

Version

1.2

Wrapious Marketing Co. Ltd

Service Provider

API Documentaton



Wrappy

PROPRIETARY AND CONFIDENTIAL

Service Provider

API Documentation

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Revisions

Version	Description/Details	Author	Date
1.0	Initial Draft of the Document	Alex Ramil Aguel	12/18/2018
1.1	Added support for Digital Asset	Alex Ramil Aguel	05/01/2019
1.2	Simplified and enhanced API definitions	Alex Ramil Aguel	06/01/2019
1.2	Supplement to the difference	Sam Wong	07/22/2019

Approvals

Version	Name	Role	Date
1.0	Bobby Ishimizu	Project Manager	12/18/2018
1.1	Bobby Ishimizu	Project Manager	05/01/2019
1.2	Bobby Ishimizu	Project Manager	07/23/2019

Distributions

Name	Remarks
Project Manager	
Technical Architect	
Development Team	
Service Provider Development Team	

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Overview

The purpose of this document is to provide a high level overview of Service Provider API definitions and protocols. This will allow internal and external applications to be able to communicate with Wrappy to access essential functions and data for service providers. Service APIs can be consumed by any mobile, web or desktop application that HTTPS (mandatory) calls through the REST (Representational State Transfer) endpoints exposed by the Wrappy platform.

Definition of Key Terminologies

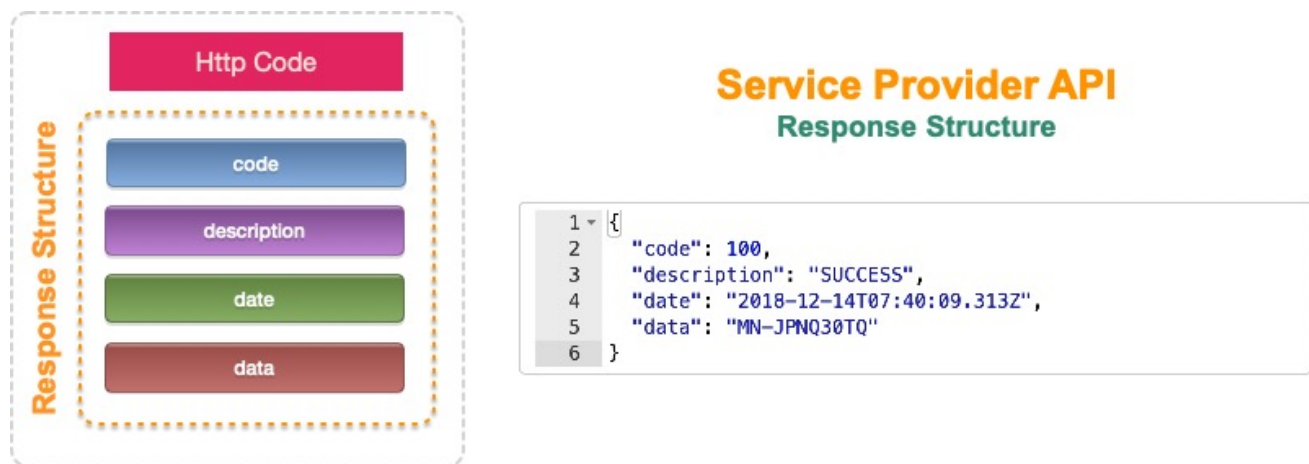
Term	Definition
Service Peer	The entity that offers services using the Wrappy platform
Service Provider	The participant that manages the functionality of the service peer
Digital Asset	Digital representation of an asset, i.e. coupon, token, rewards and others
Coupon	A digital asset that can be used to represent redeemable items with value
Token	A digital asset that can be used to represent virtual currency
Reward	A digital asset that can be used to represent points given for loyalty
JWT	Jason Web Token
REST	Representational State Transfer (an architectural style that defines a set of constraints and properties based on HTTP.)

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Response Structure

Below shows the response structure of the service provider API in JSON format. Application must handle Http response codes first to identify the status of the http call and then proceed to interpret the resulting response structure when the Http response code is **100**. When an error occurred during API initiation, it will response with code **-100** and the data element contains the error message.

The data element will be dynamic depending on the request type which will be explained in details in the next section.



Service Response Codes

The following table summarized the response code returned by the api services.

Code	Description
100	Success
-100	Error (refer to "data" element for details)

Service Definitions

This section describes the different API service definitions for request/response protocol. It is very important to understand that all request/response must use JSON as the standard data format. All request to the API endpoints (except for /authenticate and) must have a valid access token in the header using bearer authorization. When getting HTTP Code 401 (Unauthorized Access), the application may try to request first for a new access token using the provided authentication endpoint.

Endpoint Groups

The following table summarized the two primary endpoint groups.

Group	Description	Endpoint
Service User	API endpoints for service users	/user
Service Provider	API endpoints for service providers	/provider

Authenticate Provider

Authorization	None
Request Type	POST
Endpoint	/provider/authenticate
Request	{ "username": "myusername", "password": "mypassword" }
Response	{ "success": true, "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImFseWFsZSIsInBlIiwiaWF0Ij0iMTY0ODU4ODU0In0", "user": { "id": "FA087548-C414-4E42-8BCE-ADF5C9E62005", "name": "Service Provider Name", "type": "net.wrappy.participant.ServiceProvider", "peer": "E9E21B48-CF83-4C2B-ABC6-E8458AEF0A9E", } }
Note	

Authenticate User

Authorization	None
Request Type	POST
Endpoint	/user/authenticate
Request	<pre>{ "username": "myusername", "password": "mypassword", "peer": "4C0F79BF-1238-4481-BC25-309F1E7CC916" }</pre>
Response	<pre>{ "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9 ", "user": { "id": "9E9BC61D-61A9-41B2-8DC1-EDB6BED86F75", "name": "John Doe", "type": " net.wrappy.participant.ServiceUser", "active": 0, "inactive": 0, "expired": 0, "input": 0, "output": 0, "peer": "4C0F79BF-1238-4481-BC25-309F1E7CC916", } }</pre>
Note	

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Register Service User

Authorization	None
Request Type	POST
Endpoint	/user/register
Request	<pre>{ "username": "harry", "name": "John Doe", "password": "not4u2know", "peer": "E9E21B48-CF83-4C2B-ABC6-E8458AEF0A9E" }</pre>
Response	<pre>{ "code": 100, "description": "SUCCESS", "date": "2019-05-01T12:50:33.466Z", "data": { "id": "9E9BC61D-61A9-41B2-8DC1-EDB68ED86F75", "secret": "xCtqMbQPivSx" } }</pre>
Note	

Register Service Store

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/store/register
Request	<pre>{ "username": "sushi", "name": "Sushi Restaurant", "password": "password" }</pre>
Response	<pre>{ "code": 100, "description": "SUCCESS", "date": "2019-05-01T12:50:33.466Z", "data": { "id": "CAFD1F3C-84D3-48AA-88A8-C235F238A88D", "secret": "xCtqMbQPivSx" } }</pre>
Note	

Register Coupon

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/coupon/register
Request	{ "name": "Happy Meal", "denomination": [100, 200, 300] }
Response	{ "code": 100, "description": "SUCCESS", "date": "2018-12-10T17:14:20.225Z", "data": "EED1E642-73E5-4F0E-BBF3-6341FDBC07A6" }
Note	

Issue Coupon

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/coupon/issue
Request	{ "recipient": "6712BA9F-3D03-4D86-82CB-DE17DEFC5769", "coupon": "EED1E642-73E5-4F0E-BBF3-6341FDBC07A6", "quantity": 2, "value": 500, "expiry": 30 }
Response	{ "code": 100, "description": "SUCCESS", "date": "2018-12-10T17:14:56.450Z", "data": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"] }
Note	Expiry represents the number of days from registration date

Deactivate Coupon

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/coupon/deactivate
Request	{ "coupon": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"], "reason": "Invalid Coupon" }
Response	{ "code": 100, "description": "SUCCESS", "date": "2018-12-10T17:14:20.225Z", "data": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"] }
Note	

Activate Coupon

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/coupon/activate
Request	{ "coupon": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"] }
Response	{ "code": 100, "description": "SUCCESS", "date": "2018-12-10T17:14:20.225Z", "data": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"] }
Note	

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Redeem Coupon

Authorization	Bearer (User)
Request Type	POST
Endpoint	/user/coupon/redeem
Request	{ "coupon": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"], "store": "CAFD1F3C-84D3-48AA-88A8-C235F238A88D" }
Response	{ "code": 100, "description": "SUCCESS", "date": "2018-12-10T17:14:20.225Z", "data": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"] }
Note	

Transfer Coupon

Authorization	Bearer (User)
Request Type	POST
Endpoint	/user/coupon/transfer
Request	{ "coupon": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"], "recipient": "6712BA9F-3D03-4D86-82CB-DE17DEFC5769" }
Response	{ "code": 100, "description": "SUCCESS", "date": "2018-12-10T17:14:20.225Z", "data": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"] }
Note	

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Settle Coupon

Authorization	Bearer (Store)
Request Type	POST
Endpoint	/user/coupon/settle
Request	{ "coupon": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"] }
Response	{ "code": 100, "description": "SUCCESS", "date": "2018-12-10T17:14:20.225Z", "data": ["6BB54E56-7237-49C3-9741-BB08565CBC78", "BD46FB8D-8C2B-468B-86DD-F98CEB6DA6F7"] }
Note	

Provider: List Asset

Authorization	Bearer (Provider)
Request Type	GET
Endpoint	/provider/asset/list
Request	
Response	{ "id": "5541FECC-89D6-45D1-A549-67CC76990304", "type": "net.wrappy.asset.DigitalAsset", "name": "Happy Meal", "denomination": [100, 200, 300], "assetType": "COUPON", "owner": "BF8A4929-4EDD-43BC-9E7E-2C719E183099", "createdDate": 1560873853609, "createdBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "updatedDate": 1560873853609, "updatedBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA" }
Note	

Provider: List Coupon

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/coupon/list
Request	{ "filter": "ALL" }
Response	{ { "id": "08DCF9D2-7C06-4A16-83C6-DEE6B16F5245", "type": "net.wrappy.asset.Coupon", "assetId": "5541FECC-89D6-45D1-A549-67CC76990304", "name": "Happy Meal", "value": 100, "reason": "", "expiryDate": 1563465883456, "issuedDate": 1560873883456, "issuedBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "issuer": "BF8A4929-4EDD-43BC-9E7E-2C719E183099", "status": "ACTIVE", "owner": "6D:85:D4:2C:30:C1:42:C8:A3:85:FF:CF:ED:A3:0D:2E:E1:75:07:DA", "createdDate": 1560873883507, "createdBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "updatedAt": 1560915230832, "updatedBy": "2A380F7A-5997-4A4B-9850-29499EDA755B" } }
Note	"filter" values are "ALL", "ACTIVE", "DEACTIVATED", "USED", "SETTLED"

Service User: List Coupon

Authorization	Bearer (User)
Request Type	POST
Endpoint	/user/coupon/list
Request	{ "filter": "ALL" }
Response	{ { "id": "08DCF9D2-7C06-4A16-83C6-DEE6B16F5245", "type": "net.wrappy.asset.Coupon", "assetId": "5541FECC-89D6-45D1-A549-67CC76990304", "name": "Happy Meal", "value": 100, "reason": "", "expiryDate": 1563465883456, "issuedDate": 1560873883456, "issuedBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "issuer": "BF8A4929-4EDD-43BC-9E7E-2C719E183099", "status": "ACTIVE", "owner": "6D:85:D4:2C:30:C1:42:C8:A3:85:FF:CF:ED:A3:0D:2E:E1:75:07:DA", "createdDate": 1560873883507, "createdBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "updatedAt": 1560915230832, "updatedBy": "2A380F7A-5997-4A4B-9850-29499EDA755B" } }
Note	"filter" values are "ALL", "ACTIVE", "DEACTIVATED", "USED", "SETTLED"

Service Store: List Coupon

Authorization	Bearer (store)
Request Type	POST
Endpoint	/store/coupon/list
Request	{ "filter": "ALL" }
Response	{ "id": "08DCF9D2-7C06-4A16-83C6-DEE6B16F5245", "type": "net.wrappy.asset.Coupon", "assetId": "5541FECC-89D6-45D1-A549-67CC76990304", "name": "Happy Meal", "value": 100, "reason": "", "expiryDate": 1563465883456, "issuedDate": 1560873883456, "issuedBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "issuer": "BF8A4929-4EDD-43BC-9E7E-2C719E183099", "status": "ACTIVE", "owner": "6D:85:D4:2C:30:C1:42:C8:A3:85:FF:CF:ED:A3:0D:2E:E1:75:07:DA", "createdDate": 1560873883507, "createdBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "updatedAt": 1560915230832, "updatedBy": "2A380F7A-5997-4A4B-9850-29499EDA755B" }
Note	"filter" values are "ALL", "USED", "SETTLED"

Store: List Redeemer (User)

Authorization	Bearer (Store)
Request Type	GET
Endpoint	/user/redeemer/list
Request	
Response	{ "code": 100, "description": "SUCCESS", "date": "2019-05-03T13:21:12.257Z", "data": { "classification": "net.wrappy.transaction.Redeemer", "_id": "85F831DB-87AB-47B9-8C8B-E3C49D873237", "_rev": "1-d7d488e0db660f2f5fcd898f19430fdd", "store": "82C84907-AC8E-4E7D-AB60-90F72FD37EBE", "user": "7C6E111A-18DD-441B-8BB2-A459EB121246", "firstTransaction": "2019-06-24T08:42:54.247Z", "lastTransaction": "2019-06-24T08:42:54.247Z" } }
Note	

Provider: List User

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/user/list
Request	{ "filter": "ALL" }
Response	{ "{{ "id": "719051EF-21E8-4D5B-94B3-BC8COD22B681", "type": "net.wrappy.participant.ServiceUser", "userType": "CONSUMER", "wallet": { "coupon": { "activeBalance": 1000, "deactivatedBalance": 0, "expired": 0, "input": 1200, "output": 200, "type": "net.wrappy.asset.CouponWallet" }, "global": { "balance": 0, "type": "net.wrappy.asset.GlobalWallet" }, "type": "net.wrappy.asset.ServiceWallet" }, "status": "ACTIVE", "peer": "BF8A4929-4EDD-43BC-9E7E-2C719E183099", "name": "John Doe", "username": "john@64AA9799-DF84-4D24-988A-B3C2BABE70D1", "password": "\$2b\$12\$xVsHKORlg364TtAWTNZ1Qe9BzzTvQpP63G2KPuILCGUNmBBgjol/C", "fingerprint": "6D:85:D4:2C:30:C1:42:C8:A3:85:FF:CF:ED:A3:0D:2E:E1:75:07:DA", "createdDate": 1560873783287, "createdBy": "71:BC:A4:B5:C6:9C:36:E0:A3:2A:25:9B:AE:1B:8F:B6:A1:E9:62:58", "updatedDate": 1560873783287, "updatedBy": "71:BC:A4:B5:C6:9C:36:E0:A3:2A:25:9B:AE:1B:8F:B6:A1:E9:62:58" }} }
Note	"filter" values are "ALL", "", "USER", "STORE"

Service User: Balance

Authorization	Bearer (User)
Request Type	GET
Endpoint	/user/coupon/balance
Request	
Response	{ "code": 100, "description": "SUCCESS", "date": "2019-05-03T14:31:08.332Z", "data": { "activeBalance": 1000, "deactivatedBalance": 500, "expired": 1500, "input": 1500, "output": 500 } }
Note	

Provider: Transaction History

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/transaction/history
Request	{ "dateFrom": "2019-05-03T12:49:09.112Z", "dateTo": "2019-05-04T12:52:13.308Z" }
Response	[[{"classification": "net.wrappy.transaction.History", "_id": "F9C79BD6-0FFE-4489-9DF6-825138D9A645", "_rev": "1-6c414c98bc19588d4927ebcbde442560", "id": "F2839F25-891A-4F67-9160-665B6D317544", "coupon": "B3C88F81-4280-4B05-B84F-1F5B8CD149FF", "type": "ISSUE", "peer": "F2839F25-891A-4F67-9160-665B6D317544", "date": "2019-06-24T11:38:25.563Z" }]
Note	Date will use the UTC time format (ex. "YYYY-MM-DDTHH:mm:ssZ")

Service User: Transaction History

Authorization	Bearer (User)
Request Type	POST
Endpoint	/user/transaction/history
Request	{ "dateFrom": "2019-05-03T12:49:09.112Z", "dateTo": "2019-05-04T12:52:13.308Z" }
Response	[[{"classification": "net.wrappy.transaction.History", "_id": "F9C79BD6-0FFE-4489-9DF6-825138D9A645", "_rev": "1-6c414c98bc19588d4927ebcbde442560", "id": "F2839F25-891A-4F67-9160-665B6D317544", "coupon": "B3C88F81-4280-4B05-B84F-1F5B8CD149FF", "type": "ISSUE", "peer": "F2839F25-891A-4F67-9160-665B6D317544", "date": "2019-06-24T11:38:25.563Z" }]
Note	Date will use the UTC time format (ex. "YYYY-MM-DDTHH:mm:ssZ")

Provider: Coupon Info

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/coupon/info
Request	{ "coupon": "1889F607-4FFA-4E53-AEC9-6CFAF89BF9AC" }
Response	{ "id": "1889F607-4FFA-4E53-AEC9-6CFAF89BF9AC", "type": "net.wrappy.asset.Coupon", "assetId": "5541FECC-89D6-45D1-A549-67CC76990304", "name": "Happy Meal", "value": 100, "reason": "", "expiryDate": 1563504876993, "issuedDate": 1560912876993, "issuedBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "issuer": "BF8A4929-4EDD-43BC-9E7E-2C719E183099", "status": "ACTIVE", "owner": "A21DCB43-D4D9-42E4-99D0-D7CD21254B29", "createdDate": 1560912877073, "createdBy": "2A380F7A-5997-4A4B-9850-29499EDA755B", "updatedAt": 1560915230877, "updatedBy": "2A380F7A-5997-4A4B-9850-29499EDA755B" }
Note	

User: Coupon Info

Authorization	Bearer (User)
Request Type	POST
Endpoint	/user/coupon/info
Request	{ "coupon": "C9BBDUM7KWJV82RRMD" }
Response	{ "id": "1889F607-4FFA-4E53-AEC9-6CFAF89BF9AC", "type": "net.wrappy.asset.Coupon", "assetId": "5541FECC-89D6-45D1-A549-67CC76990304", "name": "Happy Meal", "value": 100, "reason": "", "expiryDate": 1563504876993, "issuedDate": 1560912876993, "issuedBy": "77:08:36:F8:A3:A8:4E:69:77:F0:FF:5A:2E:3A:69:BD:A3:B5:3F:DA", "issuer": "BF8A4929-4EDD-43BC-9E7E-2C719E183099", "status": "ACTIVE", "owner": "A21DCB43-D4D9-42E4-99D0-D7CD21254B29", "createdDate": 1560912877073, "createdBy": "2A380F7A-5997-4A4B-9850-29499EDA755B", "updatedAt": 1560915230877, "updatedBy": "2A380F7A-5997-4A4B-9850-29499EDA755B" }
Note	

Service Provider: Update Profile

Authorization	Bearer (Provider)
Request Type	POST
Endpoint	/provider/update
Request	<pre>{ "name": "FullName", "password": "mypass", "gender": "MALE", "address": { "addressLine1": "254 Bellview Apartment ", "addressLine2": "3rd Street 4th Avenue ", "city": "Los Angeles", "state": "California", "zip": "5058800", "country": "USA" }, "contact": { "email": "xxx@wrapious.hk", "mobile": "+852000000", "phone": "+852888888" } }</pre>
Response	<pre>{ "code": 100, "description": "SUCCESS", "date": "2018-12-17T04:20:14.647Z", "data": "2708392A-666C-4392-8A15-965A64034FCE" }</pre>
Note	Supports partial sectional update.

Service User: Update Profile

Authorization	Bearer (User)
Request Type	POST
Endpoint	/user/update
Request	<pre>{ "name": "Fullname", "password": "mypass", "gender": "MALE", "address": { "addressLine1": "254 Bellview Apartment ", "addressLine2": "3rd Street 4th Avenue ", "city": "Los Angeles", "state": "California", "zip": "5058800", "country": "USA" }, "contact": { "email": "xxx@wrapious.hk", "mobile": "+852000000", "phone": "+852888888" } }</pre>
Response	<pre>{ "code": 100, "description": "SUCCESS", "date": "2018-12-17T04:20:14.647Z", "data": "2708392A-666C-4392-8A15-965A64034FCE" }</pre>
Note	Supports partial sectional update.