

iOS SDK for Superior Native Payments Experience

616 commits

29 branches

1 release

3 contributors

Branch: master

New pull request

New file

Find file

HTTPS

https://github.com/citrus



Download ZIP

Vikas Singh committed with Vikas Singh Change in webViewDidFinishLoad for payUsingCitrusCash

Latest commit fb794fa Dec 17, 2015

CTS iOS Sdk.xcodeproj	Added "MerchantConstants.h"	Dec 17, 2015
Controllers	removal of MerchantConstant.h dependency from UserLogging.h	Dec 16, 2015
CustomComponents	Change code in ViewControllers	Oct 8, 2015
GUI_SampleApp	Added "MerchantConstants.h"	Dec 17, 2015
PaymentSdk_GUI	Added images	Oct 1, 2015
PaymentSdk_GUITests	Merge MasterFeature4 V3.1.2 into V3.0.1	Oct 23, 2015
RestFulltester	Change in webViewDidFinishLoad for payUsingCitrusCash	Dec 17, 2015
.gitattributes	git atribute for merge	May 28, 2015
.gitignore	First Commit	Jul 10, 2014
Bind SDK copy-Info.plist	names changed	Oct 20, 2015
Prepaid SDK Old copy-Info.p..	tests for older implementation	Jun 10, 2015
Prepaid SDK copy-Info.plist	added old code	Jun 9, 2015
Prepaid SDK.plist	plist commit	Mar 11, 2015
README.md	Update README.md	Dec 17, 2015

README.md

open-iOS V3.1.3

ChangeLog

Migration from 3.0.x to 3.1.x

SDK Installation Prerequisites

- Xcode 6 or higher.

Citrus PG Prerequisites

- You need to enroll with Citrus as a merchant.
- You need to host Bill generator on your server
- You need to host Return Url Page on your server. (After the transaction is complete, Citrus posts a response to this URL.)
- Make sure that you have obtained following parameters from your Citrus admin panel

- Merchant Secret Key
- Merchant Access Key
- SignIn Key
- SignIn Secret
- SignUp Key
- SignUp Secret

Note: Please DO NOT PROCEED if the above mentioned requirements have not been met.

Features

Citrus iOS SDK broadly offers following features.

- Prepaid Payments.
- Direct credit/debit card (CC, DC) or netbanking payments (NB) .
- Saving Credit/Debit cards into user's account for easier future payments by abiding The Payment Card Industry Data Security Standard (PCI DSS).
- Loading Money into users Citrus prepaid account for Prepaid facility .
- Withdraw the money back into User's bank account from the Prepaid account .
- Creating Citrus account for the user .

Installation From source code

Get the latest source code from [github.com](https://github.com/citruspay/open-ios.git):

```
$ git clone https://github.com/citruspay/open-ios.git
```

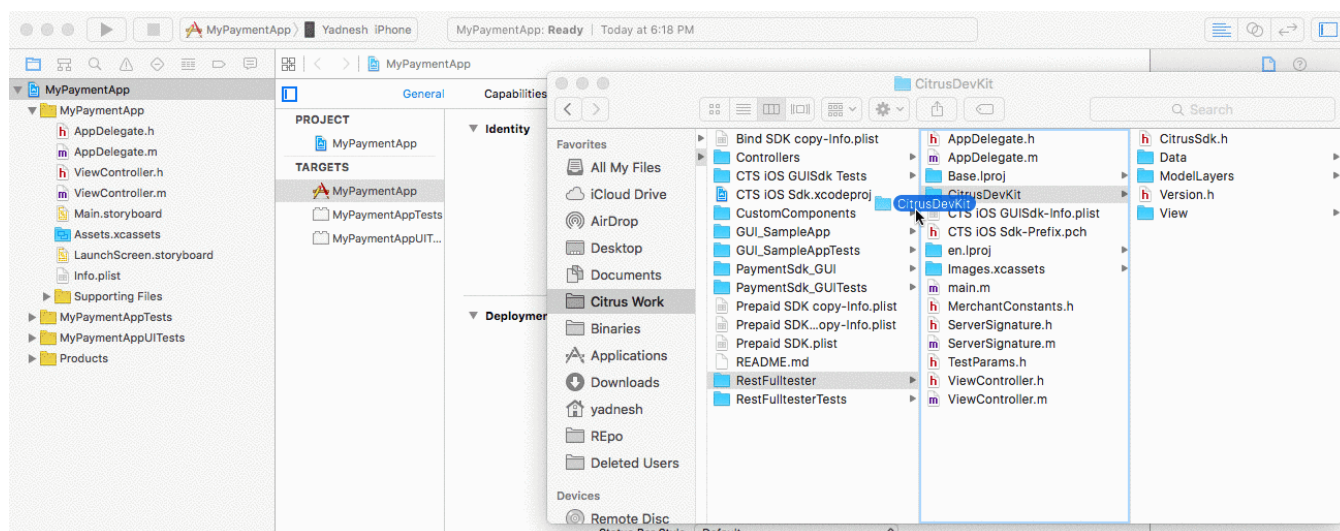
How to Run Sample code

To run the sample code, double click on "CTS iOS Sdk.xcodeproj" file from downloaded sample code and select target as in video and run the App.



Xcode integration

To integrate the SDK you just have to drag drop folder CitrusDevKit/ into your project as groups, import CitrusSdk.h and populate the macros in MerchantConstants.h with the parameters you obtained from your Citrus admin panel



```
import "CitrusSdk.h"
```

```

1 //
2 // SimpleStartViewController.h
3 // CTS iOS Sdk
4 //
5 // Created by Yadnesh Wankhede on 21/11/14.
6 // Copyright (c) 2014 Citrus. All rights reserved.
7 //
8
9 #import "CitrusSdk.h"
10
11
12

```

Let's Start Programming now

SDK operates in two different modes Sandbox and Production mode. for both the environments Citrus PG Prerequisites key sets are different. keys from one environment won't work on other. so please make sure you are using correct set of keys. During the development you would always want to use the Sandbox mode. once you are done with your App development you can switch to production mode .

you need to use `[CitrusPaymentSDK initializeWithKeyStore: environment:]` to initialize the SDK

Sandbox:

```
[CitrusPaymentSDK initializeWithKeyStore:keyStore environment:CTSEnvSandbox];
```

Production:

```
[CitrusPaymentSDK initializeWithKeyStore:keyStore environment:CTSEnvProduction];
```

How to configure KeyStore Object

As you must have noticed the SDK initialization requires you to pass the Keystore object please see below how to configure it.

```

CTSKeyStore *keyStore = [[CTSKeyStore alloc] init];
keyStore.signinId = @"test-signin";
keyStore.signinSecret = @"52f7e15efd4208cf5345dd554443fd99";
keyStore.signUpId = @"test-signup";
keyStore.signUpSecret = @"c78ec84e389814a05d3ae46546d16d2e";
keyStore.vanity = @"testing";

```

Only after you are done with initialization you can proceed with following guide

The SDK is logically divided into 3 modules/layers or interfacing classes

- CTSAuthLayer - handles all of the user creation related tasks .
- CTSProfileLayer - handles all of the user profile related tasks .
- CTSPaymentLayer - handles all of the payment related tasks .

To use any of the above layers you need to fetch their singleton instance from CitrusPaymentSDK's class methods,

```

// initialization in your .m file
CTSPaymentLayer *paymentLayer = [CitrusPaymentSDK fetchSharedPaymentLayer];
CTSAuthLayer *authLayer = [CTSAuthLayer fetchSharedAuthLayer];
CTSProfileLayer *profileLayer = [CTSProfileLayer fetchSharedProfileLayer];

```

Following are the specific tasks related to each of the layer

Important Update for iOS 9

User Management

- [See if anyone is logged in](#)
- [Bind User](#) (doesn't need password, enables user to save cards)
- [Creating & Linking the User](#) (creates user prepaid account, fires otp for signin, required for all prepaid related operations)
- [Signin the user for Prepaid level access](#)
- [Reset User Password](#)
- [Sign Out](#)

Card Management

- [Save User Cards](#)
- [Get Saved Cards](#)
- [Delete Saved Cards](#)

Wallet Management & Payment

- [Get User's Prepaid Balance](#)
- [Save Cashout Bank Account](#)
- [Get Saved Cashout Bank Account](#)
- [Loading Money into Users Citrus Prepaid Account](#)
- [Paying via Prepaid account](#)
- [Initiate Cashout Process into users Account from Citrus prepaid account](#)
- [Send Money to another Citrus User](#)

Doing direct payments

- [CC, DC, NB Direct Payments](#)
- [Saved CC, DC Payments \(A.K.A. Tokenized payments\)](#)

Dynamic Pricing Offer Coupons and Surcharge

- [How to use dynamic pricing ?](#)

Others

- [Fetch Available Schemes and Banks for the Merchant](#)
- [Fetch the PG Health](#)

Common Integration Issues

- [Could Not Connect to Internet](#)
- [postResponseiOS\(\) error](#)
- [iOS 9 SSL Errors](#)



1. Integrating CTSAuthLayer

VikasCitruspay edited this page Dec 14, 2015 · 28 revisions

There are two types of user privileges that user can have:

- Wallet level - lets user save cards, get the saved cards, payment using Credit and Debit cards and delete cards.
- Prepaid level - includes all the privileges from Wallet level in addition to that User can now load and pay using their prepaid account.

Bind User

bind the user, this grants cards saving, fetching, payment using CC and DC and delete cards privileges to the user, doesn't need password.

```
[authLayer requestBindUsername:@"test@gmail.com" mobile:@"9702222222" completionHandl
    if(error == nil){
        // Your code to handle success.
    }
    else {
        // Your code to handle error.
    }
}];
```

Get User’s Prepaid Level access (Link user)

Citrus Link user and Sign-in api simplifies the process of new user sign-up as well as enquiring the status of existing Citrus Prepaid Wallet accounts.

Acquiring the Citrus Prepaid Wallet access for the user is a two step process: First Linking the user and then presenting the sign-in screen with either OTP or password or both depending on the response of the Link User Api

Citrus Link User

When User decides to Pay using Citrus Wallet, First thing you need to check is if user is already logged in with api `[authLayer isLoggedInIn]` , if they are already logged in you can start the prepaid activities, if they are not then you need to call Citrus Link Api, Link User does all the checks on users account and responds with status that helps you to build sign-in screen. it also creates new account for new users and may fire otp to mobile or email .

Pages 7

Home

1. Integrating CTSAuthLayer

2. Integrating CTSProfileLayer

3. Integrating CTSPaymentLayer

4. Common Errors

5 Migration From V 3.0.x to V 3.1.x

ChangeLog

Clone this wiki locally

https://github.com/citruspay

Clone in Desktop

```
[authLayer requestCitrusLink:@“test@mailinator.com” mobile:@“9700000000” completion:^(
    if (error) {
        [UIUtility toastMessageOnScreen:[error localizedDescription]];
    }
    else{
        [UIUtility toastMessageOnScreen:linkResponse.userMessage];

        switch (linkResponse.signType) {
            case CitrusSignInTypeMOtpOrPassword:
                // Show Mobile otp and password sign in screen
                break;
            case CitrusSignInTypeMOtp:
                // Show Mobile otp sign in screen
                break;
            case CitrusSignInTypeEOtpOrPassword:
                // Show Email otp and password sign in screen
                break;
            case CitrusSignInTypeEOtp:
                // Show Email otp sign in screen
                break;
            default:
                break;
        }
    }
}];
```

Citrus Link User responds with CTSCitrusLinkRes object To decide whether to show Password or OTP or both in the next login screen can be decided using the enum field “linkResponse.signType” in the link user response. Please see the code above .

Citrus Link Sign-in

To Signin with Password or OTP use following API

Password Sign-in

```
[authLayer requestCitrusLinkSignInWithPassword:@“CitrusPassword” passwordType:Passwor
    LogTrace(@"error %@",error);
    if (error) {
        // Handle Error
    }
    else{
        // Handle Success
    }
}];
```

OTP Sign-in

```
[authLayer requestCitrusLinkSignInWithPassword:@“3453” passwordType:PasswordTypeOtp
    LogTrace(@"error %@",error);
    if (error) {
        // Handle Error
    }
    else{
        // Handle Success
    }
}];
```

See if anyone is logged in

To check if user is already logged into the SDK.

```
if([authLayer isLoggedIn]){
    [UIUtility toastMessageOnScreen:@"user is signed in"];
}
else{
    [UIUtility toastMessageOnScreen:@"no one is logged in"];
}
```

Reset User Password

It happens to all of us, we tend to forget our passwords. so if user forgets their password and wants to reset it following is the way to do it

```
[authLayer requestResetPassword:@"test@gmail.com" completionHandler:^(NSError *error)
{
    if(error == nil){
        // Your code to handle success.
    }
    else {
        // Your code to handle error.
    }
}
];
```

Sign out

To do a local sign out from the SDK you have to call following method

```
[authLayer signOut];
```

2. Integrating CTSProfileLayer

VikasCitruspay edited this page Dec 2, 2015 · 16 revisions

CTSProfile layer deals with tasks related to profile of the user.

Save User Cards

Once you have successfully Linked the user you can now save cards. There are two types of cards that can be saved Credit and Debit.

```
//How to initialise required card?
CTSPaymentDetailUpdate *paymentInfo = [[CTSPaymentDetailUpdate alloc] init];

CTSElectronicCardUpdate *creditCard = [[CTSElectronicCardUpdate alloc] initWithCreditCard:
creditCard.cvv = @"123";
creditCard.number = @"5105105105105100";
creditCard.expiryDate = @"03/2018"; //mm/yyyy format
creditCard.scheme = [CTSUtility fetchCardSchemeForCardNumber:creditCard.number]; //fe
creditCard.ownerName = @"Tester"; //no special characters allowed here
[paymentInfo addCard:creditCard];

// Save the card
[profileLayer updatePaymentInformation:paymentInfo withCompletionHandler:^(NSError *error) {
    if(error == nil){
        // Your code to handle success.
    }
    else {
        // Your code to handle error.
    }
}];
```

Get Saved Cards

Use following code to read the saved cards, a Saved card also will have a token which looks like this 5115669e6129247a1e7a3599ea58e947, this can be used for payment using this card. you won't need to collect the card information except CVV from user again.

```
[profileLayer requestPaymentInformationWithCompletionHandler:^(CTSPaymentRes *res) {
    if (error == nil) {
        // Your code to handle success.
        if([paymentInfo.paymentOptions count]){
            //process the save cards here
        }
        else{
            // no saved cards
        }
    } else {
        // Your code to handle error.
    }
}];
```

▼ Pages 7

[Home](#)[1. Integrating CTSAuthLayer](#)[2. Integrating CTSProfileLayer](#)[3. Integrating CTSPaymentLayer](#)[4. Common Errors](#)[5 Migration From V 3.0.x to V 3.1.x](#)[ChangeLog](#)

Clone this wiki locally

<https://github.com/citruspay/open-ios> [Clone in Desktop](#)

Delete Saved Cards

Saved card can be deleted by sending its token to following api.

```
[proifleLayer requestDeleteCardWithToken:card.token withCompletionHandler:^(NSError *error) {
    if(error == nil){
        // Your card is successfully deleted.
    }
    else {
        // Your code to handle error.
    }
}];
```

Get User's Prepaid Balance

After user is linked then you can fetch their prepaid account balance if user has a prepaid account enabled.

```
[proifleLayer requestGetBalance:^(CTSAmount *amount, NSError *error) {

    if (error) {
        //your code to handle the error
    }
    else{
        // your code to handle success.
        LogTrace(@" value %@",amount.value);
        LogTrace(@" currency %@",amount.currency);
    }
}];
```

Save Cash-out Bank Account

User can request withdraw their prepaid account balance into a bank account and such an account can be stored in users profile in the following manner

```
CTSCashoutBankAccount *bankAccount = [[CTSCashoutBankAccount alloc] init];
bankAccount.owner = @"Tester";
bankAccount.branch = @"HSBC0000123";
bankAccount.number = @"123456789987654";

[proifleLayer requestUpdateCashoutBankAccount:bankAccount withCompletionHandler:^(NSError *error) {
    if (error) {
        [UIUtility toastMessageOnScreen:[error localizedDescription]];
    }
    else{
        [UIUtility toastMessageOnScreen:@"Succesfully stored bank account"];
    }
}];
```

Get Saved Cashout Bank Acoount

```
[profileLayer requestCashoutBankAccountCompletionHandler:^(CTSCashoutBankAccountResp *  
    if(error){  
        // handle error  
    }  
    else {  
        //handle sucess  
    }  
}];
```



3. Integrating CTSPaymentLayer

VikasCitruspay edited this page Dec 2, 2015 · 34 revisions

Payment layer lets you do the payments .

PG Payments using CC, DC and NB

You can pay using Credit, Debit, Netbanking see the following code:

▼ Pages 7

[Home](#)[1. Integrating CTSAuthLayer](#)[2. Integrating CTSProfileLayer](#)[3. Integrating CTSPaymentLayer](#)[4. Common Errors](#)[5 Migration From V 3.0.x to V 3.1.x](#)[ChangeLog](#)

Clone this wiki locally

<https://github.com/citruspay/open-ios>[📄 Clone in Desktop](#)

```

//CC, DC payments
CTSElectronicCardUpdate *creditCard = [[CTSElectronicCardUpdate alloc] initWithCard:
creditCard.number = @"4028530052708001";
creditCard.expiryDate = @"03/2020"; //only mm/yyyy format
creditCard.scheme = [CTSUtility fetchCardSchemeForCardNumber:creditCard.number]; //fet
creditCard.ownerName = @"Tester"; // no special characters here
creditCard.cvv = @"123";

CTSPaymentDetailUpdate *paymentInfo = [[CTSPaymentDetailUpdate alloc] init];
[paymentInfo addCard:creditCard];

[CTSUtility requestBillAmount:@"10" billURL:BillUrl callback: ^(CTSBill *bill , NSError
    if(error){
        [UIUtility toastMessageOnScreen:error.localizedDescription];
    }
    else {
        [paymentLayer requestChargePayment:paymentInfo withContact:contactInfo wit
            if(error){
                [UIUtility toastMessageOnScreen:error.localizedDescription];
            }
            else {
                [UIUtility toastMessageOnScreen:[NSString stringWithFormat:@"Payme
            }
        }];
    }
}];

//netbanking payments
CTSPaymentDetailUpdate *paymentInfo = [[CTSPaymentDetailUpdate alloc] init];

// Update bank details for net banking payment.
CTSNetBankingUpdate* netBank = [[CTSNetBankingUpdate alloc] init];
netBank.code = @"CID001"; //you can obtain this from pgSetting service
netBank.name = @"Tester";
[paymentInfo addNetBanking:netBank];

[CTSUtility requestBillAmount:@"10" billURL:BillUrl callback: ^(CTSBill *bill , NSError

    if(error){
        [UIUtility toastMessageOnScreen:error.localizedDescription];
    }
    else {
        [paymentLayer requestChargePayment:paymentInfo withContact:contactInfo wit
            if(error){
                [UIUtility toastMessageOnScreen:error.localizedDescription];
            }
            else {
                [UIUtility toastMessageOnScreen:[NSString stringWithFormat:@"Payme
            }
        }];
    }
}];

```

Saved CC, DC Payments (A.K.A. Tokenized payments)

Obtain users saved cards and use this method to pay using saved card, Citrus server returns a token in each of the saved cards. You only need send this token and CVV(cvv is not saved along with the other card information) for doing the payment, rest of the information will be fetched by the Citrus server from its database using this token.

```

CTSPaymentDetailUpdate *tokenizedCardInfo = [[CTSPaymentDetailUpdate alloc] init];

// Update card for tokenized payment.
CTSElectronicCardUpdate *tokenizedCard = [[CTSElectronicCardUpdate alloc] initWithCreditCard:tokenizedCard];
tokenizedCard.cvv = @"123";
tokenizedCard.token = @"5115669e6129247a1e7a3599ea58e947";
[tokenizedCardInfo addCard:tokenizedCard];

[CTSUtility requestBillAmount:@"10" billURL:BillUrl callback:^(CTSBill *bill, NSError *error){
    if(error){
        [UIUtility toastMessageOnScreen:error.localizedDescription];
    }
    else {
        [paymentLayer requestChargeTokenizedPayment:tokenizedCardInfo withContact:contactInfo callback:^(CTSBill *bill, NSError *error){
            if(error){
                [UIUtility toastMessageOnScreen:error.localizedDescription];
            }
            else {
                [UIUtility toastMessageOnScreen:[NSString stringWithFormat:@"Payment of %d was successful", bill.amount]];
            }
        }];
    }
}];
}
}];

```

Loading Money into Users Citrus Prepaid Account

Money can be loaded into users citrus account using following method, this can be done using direct payments as well as saved cards

```

CTSPaymentDetailUpdate *creditCardInfo = [[CTSPaymentDetailUpdate alloc] init];

CTSElectronicCardUpdate *creditCard = [[CTSElectronicCardUpdate alloc] initWithCreditCard:creditCard];
creditCard.number = @"4028530052708001";
creditCard.expiryDate = @"03/2020"; //only mm/yyyy format
creditCard.scheme = [CTSUtility fetchCardSchemeForCardNumber:creditCard.number]; //fetch card scheme
creditCard.ownerName = @"Tester"; // no special characters here
creditCard.cvv = @"123";

[creditCardInfo addCard:creditCard];

[paymentLayer requestLoadMoneyInCitrusPay:creditCardInfo withContact:contactInfo withPaymentMethod:PaymentMethod.Cash callback:^(CTSBill *bill, NSError *error){
    if(error){
        //handle error
    }
    else{
        //handle success
    }
}];
}
}];

```

Paying via Prepaid account/Citrus Cash

Once there is some money in user's prepaid account it can be used to do payments. for that see the following method

```
[CTSUtility requestBillAmount:@"10" billURL:BillURL callback:^(CTSBill *bill , NSError *error){
    if(error){
        [UIUtility toastMessageOnScreen:error.localizedDescription];
    }
    else {
        [paymentLayer requestChargeCitrusWalletWithContact:contactInfo address:address callback:^(CTSBill *bill , NSError *error){
            if(error){
                //handle error
            }
            else{
                //handle success
            }
        }];
    }
}];
}];
```

Initiate Cashout Process into users Account from Citrus prepaid account

User can request to put money from Citrus cash account back into their bank account

Fetch Available Schemes and Banks for the Merchant

Not all banks and card types are enabled for every merchant, they can be added, removed by contacting your sales contact at Citrus. To fetch what all is available for you use following method

Fetch the PG Health

You can fetch the Health of the PG using following method

```
[paymentLayer requestGetPGHealthWithCompletionHandler:^(CTSPGHealthRes* pgHealthRes, NSError* error){
    if(error){
        //handle error
    }
    else{
        //handle success
    }
}];
```

Send money to another Citrus User

Money can be sent from one user's Citrus Wallet to another users wallet

```
[paymentLayer requestTransferMoneyTo:@"9800000000" amount:@"20" message:@"Here is Some Money" completion:^(CTSPGHealthRes* pgHealthRes, NSError* error){
    if(error){
        //handle error
    }
    else{
        //handle success
    }
}];
```

Dynamic Pricing, offer coupons, surcharge.

Using dynamic pricing you can apply surcharge or discount or even issue a coupon to the user.

Dynamic pricing happens in 2 stages first applying the rule and second is processing the payment

There are three ways in which rule can be applied

SearchAndApply

Search and apply will search for the possible rule depending upon the input data. The rule can be applied on the payment mode or card bin range or user details etc. The system will check for matching rule using the input data and apply the rule and return the altered amount if proper rule was found. Once the request is successful the user can make transaction for the altered amount. The input parameters will be transaction amount, payment details, userDetails, valid bill url.

```

//Payment details
CTSElectronicCardUpdate *creditCard = [[CTSElectronicCardUpdate alloc] initWithCreditCard:];
creditCard.number = @"4028530052708001";
creditCard.expiryDate = @"03/2020"; //only mm/yyyy format
creditCard.scheme = [CTSUtility fetchCardSchemeForCardNumber:creditCard.number]; //fet
creditCard.ownerName = @"Tester"; // no special characters here
creditCard.cvv = @"123";

CTSRuleInfo *ruleInfo = [[CTSRuleInfo alloc] init];
ruleInfo.originalAmount = @"100";
ruleInfo.operationType = DPRequestTypeSearchAndApply;

CTSPaymentDetailUpdate *paymentInfo = [[CTSPaymentDetailUpdate alloc] init];
[paymentInfo addCard:instrument];

CTSUser *user = [[CTSUser alloc] init];
user.email = @"test@gmail.com";
user.mobile = @"9700000000";

[paymentLayer requestPerformDynamicPricingRule:ruleInfo paymentInfo:paymentInfo billUr
    if(error){
        //handle error
    }
    else {
        //handle success
        [UIUtility toastMessageOnScreen: [NSString stringWithFormat:@"Request Status:
    }
}];

```

CalculatePricing

Calculate pricing will search for the given rule name and apply the rule, if rule with given name is found, it will return the altered amount. Once the request is successful the user can make transaction for altered amount. The input parameters will be transaction amount, payment details, user details and rule name, valid bill url


```

//payment details
CTSElectronicCardUpdate *creditCard = [[CTSElectronicCardUpdate alloc] initWithCreditCard:];
creditCard.number = @"4028530052708001";
creditCard.expiryDate = @"03/2020"; //only mm/yyyy format
creditCard.scheme = [CTSUtility fetchCardSchemeForCardNumber:creditCard.number]; //fet
creditCard.ownerName = @"Tester"; // no special characters here
creditCard.cvv = @"123";

CTSRuleInfo *ruleInfo = [[CTSRuleInfo alloc] init];
ruleInfo.ruleName = @"MonsoonSale";
ruleInfo.originalAmount = @"100";
ruleInfo.operationType = DPRequestTypeCalculate;

CTSPaymentDetailUpdate *paymentInfo = [[CTSPaymentDetailUpdate alloc] init];
[paymentInfo addCard:instrument];

CTSUser *user = [[CTSUser alloc] init];
user.email = @"test@gmail.com";
user.mobile = @"9700000000";

[paymentLayer requestPerformDynamicPricingRule:ruleInfo paymentInfo:paymentInfo billUr
    if(error){
        //handle error
    }
    else {
        //handle success
        [UIUtility toastMessageOnScreen: [NSString stringWithFormat:@"Request Status:
    }
}];

```

ValidateRule

Validate rule will be used to validate the whether the rule is properly applied or not. The input values will be transaction amount, payment details, user details, rule name and altered amount. System will search for the given rule and apply the rule and check whether the given altered amount matches with the generated altered amount. Once the rule is validated you can proceed for the transaction with altered amount.

```

CTSElectronicCardUpdate *creditCard = [[CTSElectronicCardUpdate alloc] initWithCreditCard:
creditCard.number = @"4028530052708001";
creditCard.expiryDate = @"03/2020"; //only mm/yyyy format
creditCard.scheme = [CTSUtility fetchCardSchemeForCardNumber:creditCard.number]; //fet
creditCard.ownerName = @"Tester"; // no special characters here
creditCard.cvv = @"123";

CTSRuleInfo *ruleInfo = [[CTSRuleInfo alloc] init];
ruleInfo.ruleName = @"50PrecentOff";
ruleInfo.alteredAmount = @"50";
ruleInfo.originalAmount = @"100";
ruleInfo.operationType = DPRequestTypeValidate;

CTSPaymentDetailUpdate *paymentInfo = [[CTSPaymentDetailUpdate alloc] init];
[paymentInfo addCard:instrument];

CTSUser *user = [[CTSUser alloc] init];
user.email = @"test@gmail.com";
user.mobile = @"9700000000";

[paymentLayer requestPerformDynamicPricingRule:ruleInfo paymentInfo:paymentInfo billUr
    if(error){
        //handle error
    }
    else {
        //handle success
        [UIUtility toastMessageOnScreen: [NSString stringWithFormat:@"Request Status:
    }
}];

```

□

Processing the payments for dynamic pricing

only after one of the above services is applied user can proceed with the actual payments.to do that use the following method.

```

contactInfo = [[CTSContactUpdate alloc] init];
contactInfo.firstName = @"first";
contactInfo.lastName = @"last";
contactInfo.email = @"Ytest@gmail.com";
contactInfo.mobile = @"9700000000";

addressInfo = [[CTSUserAddress alloc] init];
addressInfo.city = @"Mumbai";
addressInfo.country = @"India";
addressInfo.state = @"Maharashtra";
addressInfo.street1 = @"Golden Road";
addressInfo.street2 = @"Pink City";
addressInfo.zip = @"401209";

[paymentLayer requestChargeDynamicPricingContact:contactInfo withAddress:addressInfo c
    if(error){
        //handle error
    }
    else {
        //handle success
    }
}];

```


5 Migration From V 3.0.x to V 3.1.x

YadneshCitrus edited this page Oct 19, 2015 · 11 revisions

This guide will help you to migrate to V 3.1.0

Along with performance improvements, bug fixes, new features we have also changed a few basics things in integration to make it more flexible.

Integration related changes

SDK Initialization

SDK now needs to be initialized using `[CitrusPaymentSDK initializeWithKeyStore:environment:]` before you can use any of its features, [please see it here](#)

MerchantConstants.h

Previous versions of the SDK used to rely on this constant file for all the merchant related configurations, like subscription keys, secret keys, base urls. now this is obsolete. V 3.1.X no longer relies on this. you will need to directly configure these keys at the time of SDK initialization.[please see it here](#)

Sandbox OR Production

In previous versions of the SDK you would need to configure the `BASE_URL` constant in the `MerchantConstants.h` to change the SDK's mode of operation, in V3.1.X this needs to be done at the time of SDK initialization. [please see it here](#)

Layers initialization

If you have used earlier version of the SDK you already know that SDK functions using three main layers/classes. `CTSAuthLayer`, `CTSProfileLayer`, `CTSPaymentLayer`; for initialization of these layers instead of doing alloc init directly, you will need to get their instances using the respective class methods of `CitrusPaymentSDK`

```
CTSPaymentLayer *payment = [CitrusPaymentSDK fetchSharedPaymentLayer];
CTSAuthLayer *auth = [CitrusPaymentSDK fetchSharedAuthLayer];
CTSProfileLayer *profile = [CitrusPaymentSDK fetchSharedProfileLayer];
```

Pages 7

[Home](#)

- [1. Integrating CTSAuthLayer](#)
- [2. Integrating CTSProfileLayer](#)
- [3. Integrating CTSPaymentLayer](#)
- [4. Common Errors](#)
- [5 Migration From V 3.0.x to V 3.1.x](#)
- [ChangeLog](#)

Clone this wiki locally

<https://github.com/citruspay/open-ios>[Clone in Desktop](#)

Features

- [Update : Delete Card API](#)
- [Update : Wallet Pay API](#)
- [Update : Check if anyone is logged in](#)
- [New : Dynamic Pricing, Coupons, Surcharge APIs](#)

