>
    <sku>UVC-V-A06</sku>
    <currency>USD</currency>
    <denomination>
      <range min="5.00" max="2000.00" />
    </denomination>
    <base-url />
    <redemptions />
  </product>
</products>
```

```
</product>
</products>
```

JSON (RESPONSE)

```
{
  "products": [
    {
      "name": " Virtual Visa® Reward (US), 3-Month",
      "sku": "UVC-V-A03",
      "currency": "USD",
      "denomination": {
        "range": [
          {
            "min": 5,
            "max": 2000
          }
        ]
      },
      "base-url": "",
      "redemptions": []
    },
    {
      "name": " Virtual Visa® Reward (US), 6-Month",
      "sku": "UVC-V-A06",
      "currency": "USD",
      "denomination": {
        "range": [
          {
            "min": 5,
            "max": 2000
          }
        ]
      },
      "base-url": "",
      "redemptions": []
    }
  ]
}
```

Viewing product by sku for a program

URL: `https://rest.virtualincentives.com/{version}/{format}/programs/{programid}products/{sku}`

Method: GET

Definitions

Field	Type	Description
programid	<i>integer</i>	The programid identifies the program.
sku	<i>string(50)</i>	Prepaid product sku.

Examples

XML (RESPONSE)

```
<products>
  <product>
    <name>
      Virtual Visa® Reward (US), 3-Month
    </name>
    <sku>UVC-V-A03</sku>
    <currency>USD</currency>
    <denomination>
      <range min="5.00" max="2000.00" />
    </denomination>
    <base-url />
    <redemptions />
  </product>
</products>
```

JSON (RESPONSE)

```
{
  "product": {
    "name": " Virtual Visa® Reward (US), 3-Month",
    "sku": "UVC-V-A03",
    "currency": "USD",
    "denomination": {
      "range": [
        {
          "min": 5,
          "max": 2000
        }
      ]
    },
    "base-url": "",
    "redemptions": []
  }
}
```

Error Handling

When the REST API encounters an error, all processing is stopped and an error response is returned to the client. No accounts are created when an error is encountered.

There are two levels of errors that are returned in the API:

Order Errors

Order errors are defined as errors that occur in the root order container and apply to the order in its entirety rather than a specific recipient. Examples of order level errors are Duplicate Client Id or Invalid Program ID.

Account Errors

Account errors are defined as errors that are related to a specific account inside the order. Examples of account level errors are Missing First Name or Invalid Email Address.

Definitions

Field	Type	Description
Code	<i>integer</i>	Reference code that relates to an error message. See Appendix B for definitions.
Field	<i>string</i>	Request field that contained the error
Message	<i>string</i>	Detailed error message

Examples

In the examples provided below, there are multiple errors returned for the requested reward.

- Duplicate Client ID
- Invalid Amount
- Invalid Sku
- Missing Last Name

XML (REQUEST)

```
<order>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <accounts>
    <account>
      <firstname>John</firstname>
      <lastname></lastname>
      <email>john.doe@example.com</email>
      <sku>UVC-V-A18</sku>
      <amount>0.99</amount>
    </account>
  </accounts>
</order>
```

XML (RESPONSE)

```
<order>
  <programid>26490</programid>
  <clientid>56258125</clientid>
  <errors>
    <error>
      <code>90</code>
      <field>clientid</field>
      <message>Duplicate Client Id</message>
    </error>
  </errors>
  <accounts>
    <account>
      <firstname>John</firstname>
      <lastname>Doe</lastname>
      <email>john.doe@example.com</email>
      <sku>UVC-V-A18</sku>
      <amount>0.99</amount>
      <errors>
        <error>
          <code>80</code>
          <field>lastname</field>
          <message>Field is required</message>
        </error>
        <error>
          <code>50</code>
          <field>sku</field>
          <message>Sku not found</message>
        </error>
        <error>
          <code>60</code>
          <field>amount</field>
          <message>
            Amount requested outside
            allowable denomination
          </message>
        </error>
      </errors>
    </account>
  </accounts>
</order>
```

JSON (REQUEST)

```
{
  "order":{
    "programid":"26490",
    "clientid":"56258125",
    "accounts":{
      "account":[
        {
          "firstname":"John",
          "email":"john.doe@example.com",
          "sku":"UVC-V-A18",
          "amount":"0.99",
          "udf1":"101",
          "udf2":"1004"
        }
      ]
    }
  }
}
```

JSON (RESPONSE)

```
{
  "order":{
    "programid":"26490",
    "clientid":"56258125",
    "errors":{
      "error":{
        "code":"90",
        "field":"clientid",
        "message":"Duplicate Client Id"
      }
    }
  },
}
```

```
"accounts":{
  "account":[
    {
      "firstname":"John",
      "lastname":"Doe",
      "email":"john.doe@example.com",
      "sku":"UVC-V-A18",
      "amount":"0.99",
      "udf1":"101",
      "udf2":"1004",
      "errors":{
        "error":[
          {
            "code":"80",
            "field":"lastname",
            "message":"Field is required"
          },
          {
            "code":"50",
            "field":"sku",
            "message":"Sku not found"
          },
          {
            "code":"60",
            "field":"amount",
            "message":"Amount requested
            outside allowable denomination"
          }
        ]
      }
    }
  ]
}
```

Appendices

Appendix A: Order status types

Status	Description
Pending	Pending status is defined as an order that has been received by Virtual Incentives; however, there are insufficient funds on account to fulfill the order. Once funds are received the order will automatically move to completed.
Processing	Processing status occurs when an order has been received by Virtual Incentives, however there is additional processing that needs to be performed prior to order completion. This status is mainly seen on orders for physical cards.
Completed	Completed orders are defined as orders that have fully processed and have been delivered to the client.
Canceled	Canceled orders are defined as orders in which no funds have been withdrawn from the account, and in which the order is no longer deemed necessary for delivery.

Appendix B: Error Codes

Code	Message
10	Invalid request format
15	Account errors detected
20	No accounts requested
30	Data exceeds maximum field length
40	Program Id not found
45	Field not found
50	Sku not found
60	Amount requested outside allowable denomination
70	Invalid email address
80	Field is required
90	Duplicate Client Id
100	Invalid request value
999	Unknown Error Encountered (Contact API Support at api@virtualincentives.com)

Technical Support

For all questions during development and production, please route inquiries to api@virtualincentives.com.

Versioning

Author	Version	Date	Description
Steve Larmon	1.0	8/06/2011	Initial Document.
Steve Larmon	1.1	9/06/2011	General Clarifications.
Todd Kuhlman	2.1	1/26/2012	Added Order Request, Response and Error Example.
Todd Kuhlman	2.2	3/5/2012	Added Country to Order Request Format.
Steve Larmon	3.0	3/1/2013	Migrated from "Code" based redemption methodology to Link Based Redemption methodology.
Steve Larmon	3.1	6/12/2013	Added ClientID field. Updated documentation to include error response format.
Steve Larmon	3.2	6/19/2013	Corrected Listing Orders Resource URL. Corrected method verb on Listing Order and Listing Orders By Status.
Steve Larmon	3.3	7/23/2013	Added detailed Authentication Section.
Steve Larmon	3.4	9/26/2013	Updated Authentication section to reflect support for multiple IP Addresses. Corrected JSON Place Order examples.
Steve Larmon	3.5	10/28/2013	Added address fields for Place Order, and updated examples.
Steve Larmon	3.5.1	1/19/2015	Updated code example for json POST.
Steve Larmon	3.6	9/30/2015	Added definitions for UDF3 through 10. Added field definition data types.
Joshua Rodriguez	4.0	3/21/2016	Updated documentation for version 4.