



CMT Mobile API [Internal Only]

v1.1.17

Confidential

TABLE OF CONTENTS

CHANGE REQUEST REFERENCE	5
DOCUMENT SUMMARY	5
DOCUMENT CHANGE HISTORY.....	5
GENERAL INFORMATION	8
OVERVIEW	8
AUDIENCE	8
GETTING STARTED WITH THE API	8
DATES/TIMES.....	8
CURRENCY CODES	8
AMOUNTS	8
INTEGERS	8
COMMUNICATION OVERVIEW	9
TRANSPORT.....	9
HTTP RESPONSE CODES	9
HTTP RESPONSE SUB-CODES.....	9
AUTHENTICATION, AUTHORIZATION	10
INTRODUCTION	10
AUTHENTICATION	10
<i>Sample Header</i>	10
AUTHORIZATION.....	10
API RESOURCES	11
REGISTRATION RESOURCE	11
AUTHENTICATION RESOURCE	11
ACCOUNT RESOURCE	11
PAIRING RESOURCE.....	11
TRIP RESOURCE	11
TOKENIZE RESOURCE.....	11
AUTHORIZATION RESOURCE	11
VERSION RESOURCE	11
SUPPORT RESOURCE.....	11
HISTORY RESOURCE	11
REGISTRATION RESOURCE.....	12
SUMMARY	12
POST /REGISTRATION	13
<i>Resource URL</i>	13
GET /REGISTRATION/CONFIRM/:EMAILADDRESS/:CONFIRMATIONTOKEN	15
<i>Resource URL</i>	15
AUTHENTICATION RESOURCE	16
SUMMARY	16
GET /AUTH	17

<i>Resource URL</i>	17
GET /AUTH/PHONE/CONFIRM	18
<i>Resource URL</i>	18
POST /AUTH/PHONE/CONFIRM/{CONFIRMATIONTOKEN}	19
<i>Resource URL</i>	19
POST /AUTH/PHONE/VALIDATE	20
<i>Resource URL</i>	20
ACCOUNT RESOURCE	21
SUMMARY	21
GET ACCOUNT/	22
<i>Resource URL</i>	22
<i>Example Request (GET)</i>	22
PUT ACCOUNT/	24
<i>Resource URL</i>	24
GET ACCOUNT/ADDRESSES.....	26
<i>Resource URL</i>	26
POST ACCOUNT/ADDRESSES	28
<i>Resource URL</i>	28
GET ACCOUNT/ADDRESSES/:ADDRESSID	30
<i>Resource URL</i>	30
PUT ACCOUNT/ADDRESSES/:ADDRESSID	32
<i>Resource URL</i>	32
DELETE ACCOUNT/ADDRESSES/:ADDRESSID	34
<i>Resource URL</i>	34
POST ACCOUNT/PASSWORD.....	35
<i>Resource URL</i>	35
POST ACCOUNT/:EMAILADDRESS/PASSWORD/RESET	36
<i>Resource URL</i>	36
PAIRING INITIALIZATION RESOURCES	37
POST /INIT/PAIRING	38
<i>Resource URL</i>	38
POST /INIT/PAIRING/EXTERNAL/COF	40
<i>Resource URL</i>	40
DELETE /INIT/PAIRING/:PAIRINGTOKEN	43
<i>Resource URL</i>	43
PUT /INIT/PAIRING/:PAIRINGTOKEN	44
<i>Resource URL</i>	44
CARD ON FILE RESOURCES.....	46
GET /COF	47
<i>Resource URL</i>	47
POST /COF	48
<i>Resource URL</i>	48
DELETE /COF/:COFID	49
<i>Resource URL</i>	49
TRIP RESOURCE	50
SUMMARY	50
GET /TRIP/:PAIRINGTOKEN	51

<i>Resource URL</i>	51
TOKENIZE RESOURCE	54
SUMMARY	54
POST /TOKENIZE	55
<i>Resource URL</i>	55
DELETE /TOKENIZE/:CARDTOKEN	57
<i>Resource URL</i>	57
<i>Example Request (DELETE)</i>	57
<i>PUT Data Response (JSON)</i>	57
AUTHORIZATION RESOURCE	58
SUMMARY	58
POST /PAIRING/:PAIRINGTOKEN/AUTHORIZE	59
<i>Resource URL</i>	59
SUPPORT RESOURCE	61
SUMMARY	61
POST /SUPPORT	62
<i>Resource URL</i>	62
VERSION RESOURCE	63
SUMMARY	63
GET /VERSION	64
<i>Resource URL</i>	64
HISTORY RESOURCE	65
SUMMARY	65
GET /ACCOUNT/HISTORY	66
<i>Resource URL</i>	66
APPENDIX A	69
TOKENIZE RESPONSE CODES	69
APPENDIX B	70
MOBILE OPERATING SYSTEM CODES	70

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Document Change History

Date of Change	Version	Reason for Change	Summary of Change	Author
November 1, 2012	1.0.1	Initial Draft		J. Backof
November 13, 2012	1.0.2	Documentation Updates	<p>Changed format of reponse object for POST,PUT,DELETE.</p> <p>Updated Authentication section w/ more information about oauth impl.</p> <p>Added Session Management description.</p> <p>Added general information & formats.</p> <p>Added Link Resource.</p> <p>Updated Precog resource based on recent documentation changes. Timestamps are now 8601</p>	J. Backof
November 16, 2012	1.0.3	Precog Updates	<p>Added actionType and action to features for precog.</p> <p>Made the init non required on precog request</p> <p>Removed message and allowed from feature response.</p>	J. Backof
November 20, 2012	1.0.4	General Updates	Added phoneNumber field	J. Backof
January 9, 2013	1.0.5	Auth Changes	<p>Changed Oauth to support oauth_token and token_secret used for authentication.</p> <p>Removed references to account id as this now derived from the</p>	J. Backof

			<p>oauth_token. Changed "accounts" resource to "account"</p> <p>Changed "auth" resource to return oauth_token and oauth_token_secret on successful login</p>	
January 22, 2013	1.0.6	Precog Changes	<p>Removed init from response. HTTP Status indicates success/failure of precog message</p> <p>Minor structural changes</p>	J. Backof
March 1, 2013	1.0.7	Precog Updates	Added alert, interval and updated example	J. Backof
May 7, 2013	1.0.8	Account and COF Updates	Added accountId to the account resource. Added card on file resources	J. Backof
May 7, 2013	1.0.9	COF Updates	Fixed field description, Added tokenize resource and authorize resource	J. Backof
May 17, 2013	1.0.10	Profile Updates	Added new profile fields to support default COF and tip amounts	J. Backof
June 12, 2013	1.0.11	Added new pairing functionality	Added callback url, default tip percentages and tip amounts to pairing resources. Added update pairing.	J. Backof
July 2, 2013	1.0.12	Updated exceptions	Updated error handling, added autoPay field to account and registration	M. Dalen
July 19, 2013	1.0.13	Updated pairing authorization resource	Removed fields from pairing authorization resource	M. Dalen
July 22, 2013	1.0.14	Trip resource	Added trip data resource.	M. Dalen
July 24, 2013	1.0.15	Card on file, trip resource, tokenization updates	Card on file creation now returns the id of the created card. Trip data now includes a total field. Card on file token update resource has been removed. Error codes returned by the tokenization and card authorization resources have been revamped.	M. Dalen
Aug. 7, 2013	1.0.16	Update password resource	Added ability to update password, registration confirmation	M. Dalen
Aug. 8, 2013	1.0.17	Reset password resource	Added ability to reset password	M. Dalen
Aug. 12, 2013	1.0.18	Fixed reset password resource	Reset password resource may now be called while not logged in.	M. Dalen
Aug. 26, 2013	1.0.19	Added error code to trip data resource	Error code 103 will notify that pairing has failed	M. Dalen
Aug. 30, 2013	1.1.0	Update password resource	Changed way parameters are passed to update password resource	M. Dalen
Oct. 29, 2013	1.1.1	Pairing initialization resources	Added pairing initialization resources which trigger acknowledgements from the vehicle; updated trip data resource to handle acknowledgements	M. Dalen
Feb. 6, 2014	1.1.2	History, Support, and Version resources	Added history, support, and version resources; added Mobile information fields to pairing requests	M. Dalen
Feb. 13, 2014	1.1.3	History format	Changed format of history resource	M. Dalen

			to mirror Callbacks and Trip resource.	
March 5, 2014	1.1.4	Account update	Added phone to the list of fields in the account resources	M. Dalen
July 23, 2014	1.1.5	Fixed typos		M. Dalen
April 1, 2015	1.1.6	App version	- Added app version to auth request - Added app version conflict error code to authenticate and pairing resources	M. Dalen
April 2, 2015	1.1.7	SMS Validation	- Added SMS validation resources to Auth resource	M. Dalen
April 10, 2015	1.1.8	Deprecated	Removed deprecated resources	M. Dalen
June 3, 2015	1.1.9	Trip fields	Added accessFee and lastFour fields to the trip resource	M. Dalen
June 5, 2015	1.1.10	Last four field	Added lastFour field to pairing resource	M. Dalen
June 10, 2015	1.1.11	Time Zone	Changed timestamps in trip resource to local time	M. Dalen
June 16, 2015	1.1.12	Trip Request Number	Added trip request number to pairing requests	M. Dalen
July 6, 2015	1.1.13	Fixed errors	Fixed errors in tokenize, auth resources	M. Dalen
July 17, 2015	1.1.14	Lat/lon fields	Added lat and lon to trip resource for Arro only	M. Dalen
Aug 18, 2015	1.1.15	Device name	Added deviceName to /init/pairing resource for Arro only	M. Dalen
Sept 14, 2015	1.1.16	End-of-trip payment	Added error codes for card declines and processor errors at trip end	M. Dalen
Sept. 22, 2015	1.1.17	Tip incentive field	Added tip incentive field to pairing request	M. Dalen

General Information

Overview

CMT's Mobile API provides programmatic access to CMT's Mobile Middleware services. These services include robust profile storage including preferences, address information and card on file storage. CMT's Mobile Middleware also accesses CMT's proprietary "precog" features for traffic management, e-hailing and intelligent dispatch.

Audience

The audience for this document is typically an application developer familiar with RESTful services, JSON and/or XML. Developers should also be familiar with oauth and/or general request signing techniques.

Getting Started with the API

To get started with the API, a developer must obtain credentials from CMT for authentication. Once authenticated, developers can access resources using standard RESTful calls. CMT prefers that developers use JSON as the message format, but XML is also supported.

The Mobile API was designed to integrate directly with mobile devices and was not built for use in server to server applications. If you need to communicate directly with CMT systems outside of a mobile application, please contact CMT as there may be a more appropriate API available.

Dates/Times

All optional dates should be passed in as the [ISO 8601](#) date format, YYYY-MM-DDTHH:mm:ss+ UTC Offset. (eg. 2012-07-16T13:24:00+0000 is 1:24 pm on July 16, 2012 UTC).

Currency Codes

The currency codes used are from the standard [ISO 4217 Currency Codes](#).

Amounts

Amounts do not include cents nor thousands delimiters. For a \$1,017.65 amount, 101765 is sent and the last 2 digits are assumed to be cents. All amounts are assumed to be in the currency code specified in the request. If a currency code is not given, USD is assumed to be the currency.

Integers

Integers are assumed to be a non-negative number unless otherwise stated.

Communication Overview

Accessing CMT's Mobile API is done via a direct connection from mobile device.

Transport

All resources support both XML or JSON and all communications are over SSL (HTTPS).

HTTP Response Codes

The following table lists the possible http response codes returned by the CMT Mobile API and their corresponding description.

Code	Description
200	Request processed successfully. Check responseCode field for additional status indicators.
201	Creation request processed successfully. 201 is typically returned on a POST request to create a resource.
400	Message format exception. This is typically returned when the message format is incorrect. Check the latest API docs.
401	Unauthorized. The response code is returned if: <ul style="list-style-type: none">- OAuth authentication failure (could be an expired token)
403	Forbidden. Developers will receive this response code if they try to access a resource without proper authorization.
500	Server Error. Retry request.

HTTP Response Sub-Codes

The following table lists common sub-codes returned by all resources.

Code	Description
446	Validation exception. See response message.
444	Deserialization error. See response message.
443	Persistence error. See response message.
440	Unexpected error. See response message and contact CMT.

Authentication, Authorization

Introduction

Each request to the CMT Mobile API requires authentication. CMT employs a signature authentication strategy based on oauth 1.0a.

Authentication

To authenticate to the CMT Mobile API, implement or download a client based on oauth 1.0a. More information on oauth can be found at <http://oauth.net> and for information on third party resources and libraries, visit:

<http://oauth.net>
<http://oauth.net/code/>
<http://hueniverse.com/oauth/guide/authentication/>

Once your oauth client is in place, you will be provided an oauth consumer key and oauth consumer secret key. Please do not share your secret key with anyone and obfuscate any reference to this key in your libraries.

Field	Description
OAuth Consumer Key	Unique key which grants developers access to specific resources and fleets.
OAuth Consumer Secret Key	Private key issued to developers which is used in the hashing algorithm. See below.
OAuth Token	A token used for this session. Registration and Login do not require a valid OAuth Token. Developers will receive a valid token when a successful call is made to the /auth resource. This token expires and must be renewed after a set period of time.
OAuth Token Secret	The OAuth Token Secret is supplied by CMT on a successful Auth and must be used to sign all subsequent requests made by the client.

Sample Header

Below is a sample header request for an Mobile API oauth request.

```
request: account/
Accept:[application/json]
Authorization:[OAuth oauth_consumer_key="api-consumer-1", oauth_nonce="-
2277426177509978136", oauth_signature="5PICyq0XvXbwS2Fv1AvMetaTxM0%3D",
oauth_signature_method="HMAC-SHA1", oauth_timestamp="1352825875", oauth_token="
ZT1hYzE1ZWmtZDMYny00ZjFhLWJhNmQtMThiZmU2OGViNWJk", oauth_version="1.0"]
X-CMT-SessionToken:[MWZmNDcwNzQtZTMzZC00NjExLWEwMTItNTQ4OGNiYWVmOTUy]
Content-Type:[application/json]
```

Authorization

Once a developer is properly authenticated to the CMT Mobile API, their credentials will be authorized for each resource request. If a developer is unauthorized to access a particular resource, a HTTP status of 403 (Forbidden) will be returned. Developers will also receive a 403 Status for accessing a resource which requires an OAuth token.

API Resources

Registration Resource

The Registration resource provides a mechanism for developers to register user accounts with CMT.

Authentication Resource

Once an account is created and verified via email, users will be able to authenticate to the Mobile API. An oauth token is returned for that user and must be presented in all subsequent resource requests.

Account Resource

The Accounts resource provides developers access to the user's account information including preferences, addresses and card on file data.

Pairing Resource

The Pairing Resource provides access to CMT's pairing functionality for in-vehicle payment and trip reporting.

Trip Resource

The Trip resource provides access to information on trips made through the RideLinQ pairing process.

Tokenize Resource

The Tokenize resource provides a mechanism to store credit card on file information.

Authorization Resource

The Authorization resource provides access to CMT's payment authorization services.

Version Resource

The Version resource returns the current version of the RideLinQ app for a given Mobile OS.

Support Resource

The Support resource allows users to submit feedback or support requests, which are then emailed to a RideLinQ support contact.

History Resource

The History resource allows users to retrieve a list of recent trips.

Registration Resource

Summary

The Registration resource provides mechanisms to register and confirm the registration of a new Mobile API account.

Resource	Description
POST /registration	Registers a user in the Mobile API middleware
GET /registration/confirmation	Confirms a Mobile API Registration

POST /registration

Registers a user with the Mobile API middleware.

Resource URL

Production: <https://mobile.cmtapi.com/v1/registration>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/registration>

Request Field Description

Field	DataType	Size	Required	Notes
email	String	255	Y	Email address associated with the account (also the login)
password	String	100	Y	Password for the registration
firstName	String	35	Y	First name on the account
lastName	String	35	Y	Last name on the account
phone	String	50	N	Phone Number of the mobile device
twitterId	String	255	N	Used to link to a twitter account
facebookId	String	255	N	Used to link to a facebook account
linkedInId	String	255	N	Used to link to a linkedIn account
language	String	16	N	Language used. Defaults to en-us
autoPay	Boolean		N	If true, trips will auto-pay by default

Response Field Description

Field	DataType	Size	Required	Notes
responseCode	Integer		Y	See Appendix for list of sub codes
message	String	255	N	Detailed message

Error Sub-codes (HTTP 400)

Code	Description
447	Existing Account Exception
445	Unauthorized

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/registration>

Request (JSON)

```
{
  "email": "test@cmtnyc.com",
  "lastName": "Test",
  "firstName": "User",
  "phone": "302-322-3456",
  "password": "filofaff",
  "language": "en-us",
  "autoPay": true
}
```

Successful Response (JSON)

HTTP Status: 201 (Created)

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{  
    "responseCode":444,  
    "message":"Invalid Email Address"  
}
```

GET /registration/confirm/:emailAddress/:confirmationToken

Confirms an existing registration for a user.

Resource URL

Production: <https://mobile.cmtapi.com/v1/registration/confirm/:emailAddress/:confirmationToken>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/registration/confirm/:emailAddress/:confirmationToken>

URL Field Description

Field	DataType	Size	Required	Notes
emailAddress	String	255	Y	Email address of the user
confirmationToken	String	255	Y	Generated token for account confirmation

Error Sub-codes (HTTP 400)

Code	Description
441	Account not found
444	Invalid confirmation token

Example Request (GET)

GET URL: <https://mobile.cmtapi.com/v1/registration/confirm/test@cmtyc.com/sda79qdfskue23darfdseFsd9I88w21>

Successful Response (JSON)

HTTP Status: **200** (Success)

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "responseCode":444,
  "message":"Invalid confirmation token."
}
```

Authentication Resource

Summary

This resource authenticates users in the Mobile API middleware. Note that the OAuth Token and OAuth Token secret are returned on this method. These values must be used to authentication and sign all subsequent requests (See Authentication section above).

Resource	Description
GET /auth	Authenticates a Mobile API User and provides oauth credentials for subsequent requests.

GET /auth

Authenticates a Mobile API User

Resource URLProduction: <https://mobile.cmtapi.com/v1/auth>Sandbox: <https://mobile-sandbox.cmtapi.com/v1/auth>**Parameter Field Description**

Field	DataType	Size	Required	Notes
emailAddress	UUID	255	Y	Email address of the user
password	String	255	Y	Password of the user
mobileOS	String	1	Y	MobileOS id of app (See Appendix B)
appVersion	String	255	Y	App version id in "X.X.X" format

Response Field Description

Field	DataType	Size	Required	Notes
oauthToken	String	255	Y	Token to be used on all subsequent resource calls.
oauthTokenSecret	String	255	Y	Token secret used to sign all subsequent resource calls.
oauthExpiresInSeconds	Integer	4	Y	Returns the number of seconds in which the oauth token will expire. Once the oauth token expires, developers will receive a 401 (unauthorized) and must authenticate again.

Error Sub-codes (HTTP 401)

Code	Description
417	Unable to create session token

Error Sub-codes (HTTP 400)

Code	Description
418	Undefined user name or password
419	Invalid username or password
420	Expired version

Example Request (GET)**GET URL:** <https://mobile.cmtapi.com/v1/auth?emailAddress=test@cmtyc.com&password=abcd12345x!>**Successful Response (JSON)**HTTP Status: **200 (Success)**

```
{
  "oauthToken": "ZTlhYzE1ZWtZDMYny00ZjFhLWJhNmQtMThtZmU2OGViNWJk",
  "oauthTokenSecret": "ZWU5MDcxZWUtMzgwZS00M2FiLWFKNjctMGQ2MmM5MzFlOWNl",
  "oauthExpiresInSeconds": 6460
}
```

Unsuccessful Response (JSON)HTTP Status: **400**

```
{
  "responseCode": 419,
  "message": "invalid username or password"
}
```

GET /auth/phone/confirm

Second step of two-step authentication. Confirms that phone for currently-logged-in user has been confirmed through SMS validation.

Resource URL

Production: <https://mobile.cmtapi.com/v1/auth/phone/confirm>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/auth/phone/confirm>

Response Field Description

Field	DataType	Size	Required	Notes
confirmed	Boolean		Y	Whether or not the user's phone has been confirmed.

Example Request (GET)

GET URL: <https://mobile.cmtapi.com/v1/auth/phone/confirm>

Successful Response (JSON)

HTTP Status: 200 (Success)

```
{
  "confirmed":true
}
```

Unsuccessful Response (JSON)

HTTP Status: 400

```
{
  "responseCode":441,
  "message":"Account not found"
}
```

POST /auth/phone/confirm/{confirmationToken}

Validates a phone number through a confirmation token.

Resource URL

Production: <https://mobile.cmtapi.com/v1/auth/phone/confirm/{confirmationToken}>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/auth/phone/confirm/{confirmationToken}>

Request URL Field Description

Field	DataType	Size	Required	Notes
confirmationToken	String	5	Y	The 5-digit number that was texted to the user's phone.

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/auth/phone/confirm/12345>

Successful Response (JSON)

HTTP Status: 200 (Success)

Unsuccessful Response (JSON)

HTTP Status: 400

```
{
  "responseCode": 441,
  "message": "Account not found"
}
```

POST /auth/phone/validate

Starts the phone number validation process by sending a text to the user's phone.

Resource URL

Production: <https://mobile.cmtapi.com/v1/auth/phone/validate>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/auth/phone/validate>

Request Query Field Description

Field	DataType	Size	Required	Notes
phone	String		Y	The user's phone number, formatted to E.164 specifications.

Error Sub-codes (HTTP 400)

Code	Description
451	Error sending SMS message
452	Phone number already bound to different RideLinQ account
453	Phone number has been banned from using RideLinQ

Example Request (POST)

POST URL: [https://mobile.cmtapi.com/v1/auth/phone/validate?phone="+12035551212](https://mobile.cmtapi.com/v1/auth/phone/validate?phone=)

Successful Response (JSON)

HTTP Status: 200 (Success)

Unsuccessful Response (JSON)

HTTP Status: 400

```
{
  "responseCode":441,
  "message":"Account not found"
}
```

Account Resource

Summary

This resource provides access to updating their account data and provides functionality to list, get, add, update and delete addresses for a Mobile API user. **Please note that all account resources require a valid oauth token to be passed.**

Resource	Description
GET account/	Retrieves an Account resource for the current user.
PUT account/	Updates an Account for the current user.
GET account/addresses	Gets a list of addresses for a Mobile API User
POST account/addresses	Creates a new address for a Mobile API User
GET account/addresses/:addressId	Gets an address for a Mobile API User
PUT account/addresses/:addressId	Updates an existing address for a Mobile API User
DELETE account/addresses/:addressId	Deletes an address for a Mobile API User
POST account/password	Changes the password for a Mobile API User
POST account/password/reset	Resets the password for a Mobile API User

GET account/

Gets the account data for a Mobile API Account.

Resource URL

Production: <https://mobile.cmtapi.com/v1/account/>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/>

Response Field Description

Field	DataType	Size	Required	Notes
accountId	String	255	Y	Account ID for customer
email	String	255	Y	Email address associated with the account (also the login)
firstName	String	35	Y	First name on the account
lastName	String	35	Y	Last name on the account
twitterId	String	255	N	Used to link to a twitter account
facebookId	String	255	N	Used to link to a facebook account
linkedInId	String	255	N	Used to link to a linkedIn account
phone	String	255	N	The phone number associated with the account
accountStatus	Integer		Y	Status of the account – See Appendix A for status codes
defaultCardOnFileId	String	255	N	The default card on file to use for credit card transactions.
defaultTipPercentage	Integer		N	The default tip percentage (values between 0 and 200);
defaultTipAmount	Double		N	The default tip amount to be used in the transaction. Please note that the above will be combined at authorization.
autoPay	Boolean		N	If true, trips will auto-pay by default

Error Sub-codes (HTTP 400)

Code	Description
442	Account not found

Example Request (GET)

GET URL: <https://mobile.cmtapi.com/v1/account>

Successful Response (JSON)

HTTP Status: **200 (Success)**

```
{
  "accountId": "78260915-c622-4edf-a2e9-c3ccd620355b",
  "email": "test@cmtnyc.com",
  "firstName": "Test",
  "lastName": "User",
  "twitterId": "TWITID",
  "accountStatus": 0,
  "defaultCardOnFileId": "13487915-c923-4f5t-a2e9-c3ccd643c6732",
  "defaultTipPercentage": 20,
  "defaultTipAmount": 1.00
}
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{  
    "responseCode":442,  
    "message":"Account not found"  
}
```

PUT account/

This resource provides developers a method to update Mobile API account information.

Resource URL

Production: <https://mobile.cmtapi.com/v1/account/>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/>

Request Field Description

Field	DataType	Size	Required	Notes
accountId	String	255	Y	Account ID for customer
email	String	255	Y	Email address associated with the account (also the login)
firstName	String	35	Y	First name on the account
lastName	String	35	Y	Last name on the account
twitterId	String	255	N	Used to link to a twitter account
facebookId	String	255	N	Used to link to a facebook account
phone	String	255	N	The phone number associated with the account
linkedInId	String	255	N	Used to link to a linkedIn account
accountStatus	Integer		Y	Status of the account – See Appendix A for status codes
language	String	16	N	Language for the user. Defaults to "en-us"
defaultCardOnFileId	String	255	N	The default card on file to use for credit card transactions.
defaultTipPercentage	Integer		N	The default tip percentage (values between 0 and 200);
defaultTipAmount	Double		N	The default tip amount to be used in the transaction. Please note that the above will be combined at authorization.
autoPay	Boolean		N	If true, trips will auto-pay by default

Response Field Description

Field	DataType	Size	Required	Notes
responseCode	Integer		Y	See Appendix for list of sub codes
message	String	255	N	Detailed message

Error Sub-codes (HTTP 400)

Code	Description
442	Account not found

Example Request (PUT)

PUT URL: <https://mobile.cmtapi.com/v1/account/>

Request (JSON)

```
{
  "accountId": "78260915-c622-4edf-a2e9-c3ccd620355b",
  "email": "test@cmtnyc.com",
  "firstName": "Test",
  "lastName": "User",
  "twitterId": "TWITID",
  "accountStatus": 0,
  "language": "en-us",
  "defaultCardOnFileId": "13487915-c923-4f5t-a2e9-c3ccd643c6732",
  "defaultTipPercentage": 20,
  "defaultTipAmount": 1.00,
}
```



```
    "autoPay":true  
  }
```

Successful Response (JSON)

HTTP Status: **200** (Success)

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{  
  "responseCode":442,  
  "message":"Account not found"  
}
```

GET account/addresses

Gets a list of all addresses for a user.

Resource URL

Production: <https://mobile.cmtapi.com/v1/account/addresses>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/addresses>

Response Field Description

Field	DataType	Size	Required	Notes
addressId	UUID		Y	Unique identifier for an address
friendlyName	String	50	Y	A friendly name for the address (used for display purposes)
buildingName	String	20	N	Optional Name of the building the address is in
addressType	String	20	N	Optional Address Type (Home, Work, etc...)
fullAddress	String	255	Y	Full Address Information
ringCode	String	255	N	Used to ring the apartment or office when driver arrives.
latitude	Double		Y	Latitude of the address.
longitude	Double		Y	Longitude of the address.
favorite	Boolean		Y	Indicates if the address is a favorite or not. (true/false)

Error Sub-codes (HTTP 400)

Code	Description
442	Account not found

Example Request (GET)

GET URL: <https://mobile.cmtapi.com/v1/account/addresses>

Successful Response (JSON)

HTTP Status: **200 (Success)**

```
[{
  "addressId": "78260915-c622-4edf-a2e9-c3ccd62035ae",
  "friendlyName": "HOME",
  "addressType": "home",
  "buildingName": "test building",
  "latitude": 56.4333433,
  "longitude": -67.32323232,
  "fullAddress": "378 carrington lane, San Francisco, CA 18822",
  "ringCode": "1234",
  "favorite": true
},{
  "addressId": "3d3164b9-ed51-4b05-ad04-94f7e31c3040",
  "friendlyName": "work",
  "addressType": "work",
  "buildingName": "test work",
  "latitude": 36.4333433,
  "longitude": -87.32323232,
  "fullAddress": "5803 Kennett Pike, Suite C, Wilmington DE 19807",
  "favorite": false
}]
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{  
    "responseCode":442,  
    "message":"Account not found"  
}
```

POST account/addresses

Creates new addresses for a user.

Resource URL

Production: <https://mobile.cmtapi.com/v1/account/addresses>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/addresses>

Request Field Description

Field	DataType	Size	Required	Notes
friendlyName	String	50	Y	A friendly name for the address (used for display purposes)
buildingName	String	20	N	Optional Name of the building the address is in
addressType	String	20	N	Optional Address Type (Home, Work, etc...)
fullAddress	String	255	Y	Full Address Information
ringCode	String	255	N	Used to ring the apartment or office when driver arrives.
latitude	Double		Y	Latitude of the address.
longitude	Double		Y	Longitude of the address.
favorite	Boolean		Y	Indicates if the address is a favorite or not. (true/false)

Response Field Description

Field	DataType	Size	Required	Notes
addressId	String	100	Y	Unique Address ID

Error Sub-codes (HTTP 400)

Code	Description
442	Account not found

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/account/addresses>

Request (JSON)

```
{
  "friendlyName": "work",
  "addressType": "work",
  "buildingName": "test work",
  "latitude": 36.4333433,
  "longitude": -87.32323232,
  "fullAddress": "5803 Kennett Pike, Suite C, Wilmington DE 19807",
  "favorite": false
}
```

Successful Response (JSON)

HTTP Status: 201 (Created)

```
{
  "addressId": "3d3164b9-ed51-4b05-ad04-94f7e31c3040"
}
```

Unsuccessful Response (JSON)HTTP Status: **400**

```
{
  "responseCode":444,
  "message":"FriendlyName is required."
}
```

GET account/addresses/:addressId

Gets address information for a specific address

Resource URLProduction: <https://mobile.cmtapi.com/v1/account/addresses/:addressId>Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/addresses/:addressId>**URL Parameter Description**

Field	DataType	Size	Required	Notes
:addressId	String	100	Y	Unique identifier for an address

Response Field Description

Field	DataType	Size	Required	Notes
addressId	UUID		Y	Unique identifier for an address
friendlyName	String	50	Y	A friendly name for the address (used for display purposes)
buildingName	String	20	N	Optional Name of the building the address is in
addressType	String	20	N	Optional Address Type (Home, Work, etc...)
fullAddress	String	255	Y	Full Address Information
ringCode	String	255	N	Used to ring the apartment or office when driver arrives.
latitude	Double		Y	Latitude of the address.
longitude	Double		Y	Longitude of the address.
favorite	Boolean		Y	Indicates if the address is a favorite or not. (True/False)

Error Sub-codes (HTTP 400)

Code	Description
441	Address not found
442	Account not found

Example Request (GET)**POST URL:** <https://mobile.cmtapi.com/v1/account/addresses/3d3164b9-ed51-4b05-ad04-94f7e31c3040>**Successful Response (JSON)**HTTP Status: **200 (Success)**

```
{
  "addressId": "3d3164b9-ed51-4b05-ad04-94f7e31c3040",
  "friendlyName": "work",
  "addressType": "work",
  "buildingName": "test work",
  "latitude": 36.4333433,
  "longitude": -87.32323232,
  "fullAddress": "5803 Kennett Pike, Suite C, Wilmington DE 19807",
  "favorite": false
}
```

Unsuccessful Response (JSON)

HTTP Status: 400

```
{  
  "responseCode":442,  
  "message":"Account not found."  
}
```

PUT account/addresses/:addressId

Updates a user address.

Resource URLProduction: <https://mobile.cmtapi.com/v1/account/addresses/:addressId>Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/addresses/:addressId>**URL Parameter Description**

Field	DataType	Size	Required	Notes
:addressId	String	100	Y	Unique identifier for an address

Request Field Description

Field	DataType	Size	Required	Notes
addressId	UUID		N	Unique identifier for an address
friendlyName	String	50	Y	A friendly name for the address (used for display purposes)
buildingName	String	20	N	Optional Name of the building the address is in
addressType	String	20	N	Optional Address Type (Home, Work, etc...)
fullAddress	String	255	Y	Full Address Information
ringCode	String	255	N	Used to ring the apartment or office when driver arrives.
latitude	Double		Y	Latitude of the address.
longitude	Double		Y	Longitude of the address.
favorite	Boolean		Y	Indicates if the address is a favorite or not. (True/False)

Response Field Description

Field	DataType	Size	Required	Notes
responseCode	Integer		Y	See Appendix for list of sub codes
message	String	255	N	Detailed message

Error Sub-codes (HTTP 400)

Code	Description
441	Address not found
442	Account not found

Example Request (PUT)**POST URL:** <https://mobile.cmtapi.com/v1/account/addresses/3d3164b9-ed51-4b05-ad04-94f7e31c3040>**Request (JSON)**

```
{
  "addressId": "3d3164b9-ed51-4b05-ad04-94f7e31c3040",
  "friendlyName": "work",
  "addressType": "work",
  "buildingName": "test work",
  "latitude": 36.4333433,
  "longitude": -87.32323232,
  "fullAddress": "5803 Kennett Pike, Suite C, Wilmington DE 19807",
  "favorite": false
}
```


Successful Response (JSON)

HTTP Status: **200** (Success)

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "responseCode":442,
  "message":"Account not found."
}
```

DELETE account/addresses/:addressId

Deletes a user address.

Resource URL

Production: <https://mobile.cmtapi.com/v1/account/addresses/:addressId>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/addresses/:addressId>

URL Parameter Description

Field	DataType	Size	Required	Notes
:addressId	String	100	Y	Unique identifier for an address

Error Sub-codes (HTTP 400)

Code	Description
441	Address not found
442	Account not found

Example Request (DELETE)

DELETE URL: <https://mobile.cmtapi.com/v1/account/addresses/3d3164b9-ed51-4b05-ad04-94f7e31c3040>

Successful Response (JSON)

HTTP Status: **200** (Success)

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "responseCode":442,
  "message":"Account not found."
}
```

POST account/password

Changes the password for a user.

Resource URL

Production: <https://mobile.cmtapi.com/v1/account/password>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/password>

Request Field Description

Field	DataType	Size	Required	Notes
oldPassword	String	100	Y	The old password for the account
newPassword	String	100	Y	The new password for the account

Error Sub-codes (HTTP 400)

Code	Description
442	Account not found
419	Old password does not match password on file

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/account/password>

Request (JSON)

```
{
  "oldPassword": "password1",
  "newPassword": "password2"
}
```

Successful Response (JSON)

HTTP Status: **200 (Success)**

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "responseCode": 442,
  "message": "Account not found."
}
```

POST account/:emailAddress/password/reset

Resets the password for a user.

Resource URL

Production: <https://mobile.cmtapi.com/v1/account/:emailAddress/password/reset>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/:emailAddress/password/reset>

URL Field Description

Field	DataType	Size	Required	Notes
emailAddress	String	100	Y	The email address associated with the account

Error Sub-codes (HTTP 400)

Code	Description
442	Account not found

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/account/password/reset>

Successful Response (JSON)

HTTP Status: 200 (Success)

Unsuccessful Response (JSON)

HTTP Status: 400

```
{
  "responseCode":442,
  "message":"Account not found."
}
```

Pairing Initialization Resources

The Pairing Initialization Resources duplicate the functionality of the Pairing Resources, but with the additional feature of asynchronous confirmation of pairing, unpairing, and updating messages. All requests made through these resources should be considered in a pending state until a confirmation is received.

Resource	Description
POST /init/pairing	Pairs the e-hail app to a CMT vehicle.
DELETE /init/pairing/:pairingToken	Un-pairs the e-hail app from a CMT vehicle
PUT /init/pairing/:pairingToken	Updates current pairing data.

POST /init/pairing

Pairs an e-hail application to a vehicle for payment and trip collection and gets a pairing token (used in subsequent requests).

Resource URL

Production: <https://mobile.cmtapi.com/v1/init/pairing>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/init/pairing>

Request Field Description

Field	DataType	Size	Required	Notes
pairingCode	String	20	Y	Code to link with CMT
customerId	String	50	Y	Unique identifier for the mobile user (customer)
customerName	String	50	Y	Customer name for display
latitude	Double		Y	Latitude of device requesting the pairing token
longitude	Double		Y	Longitude of the device requesting the pairing token
callbackUrl	String	500	N	url used for callback features.
autoCompletePayment	Boolean		Y	Indicates if payment will occur automatically by the ehail provider (true) or if payment will be completed using the in-vehicle equipment (false).
autoTipPercentage	Integer		N*	Indicates the percentage tip automatically used. Valid ranges are 0 to 200. *autoTipPercentage and/or autoTipAmount is required if autoCompletePayment is enabled.
autoTipAmount	Double		N*	Indicates the amount tip automatically be used. Valid ranges are 0 to 200. *autoTipPercentage and/or autoTipAmount is required if autoCompletePayment is enabled.
mobileType	Integer		N	The operating system code for the mobile device used to pair. [See Appendix B]
mobilePlatformId	String		N	Built-in string representing the mobile device hardware type. Examples: "iPhone4,1" for iPhone 4S, "iPhone5,1" for iPhone 5 (GSM).
mobileOSVersion	String		N	Version of the operating system the mobile device is running. Example: "7.0.2"
mobileAppId	String		N	String representing the application being used to pair. Example: "Hailo", "RideLinQ"
mobileAppVersion	String		N	String representing the application version. Example: "1.0.2"

Response Field Description

Field	DataType	Size	Required	Notes
pairingToken	String	30	Y	Unique pairing token used in all subsequent requests.
pairingCode	String	10	Y	Returned pairing code.
medallion	String	20	Y	Medallion
tripId	Integer		Y	Trip Identifier
driverId	Integer		Y	Driver Identifier
timeoutSeconds	Long		Y	The time in seconds after which the request will be considered to have failed.

Error Sub-codes (HTTP 400)

Code	Description
101	The pairing code is invalid
102	Missing or invalid customer ID
103	Pairing code already in use
104	Invalid Customer Name
105	Invalid Lat/Lon
106	Invalid Callback URL
420	Expired app version

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/init/pairing>

Request (JSON)

```
{
  "pairingCode": "1234567",
  "customerId": "3231432232",
  "customerName": "Test Customer",
  "latitude": 78.342342,
  "longitude": -43.893454,
  "callbackUrl": "https://host.appcompany.com/faredata/",
  "autoCompletePayment": true,
  "autoTipPercentage": 25,
  "autoTipAmount": 0.0
}
```

Successful Response (JSON)

HTTP Status: **201 (Created)**

```
{
  "pairingToken": "dg76Jkil90hgsF3gfe67873DfgghJ",
  "pairingCode": "1234567",
  "medallion": "1N42",
  "tripId": 34,
  "driverId": 2342344,
  "timeoutSeconds": 240
}
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "code": 102,
  "description": "Missing or invalid customer ID"
}
```

POST /init/pairing/external/cof

Pairs an e-hail application to a vehicle for payment and trip collection and gets a pairing token (used in subsequent requests). This method allows the ehail provider to pass a card on file token with the request which will be used for preauthorization and payment.

Providers must inform the CMT development team in advance if they plan on making use of this resource.

Resource URL

Production: <https://mobile.cmtapi.com/v1/init/pairing/external/cof>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/init/pairing/external/cof>

Request Field Description

Field	DataType	Size	Required	Notes
medallion	String	20	N*	Unique identifier for the vehicle * NOTE: Either medallion/driverId or pairingCode must be specified in order to pair
driverId	String	20	N*	Hack license or driver id used in the pairing * NOTE: Either medallion/driverId or pairingCode must be specified in order to pair
pairingCode	String	7	N*	Pairing code for this trip * NOTE: Either medallion/driverId or pairingCode must be specified in order to pair
customerId	String	50	Y	Unique identifier for the mobile user (customer)
customerName	String	50	Y	Customer name for display
latitude	Double		Y	Latitude of device requesting the pairing token
longitude	Double		Y	Longitude of the device requesting the pairing token
callbackUrl	String	500	N	url used for callback features.
autoCompletePayment	Boolean		Y	Indicates if payment will occur automatically by the ehail provider (true) or if payment will be completed using the in-vehicle equipment (false).
autoTipPercentage	Integer		N*	Indicates the percentage tip automatically used. Valid ranges are 0 to 200. *autoTipPercentage and/or autoTipAmount is required if autoCompletePayment is enabled.
autoTipAmount	Double		N*	Indicates the amount tip automatically be used. Valid ranges are 0 to 200. *autoTipPercentage and/or autoTipAmount is required if autoCompletePayment is enabled.
cardOnFileId	String		Y	A token, created by the tokenization resource, representing the card on file to be used for preauthorization and payment.
market	String	5	N	A three-to-five digit code indicating which CMT market the vehicle is in. Defaults to NYC. (See Appendix B)
lastFour	String	4	N	The last four digits of the card on file
tripRequestNumber	String		N	The id number for the trip request (order)
tipIncentive	Double		N	Indicates the incentive amount to be added to the tip. The incentive cannot be changed by subsequent tip updates, and will be added to the values of autoTipPercentage or autoTipAmount.

Response Field Description

Field	DataType	Size	Required	Notes
pairingToken	String	30	Y	Unique pairing token used in all subsequent requests.
pairingCode	String	10	Y	Returned pairing code.
medallion	String	20	Y	Medallion
tripId	Integer		Y	Trip Identifier
driverId	Integer		Y	Driver Identifier
timeoutSeconds	Long		Y	The time in seconds after which the request will be considered to have failed.
deviceName	String		N*	The pimId associated with the referenced device. * Note: This value is returned for Arro users only

Error Sub-codes (HTTP 400)

Code	Description
101	The pairing code is invalid
102	Missing or invalid customer ID
103	Unable to pair with this driver/vehicle. Usually returned if the vehicle is not in a trip currently
104	Invalid Customer Name
105	Invalid Lat/Lon
106	Invalid Callback URL
107	Invalid driver. Driver specified is not in given vehicle.
108	Missing card on file id

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/init/pairing/external/cof>

Request (JSON)

```
{
  "medallion": "EH9009",
  "driverId": "9999",
  "customerId": "3231432232",
  "customerName": "Test Customer",
  "latitude": 78.342342,
  "longitude": -43.893454,
  "callbackUrl": "https://host.appcompany.com/faredata/",
  "autoCompletePayment": true,
  "autoTipPercentage": 25,
  "autoTipAmount": 0.0,
  "cardOnFileId": "57474e484f734d716c4e513172717358337a697a315076656452453d",
  "lastFour": "1111",
  "tripRequestNumber": "1111"
}
```

Successful Response (JSON)

HTTP Status: 201 (Created)

```
{
  "pairingToken": "dg76Jkil90hgsF3gfe67873DfgghJ",
  "pairingCode": "1234567",
  "medallion": "EH9009",
}
```

```
    "tripId":34,  
    "driverId":"9999",  
    "timeoutSeconds":240  
}
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{  
    "code":101,  
    "description":"missing or invalid customer id"  
}
```

DELETE /init/pairing/:pairingToken

Un-pairs an e-hail application from a CMT vehicle.

Resource URL

Production: <https://mobile.cmtapi.com/v1/init/pairing/:pairingToken>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/init/pairing/:pairingToken>

URL Parameters

Field	DataType	Size	Required	Notes
:pairingToken	String	100	Y	Pairing token received during the pairing process.

Response Field Description

Field	DataType	Size	Required	Notes
timeoutSeconds	Long		Y	The time in seconds after which the request will be considered to have failed.

Error Sub-codes (HTTP 400)

Code	Description
101	The pairing token is invalid
102	Missing or invalid customer id

Example Request (DELETE)

DELETE URL: <https://mobile.cmtapi.com/v1/init/pairing/dq76Jki90hqsF3qfe67873DfqghJ>

Successful Response (JSON)

HTTP Status: **200 (Success)**

```
{
  "timeoutSeconds":240
}
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "code":101,
  "description":"The pairing token is invalid"
}
```

PUT /init/pairing/:pairingToken

Augments the current pairing with updated auto-pay fields.

Resource URL

Production: <https://mobile.cmtapi.com/v1/pairing/dg76Jkil90hgsF3gfe67873DfgghJ>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/pairing/dg76Jkil90hgsF3gfe67873DfgghJ>

Request Field Description

Field	DataType	Size	Required	Notes
customerId	String	50	Y	Unique identifier for the mobile user (customer)
customerName	String	75	Y	Customer name for display
latitude	Double		Y	Latitude in degrees of device requesting the pairing token
longitude	Double		Y	Longitude in degrees of the device requesting the pairing token
callbackUrl	String	500	N	url used for callback features.
autoCompletePayment	Boolean		Y	Indicates if payment will occur automatically by the ehail provider (true) or if payment will be completed using the in-vehicle equipment (false).
autoTipPercentage	Integer		N*	Indicates the percentage tip automatically used. Valid ranges are 0 to 200. *autoTipPercentage and/or autoTipAmount is required if autoCompletePayment is enabled.
autoTipAmount	Double		N*	Indicates the amount tip automatically be used. Valid ranges are 0 to 200. *autoTipPercentage and/or autoTipAmount is required if autoCompletePayment is enabled.

Response Field Description

Field	DataType	Size	Required	Notes
timeoutSeconds	Long		Y	The time in seconds after which the request will be considered to have failed.

Error Sub-codes (HTTP 400)

Code	Description
102	Missing or invalid customer ID
104	Invalid Customer Name
105	Invalid Lat/Lon
106	Invalid callback URL
103	No data found for pairing token

Example Request (POST)

PUT URL: <https://mobile.cmtapi.com/v1/pairing/dg76Jkil90hgsF3gfe67873DfgghJ>

Request (JSON)

```
{
  "customerId": "321232322",
  "customerName": "Updated Customer",
  "latitude": 78.342342,
  "longitude": -43.893454,
  "callbackUrl": "https://host.appcompany.com/faredata/",
  "autoCompletePayment": true,
```

```
    "autoTipPercentage":0,  
    "autoTipAmount":10.35  
  
}
```

Successful Response (JSON)

HTTP Status: **200 (Success)**

```
{  
    "timeoutSeconds":240  
}
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{  
    "code":103,  
    "description":"No data found for pairing token"  
}
```

Card on File Resources

The card on file resources are used to manage the credit card tokens received from a Card on File provider.

Resource	Description
GET /cof	Gets all cards on file
POST /cof	Creates a new card on file
DELETE /cof/:cofid	Deletes a card on file

GET /cof

Retrieves all cards that are currently on file for this account.

Resource URL

Production: <https://mobile.cmtapi.com/v1/cof>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/cof>

Response Field Description

Field	DataType	Size	Required	Notes
cofId	String	50	Y	Unique identifier of the card on file
friendlyName	String	75	Y	Friendly Name of the card on file
token	String	60	Y	The token used to authorize
cardType	String	10	Y	The card type used in the transaction
lastFour	String	4	Y	The last four digits of the card

Error Sub-codes (HTTP 400)

Code	Description
442	Account not found

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/cof>

Successful Response (JSON)

HTTP Status: **200 (OK)**

```
[{
  "cofId": "8d6e3087-3c62-4e12-ac23-d811f3588e77",
  "friendlyName": "Chase Card",
  "token": "3242345rfdsgt345t4rfagret43534fegetw4r52qrfsdg425",
  "cardType": "VISA",
  "lastFour": "1111"
}, {
  "cofId": "b06b8072-a7db-44a3-8160-f53041f24681",
  "friendlyName": "Discover Card",
  "token": "3242345rfsdgy54tfghfjyuregetw4r52qrfsdg425",
  "cardType": "DISCOVER",
  "lastFour": "1231"
}]
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "code": 442,
  "description": "Account not found"
}
```

POST /cof

Creates a new card on file

Resource URL

Production: <https://mobile.cmtapi.com/v1/cof>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/cof>

Request Field Description

Field	DataType	Size	Required	Notes
friendlyName	String	75	Y	Friendly Name of the card on file
token	String	60	Y	The token used to authorize
cardType	String	10	Y	The card type used in the transaction
lastFour	String	4	Y	The last four digits of the card

Return Field Description

Field	DataType	Size	Required	Notes
cofId	String	50	Y	Id of the created card on file

Error Sub-codes (HTTP 400)

Code	Description
441	Card not found
442	Account not found

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/cof>

Request (JSON)

```
{
  "friendlyName": "Chase Card",
  "token": "3242345rfdsgt345t4rfagret43534fegetw4r52qrfsdg425",
  "cardType": "VISA",
  "lastFour": "1111"
}
```

Successful Response (JSON)

HTTP Status: 201 (Created)

Unsuccessful Response (JSON)

HTTP Status: 400

```
{
  "code": 442,
  "description": "Account not found"
}
```


DELETE /cof/:cofId

Deletes card on file

Resource URL

Production: <https://mobile.cmtapi.com/v1/cof/:cofId>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/cof/:cofId>

URL Parameters

Field	DataType	Size	Required	Notes
:cofId	String	100	Y	The id of the card on file

Error Sub-codes (HTTP 400)

Code	Description
441	Card not found
442	Account not found

Example Request (DELETE)

DELETE URL: <https://mobile.cmtapi.com/v1/cof/b06b072-a743-443a-3221-f54543ce451>

Successful Response (JSON)

HTTP Status: **200** (Success)

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "code":442,
  "description":"Account not found"
}
```

Trip Resource

Summary

The Trip resource provides access to trip data after a trip has been completed. **Please note that all trip resources require a valid oauth token to be passed.**

Resource	Description
GET /trip/{pairingToken}	Gets the trip details associated with the provided pairing token.

GET /trip/:pairingToken

This method is designed to retrieve trip data. In the case of a pairing initialization, once the vehicle returns a pairing acknowledgement, this resource will return a 200 success with only pairing details populated. In a pairing update initialization, the resource will return a 200 success with the relevant fields updated. Once the trip has ended, the json will be populated with trip data.

Resource URL

Production: <https://mobile.cmtapi.com/v1/trip/:pairingToken>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/trip/:pairingToken>

URL Parameters

Field	DataType	Size	Required	Notes
:pairingToken	String	250	Y	The token associated with the trip to be returned.

Response Field Description

Field	DataType	Size	Required	Notes
type	String	4	Y	Set to "TRIP" for tripData callbacks.
tripId	Integer		Y	The id of the trip.
driverId	Integer		Y	The driver id for the trip.
pairingToken	String		Y	The pairing token for the trip.
startTime	String		Y	The start time of the trip, in ISO 8601 format (See example request below)
endTime	String		Y	The end time of the trip, in ISO 8601 format
total	Integer		Y	The total cost of the trip, including fare, fareAtAlternateRate, extra, surcharge, tax, and tip.
fare	Integer		Y	The fare amount in cents at the initial rate class.
fareAtAlternateRate	Integer		Y	The fare amount in cents after a rate change (generally only has a value when going from rate 1 to 4).
extra	Integer		Y	Extra costs for the trip.
tip	Integer		Y	The tip amount for the trip.
surcharge	Integer		Y	The surcharge amount for the trip.
tax	Integer		Y	The tax amount for the trip.
rateAtTripStart	Integer		Y	The rate class at trip start.
rateAtTripEnd	Integer		Y	The rate class at trip end.
rateChangeTime	String		Y	The time, in ISO 8601 format, at which the rate class changed. Empty if no rate change.
distance	Double		Y	The distance of the trip.
autoCompletePayment	Boolean		Y	Indicates if payment will occur automatically by the ehail provider (true) or if payment will be completed using the in-vehicle equipment (false).
autoTipPercentage	Integer		Y	The automatically-set percentage used to calculate the tip.
autoTipAmount	Integer		Y	The automatically-set tip amount.
tollHistory	Array		Y	An array of any tolls included in the trip. Can be empty.
tollName	String			The name of the toll.
tollAmount	Integer			The amount of the toll.
customerId	String		Y	The internal id of the customer that has been paired with this trip
customerName	String		Y	The name of the customer which will be displayed on the taxi screen
lastFour	String		Y	The last four digits of the customer's credit card*

				Note: This field is only visible to Arro/TaxiHail users; when preauthorization is enabled, it will only appear after the trip has authorized.
accessFee	Integer		Y	The improvement surcharge for the trip* Note: This field is only visible to Arro/TaxiHail users
lat	Double		Y	The latitude of the vehicle* Note: This field is only visible to Arro/TaxiHail users
lon	Double		Y	The longitude of the vehicle* Note: This field is only visible to Arro/TaxiHail users

Error Sub-codes (HTTP 400)

Code	Description
441	Trip not found or has not ended yet
103	Trip was unable to pair with vehicle due to timing of pairing request
111	Trip has been unpaired
112	Trip has ended without sending pairing information
113	Pairing initialization request timed out
114	Credit card declined at trip end
115	System error processing payment at trip end

Example Request (GET)

GET URL: <http://mobile.cmtapi.com/v1/trip/MTM2NDFiYWItOGU2Yy00N2IxLTkzZDgtNzEyNGM1Y2YwMzM3>

Successful Response (JSON) – Pairing initialization

HTTP Status: 200 (Success)

```
{
  "driverId":90009,
  "autoCompletePayment":true,
  "autoTipAmount":5.0,
  "autoTipPercentage":10,
  "tripId":6,
  "pairingToken":"MTM2NDFiYWItOGU2Yy00N2IxLTkzZDgtNzEyNGM1Y2YwMzM3",
  "customerId":"customer@gmail.com",
  "customerName":"Sarah Conner"
}
```

Successful Response (JSON) – Trip ended

HTTP Status: 200 (Success)

```
{
  "startTime":"2015-06-10T10:07:27.000-04:00",
  "driverId":90009,
  "autoTipAmount":5.0,
  "autoTipPercentage":10,
  "tripId":6,
  "endTime":"2015-06-10T10:07:29.513-04:00",
  "pairingToken":"MTM2NDFiYWItOGU2Yy00N2IxLTkzZDgtNzEyNGM1Y2YwMzM3",
  "fare":400,
}
```

```
    "fareAtAlternateRate":0,  
    "tip":180,  
    "surcharge":0,  
    "tax":0,  
    "accessFee":0,  
    "rateChangeTime":"",  
    "distance":0.0,  
    "rateAtTripStart":1,  
    "rateAtTripEnd":1,  
    "tollHistory":[],  
    "type":"TRIP",  
    "lastFour":"1234",  
    "extra":0  
}
```

Unsuccessful Response (JSON)

HTTP Status: 400

```
{  
    "code":441,  
    "description":"Trip data not found"  
}
```

Tokenize Resource

Summary

The Tokenize resource provides a programmatic interface to create a token for the credit card information given. **Please note that all resources require a valid oauth key to be passed; they do not require token authentication. Additionally, the URL used is the *payment* host and not the *mobile* host (see below).**

Supported cards are American Express, Mastercard, Visa, Discover, Diner's Club, and JCB.

Resource	Description
POST /tokenize	Provides access to tokenize credit card data.
PUT /tokenize/:cardToken	Provides access to update tokenized credit card data.
DELETE /tokenize/:cardToken	Provides access to delete tokenized credit card data.

POST /tokenize

This method is designed to tokenize credit card data.

Resource URL

Production: <https://payment.cmtapi.com/v2/tokenize>

Sandbox: <https://payment-sandbox.cmtapi.com/v2/tokenize>

Request Field Description

Field	DataType	Size	Required	Notes
accountNumber	String	200	Y	Card account number
expiryDate	String	4	Y	Card expiration date in YYMM format
validateAccountInformation	Boolean			If true, a preauthorization is sent to verify the cardholder data to protect against fraud. The default is false.
cvv	String	8		Card verification value
zipCode	String	9		Either the 5 or 9 digit representation

Response Field Description

Field	DataType	Size	Required	Notes
responseCode	Integer		Y	See sub-codes below.
responseMessage	String	100	Y	Message description
cardType	String	16	Y	One of the following six values: AMERICAN_EXPRESS, VISA, JCB, DISCOVER, MASTERCARD, DINERS CLUB
lastFour	String	4	Y	Last four digits of the tokenized credit card number
cardOnFileToken	String	100	Y	Token to be used to call the service to use the saved card information

Success Sub-codes (HTTP 200)

Code	Description
1	Success

Error Sub-codes (HTTP 400)

Code	Description
601	Invalid fields: [See message for more details]
602	Invalid card type or card type not supported
603	Invalid data
604	Invalid CVV2
605	Invalid AVS
606	Invalid CVV2 and AVS
607	Declined if the validateAccountInformation flag was set to true and card was not able to be authorized.
608	Error processing request

Example Request (POST)

POST URL: <https://payment.cmtapi.com/v2/tokenize>

Request (JSON)

```
{
  "accountNumber": "8888888888",
  "expiryDate": "1504"
}
```

Successful Response (JSON)HTTP Status: **200 (Success)**

```
{
  "responseCode":1,
  "responseMessage":"Success",
  "cardType":"VISA",
  "lastFour":"1234",
  "cardOnFileToken":"abcdefghijklmnop123456"
}
```

Unsuccessful Response (JSON)HTTP Status: **400**

```
{
  "responseCode":601,
  "message":"Invalid card type or card type not supported"
}
```


DELETE /tokenize/:cardToken

This method is designed to delete tokenized credit card data.

Resource URL

Production: <https://payment.cmtapi.com/v2/tokenize/:cardToken>

Sandbox: <https://payment-sandbox.cmtapi.com/v2/tokenize/:cardToken>

Response Field Description

Field	DataType	Size	Required	Notes
responseCode	Integer		Y	See sub-codes below
responseMessage	String	100	Y	Message description

Success Sub-codes (HTTP 200)

Code	Description
1	Success

Error Sub-codes (HTTP 400)

Code	Description
601	Invalid fields: [See message for more details]
603	Invalid data
608	Error processing request

Example Request (DELETE)

DELETE URL: <https://payment.cmtapi.com/v2/tokenize/da43fdfsdfsdfs/>

PUT Data Response (JSON)

HTTP Status: **200 (Success)**

```
{
  "responseCode": 1,
  "responseMessage": "Success"
}
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "responseCode": 608,
  "message": "Error processing request"
}
```

Authorization Resource

Summary

The Authorization resource provides a mechanism to authorize credit card transactions for paired transactions. **Please note that all resources require a valid oauth key to be passed; they do not require token authentication. Additionally, the URL used is the *payment* host and not the *mobile* host (see below).**

Resource	Description
POST /pairing/:pairingToken/authorize	Authorizes payment by the included credit card for the total amount given, checking against trip data for the given pairing token.

POST /pairing/:pairingToken/authorize**Resource URL**Production: <https://payment.cmtapi.com/v2/pairing/:pairingToken/authorize>Sandbox: <https://payment-sandbox.cmtapi.com/v2/pairing/:pairingToken/authorize>**URL Parameters**

Field	DataType	Size	Required	Notes
:pairingToken	String	100	Y	Unique pairing token received during the pairing process.

Request Field Description

Field	DataType	Size	Required	Notes
totalInCents	Integer		Y	Total amount to be authorized. This amount will be paid to the operator/driver/fleet. Must match total amount reported in trip, including tip.
encryptionKeyVersion	Integer		N	Version of the key used in the encryption
encryptionToken	String	50	N	Send "CMT_PAYNET" encrypted (if encryption is not 0)
encryptionAlgorithm	Integer		N	0=None, 1=3DES
customerReferenceNumber	String	50	N	
eHailServiceFeeInCents	Integer		Y	The service fee charged by the e-hail provider. Set to 0 if you are not providing it to us.
currencyCode	String	5	N	Currency code for the transaction. Options are USD (default), GBP, EUR, and CAD.
accountNumber	String	200	Y (if cardOnFileToken is not set)	The primary account number for authorization
expiryDate	String	4	Y (if cardOnFileToken is not set)	The expiry date in YYMM format
cvv2	String	5	N	Card verification value
zipCode	String	9	N	Either the 5 or 9 digit representation
cardOnFileToken	String		Y (if accountNumber is not set)	Card on file token

Response Field Description

Field	DataType	Size	Required	Notes
tripId	Integer		Y	The trip associated with the authorization
totalInCents	Integer		Y	Total amount of the authorization
authorizationCode	String	8	Y	The authorization code
lastFour	String	4	Y	The last 4 digits of the credit card
cardType	String	10	Y	The card type used in the transaction
transactionId	Long			Unique identifier used to reference the authorization
responseCode	Integer			See sub-codes below.
message	String	100		Additional message on response

Success Sub-codes (HTTP 200)

Code	Description
1	Approved
2	Partial Approval

Error Sub-codes (HTTP 400)

Code	Description
601	Invalid fields: [See message for more details]
602	Invalid pairing token
603	Total amount does not match recorded amount for trip
604	Invalid CVV2
605	Invalid AVS
606	Unable to decrypt data
607	Declined
608	Error processing request

Example Request (POST)

POST URL: <https://payment.cmtapi.com/v2/pairing/dq76Jkil90hqsF3qfe67873DfqghJ/authorize>

Request (JSON)

```
{
  "totalInCents":5382,
  "ehailServiceFeeInCents":0,
  "accountNumber":"4111111111111111",
  "expiryDate":"1605",
  "cvv2":"142"
}
```

Successful Response (JSON)

HTTP Status: **200 (Success)**

```
{
  "tripId":1223,
  "authorizationCode":"AR32564",
  "lastFour":"1111",
  "cardType":"VISA",
  "transactionId":12345678901234,
  "responseCode":0,
  "message":"Approved"
}
```

Unsuccessful Response (JSON)

HTTP Status: **400**

```
{
  "responseCode":602,
  "message":"Invalid pairing token"
}
```

Support Resource

Summary

The Support resource allows RideLinQ users to submit feedback or support requests, which are emailed to a support contact.

Resource	Description
POST /support	Submits feedback or support to support-team@ridelinq.com.

POST /support

Resource URL

Production: <https://mobile.cmtapi.com/v1/support>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/support>

Request Field Description

Field	DataType	Size	Required	Notes
body	String	255	Y	Body of the emailed request
subject	String	100	N	Subject of the emailed request. Defaults to "RideLinQ Support Request" if not specified

Error Sub-codes (HTTP 400)

Code	Description
442	Account not found
443	Unable to access account information; try again later.

Example Request (POST)

POST URL: <https://mobile.cmtapi.com/v1/support>

Request (JSON)

```
{
  "subject": "Help required",
  "body": "I am in need of assistance. Please send help."
}
```

Successful Response (JSON)

HTTP Status: 200 (Success)

Unsuccessful Response (JSON)

HTTP Status: 400

```
{
  "responseCode": 442,
  "message": "Account not found"
}
```

Version Resource

Summary

The Version resource allows the RideLinQ app to check the currently published version of the app.

Resource	Description
GET /version	Gets the current version of the RideLinQ app for a given operating system.

GET /version

Resource URL

Production: <https://mobile.cmtapi.com/v1/version>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/version>

Parameter Field Description

Field	DataType	Size	Required	Notes
mobileOSCode	Integer		Y	Code corresponding to the current Mobile Operating System. [See Appendix B]

Response Field Description

Field	DataType	Size	Required	Notes
version	String		Y	String representing the current version.

Example Request (GET)

GET URL: <https://mobile.cmtapi.com/v1/version?mobileOSCode=1>

Successful Response (JSON)

HTTP Status: 200 (Success)

```
{
  "version": "1.0.0"
}
```

Unsuccessful Response (JSON)

HTTP Status: 400

```
{
  "responseCode": 442,
  "message": "Account not found"
}
```


History Resource

Summary

The History resource allows the user to retrieve a list of his last 10 trips.

Resource	Description
GET /account/history	Gets the a list of the current user's last 10 trips

GET /account/history

Resource URL

Production: <https://mobile.cmtapi.com/v1/account/history>

Sandbox: <https://mobile-sandbox.cmtapi.com/v1/account/history>

Parameter Field Description

Field	DataType	Size	Required	Notes
limit	Integer		N	The number of records to retrieve. Defaults to 10. Maximum is 100.
offset	Integer		N	Number of records to offset (used for paging.) Defaults to 0.

Response Field Description

Field	DataType	Size	Required	Notes
trips	Array			<i>Subfields are indented</i>
type	String	4	Y	Set to "TRIP" for tripData callbacks.
medallion	String		Y	Medallion of the vehicle associated with the trip
tripId	Integer		Y	The id of the trip.
driverId	Integer		Y	The driver id for the trip.
pairingToken	String		Y	The pairing token for the trip.
startTime	String		Y	The start time of the trip, in UTC ISO 8601 format (See example request below)
endTime	String		Y	The end time of the trip, in UTC ISO 8601 format
total	Integer		Y	The total cost of the trip, including fare, fareAtAlternateRate, extra, surcharge, tax, and tip.
fare	Integer		Y	The fare amount in cents at the initial rate class.
fareAtAlternateRate	Integer		Y	The fare amount in cents after a rate change (generally only has a value when going from rate 1 to 4).
extra	Integer		Y	Extra costs for the trip.
tip	Integer		Y	The tip amount for the trip.
surcharge	Integer		Y	The surcharge amount for the trip.
tax	Integer		Y	The tax amount for the trip.
rateAtTripStart	Integer		Y	The rate class at trip start.
rateAtTripEnd	Integer		Y	The rate class at trip end.
rateChangeTime	String		Y	The time, in UTC ISO 8601 format, at which the rate class changed. Empty if no rate change.
distance	Double		Y	The distance of the trip.
autoCompletePayment	Boolean		Y	Indicates if payment will occur automatically by the ehail provider (true) or if payment will be completed using the in-vehicle equipment (false).
autoTipPercentage	Integer		Y	The automatically-set percentage used to calculate the tip.
autoTipAmount	Integer		Y	The automatically-set tip amount.
tollHistory	Array		Y	An array of any tolls included in the trip. Can be empty. <i>Subfields are indented.</i>
tollName	String			The name of the toll.
tollAmount	Integer			The amount of the toll.

Example Request (GET)

GET URL: <https://mobile.cmtapi.com/v1/account/history?limit=10&offset=0>

Successful Response (JSON)

HTTP Status: 200 (Success)

```

{
  "trips":
    [{
      "medallion": "EH9009",
      "driverId": 90009,
      "autoTipAmount": 105,
      "autoTipPercentage": 10,
      "pairingToken": "YzE1NThjYjYtjE1Yi00MDA3LThiNTEtZWUzYTBiZjQxOTJj",
      "tripId": 5,
      "fare": 100,
      "surcharge": 0,
      "tip": 114,
      "tax": 0,
      "distance": 0.0,
      "fareAtAlternateRate": 0,
      "rateAtTripStart": 1,
      "rateAtTripEnd": 1,
      "rateChangeTime": "2013-08-05T14:50:24.610Z",
      "tollHistory": [],
      "type": "TRIP",
      "total": 100,
      "extra": 0,
      "startTime": "2013-08-05T14:50:24.610Z",
      "endTime": "2013-08-05T14:51:16.876Z"
    }, {
      "medallion": "EH9009",
      "driverId": 90009,
      "autoTipAmount": 100,
      "autoTipPercentage": 20,
      "pairingToken": "ZGZiY2E4OTgtYmYyYy00ZWVmLWl0a10TA10GQ1NDAw",
      "tripId": 10,
      "fare": 500,
      "surcharge": 0,
      "tip": 200,
      "tax": 0,
      "distance": 0.0,
      "fareAtAlternateRate": 0,
      "rateAtTripStart": 1,
      "rateAtTripEnd": 1,
      "rateChangeTime": "2013-08-05T16:09:49.728Z",
      "tollHistory": [],
      "type": "TRIP",
      "total": 500,
      "extra": 0,
      "startTime": "2013-08-05T16:09:49.728Z",
      "endTime": "2013-08-26T19:51:19.200Z"
    }
  ]
}

```

Unsuccessful Response (JSON)

HTTP Status: 400

```
{  
  "responseCode":443,  
  "message":"Persistence error"  
}
```

Appendix A

Tokenize Response Codes

<i>Code</i>	<i>Message</i>
--------------------	-----------------------

0	An error occurred
1	Success
2	Token not found
3	Bad merchant token
4	Unable to decrypt merchant token
5	Invalid data (Required fields missing or data is not in valid format)
6	Card information is invalid (if the preauthorization is declined from the authorizer)
7	Invalid CVV2 (If the CVV2 information given is invalid from the authorizer)
8	Invalid AVS (If the AVS information given is invalid from the authorizer)

Appendix B

Mobile Operating System Codes

<i>Code</i>	<i>Message</i>
0	Unknown
1	iOS
2	Android
3	Windows