Conio

`platform` `iOS` `platform` `Android` `spm` `compatible` `artifactory` `v0.5.0`

Conio SDK provides a set of Android and iOS native APIs for Conio services to let you create native applications with Crypto Wallets and Crypto Trading functionalities.

Overview

- Installation
    - iOS
    - Android
- Configuration
    - iOS
    - Android
- Features
    - User Service
    - Trading Info Service
    - Wallet Service
    - BTC Transaction Management Service
    - Trading Buy Service
    - Trading Sell Service
    - Trading Price Service
    - Swap Service
    - Transfer Service
    - Activities Service

Old

Old docs

Changelog

- iOS
- Android

iOS

2.1.2 - 22-10-2024

Changed

- Update ConioSDK

2.1.1 - 04-10-2024

Changed

- TSK-6182: Update Fetch Historical Prices

2.1.0 - 18-09-2024

Changed

- TSK-4511: Transfer Service

2.0.1 - 07-08-2024

Changed

- Update ConioSDK

2.0.0 - 13-06-2024

Added

- TSK-4503: Trading Info Service
- TSK-4504: Btc Transaction Management Service

- TSK-4505: Trading Buy Service

- TSK-4506: Trading Sell Service

- TSK-4509: Trading Price Service

- TSK-4510: Swap Service

Changed

- TSK-4502: User Service

- TSK-4598: Wallet Service

0.7.0 - 07-06-2022

Added

- Model `CryptoSellParams` to replace `SellParams`

- `ConioError.onNetwork` to wrap network communication errors

Changed

- `SellParams` deprecated

- Factory init used to create/refresh an ask with all user available amount

Fixed

- Always throw `ConioError.unauthorized` on session expired

0.6.10 - 09-02-2022

Changed

- Update legal acceptances

0.6.9 - 08-02-2022

Changed

- Error mapping as `unauthorized` on 401 status code

0.6.8 - 28-01-2022

Added

- Transaction speedup
- Reset password flow APIs
- KYC create applicant params public init
- KYC trigger check params public init
- User data handling APIs
- User permissions map update

Changed

- Updated model: withdrawal transaction, available fee

Fixed

- Signup B2B wallet encrypt with hashed password
- Bad cancellables store in operations
- Missing password hash on B2B signup

0.6.2 - 17-11-2021

Changed

- Wallet service `walletPDFActivities`, `limit` in `PDFActivitiesParams` now optional

Added

- User service `getLegalAcceptances`, new `preContractualInfoUrl` param in `LegalAcceptances` response

0.6.0 - 02-11-2021

Added

- User service `changeEmail`

0.5.0 - 11-10-2021

Changed

- Data serialization and mapping
- Code refactor and optimizations

0.4.0 - 13-09-2021

Fixed

- Wrong mapping for `rangeFrom` property in `ServiceFee`

Changed

- Update `rangeFrom` type from `UInt64?` to `FiatAmount?` in `ServiceFee`

0.3.3 - 07-09-2021

Changed

- Rename `tradedFiat` to `weightedBidBalance` in `TradingInfo.swift` as per docs specifications

0.3.2 - 20-07-2021

Added

- Bitcoin network `privateMainnet` and `privateTestnet`

0.3.1 - 19-07-2021

Fixed

- Avoid using app bundle identifier during keychain init

0.3.0 - 14-07-2021

Changed

- Added missing filters params in `ActivitiesParams` to correctly get wallet activities
- Refactor on SDK errors: `ConioError` is now the only error type throwable (check operation section)

0.2.0 - 06-07-2021

Changed

- SDK configuration object `ConioConfiguration` has no default value and must be explicitly initialized

Fixed

- Fix wrong privacy policies url mapping in `GetLegalAcceptancesOperation`
- Avoid build error on Xcode 12.4 in `OpenAPIConioBuilder`

0.1.6 - 25-06-2021

Changed

- Explicit fees represented as intervals
- `WiretransferPayeeInfo` in `CreatedBid` has now two dedicated properties representing standard and custom wire transfer payee info
- `CreatedBid` now contains net cost amount `fiatAmount` and gross amount `grossFiatAmount`
- All fiat amounts are now represented as `Decimal`

0.1.5 - 15-06-2021

Changed

- `Models` update
- `Bid`, `Ask` e `Transaction` properties linked to amount/balance now are declared with type `UInt64`

Added

- `ConioError` entity to map operation errors

0.1.4 - 10-06-2021

Changed

- `Models` update
- `Bid`, `Ask`, `WalletBalances` e `SimpleActivity` properties now have public control access

- `Bid` , `Ask` , `WalletBalances` e `SimpleActivity` properties linked to amount/balance now are declared with type `UInt64`

Removed

- Removed `SwiftyRSA` from dependencies included in `ConioSDK`

0.1.3 - 03-06-2021

Fixed

- Correzione errore signup operation

0.1.0 - 12-04-2021

Added

- Rilascio versione 0.1.0

Android

0.8.11 - 7-06-2022

Added

- `ConioException.OnNetwork` to wrap network communication errors

Fixed

- Always throw `ConioException.Unauthorized` on session expired

0.8.3 - 24-03-2022

Fixed

- Initialization error caused by unusable KeyStore keys

0.8.0 - 9-03-2022

Changed

- Minimum Android version supported to *Android 6.0* (Android Sdk Version: *23*)
- Improved performance
- `SellParams` deprecated

Added

- Factory method `CreateOrRefreshAskParams.withAll` to request an Ask with the maximum sellable amount
- Model `CryptoChangeEmailParams` to replace `ChangeEmailParams`
- Model `CryptoSellParams` to replace `SellParams`

0.7.18 - 8-02-2022

Changed

- Solved retro-compatibility with OkHttp 3.x
- Removed appsync dependency

0.7.16 - 4-02-2022

Changed

- Downgraded OkHttp to 3.14.9

0.7.15 - 3-02-2022

Changed

- Improved concurrencly on service layer
- Updated OkHttp to 4.9.0

0.7.13 - 24-01-2022

Fixed

- Compatibility issue below Api level 26

0.7.9 - 26-11-2021

Changed

- Legal text copies on the `LegalAcceptances` model

0.7.8 - 17-11-2021

Changed

- Wallet service `activityListPdf`, `limit` in `ActivityListPdfParams` now nullable

Added

- User service `getLegalAcceptances`, new `preContractualInfoUrl` param in `LegalAcceptances` response

0.7.4 - 02-11-2021

Added

- User service `changeEmail`

0.7.2 - 20-10-2021

Added

- API to get activities in PDF format

0.7.0 - 11-10-2021

Changed

- Data serialization and mapping
- Code refactor and optimizations

0.6.2 - 03-08-2021

Fixed

- Security issue

0.6.1 - 29-07-2021

Changed

- Refactor on SDK errors: `ConioException` as the operations result error type

0.6.0 - 28-07-2021

Changed

- Refactor on SDK errors: `ConioException` is now the only error type throwable (check operation section)

0.5.4 - 26-07-2021

Fixed

- Made `cro`, `iban` and `chargedAt` fields of `Ask` class optional
- Made `paidAt` field of `Ask` class non-optional

0.5.3 - 20-07-2021

Added

- Bitcoin network `privateMainnet` and `privateTestnet`

0.5.1 - 14-07-2021

Fixed

- Fix factory methods of `TimeFrame` class

0.5.0 - 06-07-2021

Changed

- SDK configuration object `ConioConfiguration` has no default value and must be explicitly initialized

0.4.8 - 25-06-2021

Changed

- Explicit fees represented as intervals
- `WiretransferPayeeInfo` in `CreatedBid` has now two dedicated properties representing standard and custom wire transfer payee info
- `CreatedBid` now contains net cost amount `fiatAmount` and gross amount `grossFiatAmount`
- All fiat amounts are now represented as `BigDecimal`

Removed

- Removed `type` property from `ServiceFee` entity
- Renamed `id` property of model entities:
    - `CreatedAsk.id` -> `CreatedAsk.askId`
    - `CreatedBid.id` -> `CreatedBid.bidId`
    - `SimpleActivity.id` -> `SimpleActivity.activityId`
    - `ActivityDetails.id` -> `ActivityDetails.activityId`

Added

- `ConioError`:
    - INVALID_CRYPTO_PROOF,
    - CRYPTO_PROOF_EXPIRED

0.4.7 - 01-06-2021

Added

- Aggiunta di `weightedBidBalance` alle `TradingInfo`: controvalore investito

modified

- Modifica alle `TradingFees`: supporto fasce di commissioni

0.4.2 - 13-04-2021

Added

- Rilascio versione 0.4.2

0.4.1 - 12-04-2021

Added

- Rilascio versione 0.4.1

iOS Installation

Prerequisites

- iOS 13+
- Swift 5.9

Swift Package Manger

Via Xcode

1. In Xcode, install Conio B2B SDK by navigating to *File > Add Packages*
2. In the prompt that appears, insert the repository:

```
git@bitbucket.org:squadrone/conio-sdk-b2b-ios.git
```

or

```
https://bitbucket.org/squadrone/conio-sdk-b2b-ios.git
```

Via `Package.swift`

Simply add the following lines to `dependencies` of your `Package.swift` manifest:

```
dependencies: [
  .package(url: "git@bitbucket.org:squadrone/conio-sdk-b2b-ios.git")
  // ...
],
```

Note: in order to correctly fetch package you will need to have access to project repository.

Troubleshooting

If you get the following error:

```
autoreconf: failed to run aclocal: No such file or directory
```

try the following command using Brew:

```
brew install autoconf && brew install automake
```

If you get the following error: `Can't exec "/opt/local/bin/aclocal": No such file or directory` Uninstall MacPorts with: `sudo port -fp uninstall --follow-dependents installed`

Android Installation

Prerequisites

- Min Android SDK: 23 (Android 6.0 "Marshmallow")

Installation

The Conio Android SDK is located in a private Maven repository on *JFrog Artifactory*, so it is necessary to configure the authentication as follow.

- Add the Artifactory credentials provided by Conio to your global `gradle.properties`

```
artifactory_user=<username provided by Conio>
artifactory_password=<password provided by Conio>
```

- Add the Conio Artifactory repository to your `build.gradle`

```
repositories {
    // ...
    maven {
        url "https://artifactory.conio.com/artifactory/gradle-release-local"
        credentials(PasswordCredentials) {
            username "${artifactory_user}"
            password "${artifactory_password}"
        }
    }
}
```

- Add the Conio SDK dependency

```
dependencies {
    // ...
    implementation 'com.conio:sdk-b2b:[VERSION]'
}
```

iOS Configuration

`ConioB2BSDK` is divided into multiple services, each one providing a different set of APIs.

Each service is independent and can be initialized through a `ServiceConfiguration` configuration using its own factory.

```
let conioConfig = ConioConfiguration.makeTestConfiguration(baseUrl: ...)
let userService =
UserServiceFactory().makeServiceUsingConfiguration(conioConfig)

// User Service ready to be used
userService
    .login(with: ...)
    .asPublisher()
    .sink { ... }
// ...
```

Otherwise, `ConioB2BServiceFactory` factory leverages on a single `ServiceFactory` to make the requested `Service`.

```
let conioConfig = ConioConfiguration.makeTestConfiguration(baseUrl: ...)
let userService =
ConioB2BServiceFactory.makeServiceUsingFactory(UserServiceFactory(),
serviceConfiguration: conioConfig)
let walletService =
ConioB2BServiceFactory.makeServiceUsingFactory(WalletServiceFactory(),
serviceConfiguration: conioConfig)
let activitiesService =
ConioB2BServiceFactory.makeServiceUsingFactory(ActivitiesServiceFactory(),
serviceConfiguration: conioConfig)
// ...
```

Usage

The single `Service` API is initialized with its specific `Params` parameters (if necessary) and the output can be read through its `OperationResult` result.

```
// ...
let params = LoginParams
    .make(
        username: ...,
        password: ...,
        cryptoRequest: ...
    )

userService
    .login(with: params)
```

```
        .asPublisher()
        .sink { result in
            switch result {
            case .success:
                // ...
            case .failure(let error):
                // ...
            }
        }
        .store(in: ...)
// ...
```

Each API is returned as `ServiceConsumer` and can be consumed in three different ways:

- `asPublisher()`, used to handle the result in a declarative way leveraging on Combine;

- `asCallback()`, used to handle the result in closure/lambda style as self-contained block;

- `run()`, used to execute the API without handling the result.

```
// asPublisher()
let cancellable = userService
    .logout()
    .asPublisher()
    .sink { result in
        // ...
    }

// asCallback()
userService
    logout()
    .asCallback { result in
        // ...
    }

// run()
userService
    .logout()
    .run()
```

Android Configuration

To use the Conio SDK, you need to create an instance of the `Conio` class, providing an Android `Context` and a `ConioConfiguration`.

The `ConioConfiguration` allow you to specify the execution environment of the Conio SDK (e.g. test or production) and can be created with the url of the Conio Back-end and with the related Bitcoin Network.

```kotlin
val configuration = ConioConfiguration(
    // required

    baseUrl = "https://example.test.com",
    bitcoinNetwork = BitcoinNetwork.Testnet, // or BitcoinNetwork.Mainnet for
production enviroment

    // optional

    // http headers added to each request, usefull for debug purpose
    headers = mapOf("header_key" to "header_value"),
)

val conio = Conio(configuration, context)
```

User Service

The `UserService` contains all the APIs used to manage a Conio user. It provides methods to manage a Conio user.

APIs

Login

• User Login

Signup

• User Signup

Logout

• User Logout

Fetch Legal Acceptances

• Fetch Legal Acceptances

Fech User Permissions

• Fetch Permissions

Accept New Legal Acceptances

• Accept New Legal Acceptances

Trading Info Service

The `TradingInfoService` contains all the APIs used to manage a Conio user trading profile and information.

APIs

Fetch Trading Fees

- Fetch Trading Fees

Fetch Trading Summary

- Fetch Trading Summary

Fetch Trading Limits

- Fetch Trading Limits

Fetch Trading Report

- Fetch Trading Report

Wallet Service

The `WalletService` contains all the APIs that provides information about the user Wallets, such balance and mnemonic.

APIs

Balance

- Fetch Balances

Mnemonic

- Fetch Mnemonic

BTC Transaction Management Service

The `BtcTransactionManagementService` contains all the APIs responsible for managing Bitcoin transactions, including sending bitcoin, receiving bitcoin and speeding up transactions.

APIs

Receive

- Fetch Address

Send

- Send Bitcoin

Speed Up

- Speed Up Transaction

Transaction Available Fees

- Fetch Transaction Available Fees

Speed Up Transaction Available Fees

- Fetch Speed Up Available Fees

Trading Buy Service

The `TradingBuyService` contains all the APIs designed to facilitate the purchase of cryptocurrencies through trading operations. It provides methods for creating, updating, fetching and finalizing bid quotations.

APIs

Create New Bid

• Create Bid

Update Existing Bid

• Update Bid

Fetch Existing Bid

• Fetch Bid

Buy Cryptocurrency

• Buy

Trading Sell Service

The `TradingSellService` contains all the APIs designed to facilitate the sale of cryptocurrencies through trading operations. It provides methods for creating, updating, fetching and finalizing ask quotations.

APIs

Create New Ask

- Create Ask

Update Existing Ask

- Update Ask

Fetch Existing Ask

- Fetch Ask

Sell Cryptocurrency

- Sell

Trading Price Service

The `TradingPriceService` contains all the APIs that provides cryptocurrencies trading price information. It provides methods for fetching current or historical crypto prices and tradable metadata, including cryptocurrency ids.

APIs

Fetch Current Cryptocurrency Price

- Fetch Price

Fetch Historical Cryptocurrency Price

- Fetch Historical Prices

Fetch All Current Cryptocurrencies Prices

- Fetch All Prices

Fetch Tradable Cryptocurrencies Metadata

- Fetch Tradable Crypto Metadata

Swap Service

The `SwapService` contains all the APIs designed to facilitate the cryptocurrency swap functionality. It provides methods for creating, updating, fetching and finalizing swap quotations between cryptos.

APIs

Create New Swap

- Create Swap

Update Existing Swap

- Update Swap

Fetch Existing Swap

- Fetch Swap

Swap Cryptocurrency

- Swap

Transfer Service

The `TransferService` contains all the APIs designed to facilitate the cryptocurrency amount transferring from an On-Chain Wallet to an Off-Chain Wallet of the same cryptocurrency and viceversa. It provides methods for creating, updating, fetching and finalizing transfer cryptocurrency between On-Chain and Off-Chain Wallet.

APIs

Create New Transfer

- Create Transfer

Update Existing Transfer

- Update Transfer

Fetch Existing Transfer

- Fetch Transfer

Transfer Cryptocurrency Amount

- Transfer

Activities Service

The `ActivitiesService` contains all the API that provides information about wallets transactions.

APIs

Activities

- [Fetch Activities](#)

Single Activity

- [Fetch Activity](#)