PHILLIP SECURITIES PTE LTD
(INCORPORATED IN THE REPUBLIC OF SINGAPORE)
STOCK & SHARE BROKERS
MEMBER OF THE STOCK EXCHANGE OF SINGAPORE LTD

PHILLIP SECURITIES PTE LTD

Mobile 2.0 API

Program Design Specifications

For:	*Phillip Securities Pte Ltd*	*Project Ref:*	
Author:		*Doc Ref:*	
Proj Mgr:		*Version:*	
Date:		*Classification:*	
To:		*Cc:*	

Document Revision History

Document Title :

Version	Revised by	Effective Date	Summary of Change	Reason for change
1.0			Initial release	
1.1		27 Jul 2016	Phase 4 API release	
1.2			Minor update on documents	
1.3			Minor update on news	
1.4			Minor update on couter info	
1.5			Add Pre-Login price, minor update on API.	

Change Logs:

1.1:
- Presession function add touchIDEnabled flag, forgotPwd link and appStore Link
- Authenticate function add accountType, pwdChangeNotifyStatus and pwdChangeNotifyMsg
- Added Touch ID related function (authenticate, register, re-authenticate)
- Counter Info now available for individual products API (ut/counter/info, cfd/counter/info, st/counter/info).
- PMPChartPreAuth (/global/chart/globalchartpreauth) will return counter information for PMP request
- CFD Trade Info (/cfd/trade/info) adjustment for bidSize properties
- Added UT Basket Order Count (/ut/trade/basket/count)
- Order Status List functions added delayIndicator for ST and CFD
- CFD Order Details (/cfd/order/{orderNo}) removed unecceary properties (ocoLimitPrice, ocoLimitQty, ocoStopSPrice, ocoStopSPriceTrigger, ocoStopLPrice, ocoStopQty). Added correspondOrderNo property.
- UT Order Details (/ut/order/{orderNo}) added qty, indicativeTransactionDate properties
- UT orderNo parameter updated to INT.
- Added My News related functions (My News, My News Settings, Update My News Setting)
- Alert related functions (Count, Price, Order, Account) updated timestamp parameters format
- Price alert related functions (List and Details) added delayIndicator properties
- Added Online Forms (ST, CFD) related functions
- Added Account Management related functions (Portfolio, Account Details, Holdings, Outstanding Position, Transaction History)
- Product Access function (/global/settings/productaccess) added name, searchEnabled and allSearchValue. Removed NFX product.
- Stock Analytics related functions moved from /global to /st

1.2:
- CFD trade validate (/cfd/trade/validate) update encryptedPIN to authToken
- Counter Top functions (/st/counter/top & /ut/counter/top) added counterID property
- Order Details functions (/st/order/{orderNo} & /cfd/order/{orderNo}) removed isWithdrawable and isAmendable properties
- Stocks currency converstion validate (/st/onlineforms/currencyconversion/validate) and submit (/st/onlineforms/currencyconversion/submit) added offsetSourceCurrency and offsetTargetCurrency parameters.
- Pre-session (/global/onefa/presession) now returning FAQ and AppStore link.

1.3:
- Fixed section number
- News list (/global/news/mynews, /st/news/headlines/{category}, /st/news/related, /st/news/prelogin, /ut/news/headlines/{category}) add 'count' parameter, by default is 30.
- Some of news list functions (/global/news/mynews, /st/news/headlines/{category}, /ut/news/headlines/{category}) add 'keyword' parameter for search.
- Stock Analytics related functions add 'lastUpdated' properties.

1.4:
- CFD counter detail function (cfd/counter/info) added 'fiftyTwoWkHigh',' fiftyTwoWkLow' and 'commission' properties.
- Counter info detail function for CFD (global/counter/info) added 'commission' property.
- Remove counter info functions (Global) for individual product as one common global function is enough.

- CFD order detail function (cfd/order/{orderNo}) added 'orderNo' property.
- Add passwordRequire and twoFARequire for every transaction related functions (trade, order status, online forms)
- Update client settings, add encryptedPIN parameter only for disable password confirmation
- Counter Price (global/counter/pricelist) added spread and spTickSize.

1.5:
- Add note about the param 'sorts' for function (/global/watchlist/{watchListID}/sort) .
- Add 3 new functions (/global/counter/prelogin, /st/counter/prelogin/worldindices, /st/counter/prelogin/indicescomponent/sgx/{indexCode}) for Prelogin pricelist.
- Update response format for Equities balance list (/global/portfolio/equitybalance)
- Add AlertType values & Definition for Price Alert update function (/global/alert/price/update)
- Add UT Basket get by group (/ut/trade/basket/getbygroup), get basket order add nav and salesCharge properties.
- Update description for param values that can be passed in rank option of (/ut/counter/top) to make more clear.
- Update Outstanding Position related functions. List function will return 'id' properties and details functions will accept 'id' as query.
- Stocks Transaction Hitory (/st/transactionhistory) added lastUpdated property
- CFD Transaction History (/cfd/transactionhistory) added lastUpdated and currencies properties.
- Add 2 new functions (/st/onlineforms/withdrawal/note, /cfd/onlineforms/withdrawal/note) to retrieve withdrawal note without validation.
- Add Touch ID Terms & Conditions function (/global/onefa/touchid/termcondition)
- General portfolio disclaimer function (/global/portfolio/disclaimer) now support for OnlineForms and OSPosition.
- Online Form history (/st/onlineforms/history) now return adminRemark and clientRemark instead of remarks.
- Add "typeIcon" property in Equities balance list (/global/portfolio/equitybalance).
- Add "withdrawalType" input parameter in (/cfd/onlineforms/withdrawal/note).

Table of Contents

I.   Program Definition

1.1   System Name

Pmobile 2.0 API – This API will be used from POEMS Mobile application Pmobile Android 2.0 and Pmobile iPhone 2.0.

1.2   Program Description and the module in Design Specification this program is based on

1.2.1   Authentication

Several APIs are available for POEMS 1FA login, change password and some 2FA features (device linkage, authenticate, send SMS OTP).

1.2.2   Watchlist

Provide API funcitons to control/manage the client's multiproduct watchlist. (Add counters to the watchlist, remove counter from the watchlist, rename the watchlist name, move the counter from one to another, update the counter sequence).

1.2.3   Counter

Those are the API releated with counter information and price. Get counter details, prices, top counters, indices, etc.

1.2.4   Stock Analytics

Those are the API releated with stock analytics information.

1.2.5   Chart

There's a function to get the authentication code to subscribe to global chart.

1.2.6   Trade

API functions related with Trade, get Trade Info, validate, and submission.

1.2.7   Order Status

Order status related functions, like today order, past order, amend order, withdraw order.

1.2.8   Settings

There are several functions to retrieve the application settings/flag for specific version, account settings, notification settings and hotline numbers, etc.

II.   Structure Design

2.1   Block Chart or Flow Chart on top level structure of the program

2.2   Description of each module

2.2.1 Application Constants and Definitions

2.2.1.1   Environment

Environement	URL
Public Test	https://118.189.144.221/pmobile2

2.2.1.2   Supported Products

ProductKey	Name	Icon	Binary Flag	Watchlist Product ID
ST	Equities	EQ	1	1
CFD	CFD	CFD	2	2
CFDDMA	CFD DMA	CFD DMA	4	3
FT	Futures	FUT	8	4
FX	Reg Forex	REG FX	16	5
FXMN	Mini Forex	Mini FX	32	5
UT	Unit Trust	UT	64	6
NFX	FX Invest	NFX	128	7

2.2.1.3   Supported Modules

Module Key	Parent	Sequence	Binary Flag
Watchlist		1	1
Trade		2	2
OrderStatus		3	4
Alert		4	8
TopMover		5	16
News		6	32
UTBasket		7	64
Portfolio		8	128
OSPayment		9	256
OnlineForms		10	512
TransactionHistory		11	1024
FXInvest		12	2048
Settings		13	4096
Help		14	8192
PriceAlert	Alert	1	16384
OrderAlert	Alert	2	32768
AccountAlert	Alert	3	65536
AnnouncementAlert	Alert	4	131072

2.2.1.4   Supported Applications

Application	Version No	API Key
PMobile 2 Android	2.0.0	3FA5B748-9EC7-41EF-93FA-8C93AC349312
PMobile 2 iPhone	2.0.0	A4AB8B23-735E-4ABC-9E26-9F78292E25CC

2.2.1.5   Supported Languages

ID	Language
1	EN (English)
2	CN

3	JP

2.2.1.6   Return Code

Code	Description
1	Success
-1	Error / Request Failed
-42	Session Expired
-333	Confirmation / Warning

2.2.2 Authentication

2.2.2.1 Presession

URL	/global/onefa/presession			
Verb	POST			
Description	Create presession			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
Produce	application/json			
Result	```Presession { "msg": String, "code": int, "sessionId": String, "randomNo": String, "publicKey": String, "touchIDEnabled": Boolean, "urls": { "termsAndConditions": String, "accountOpening": String, "facebook": String, "twitter": String, "youtube": String, "forgotPwd": String, "appStore": String, "faq": String } }```			

2.2.2.2 Authenticate

URL	/global/onefa/authenticate			
Verb	POST			
Description	Create presession			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
Produce	application/json			
Result	```AccountSettings { "msg": String, "code": int, "pwdStatus": String, "accountActivatedFlag": String, "accountType": String, "pwdAttempts": int, "lastLoginTime": String, "pwdChangeNotifyStatus": int, "pwdChangeNotifyMsg": int, "twofa": { "status": boolean, "linkUsers": [```			

```
                        {
                            "nric": String,
                            "nafUserName": String,
                            "devices": [
                                {
                                    "id": String,
                                    "type": String,
                                    "spid": String
                                }
                            ]
                        }
                    ]
                }
            }
```

2.2.2.3 Authenticate Touch ID

URL	/global/onefa/touchid			
Verb	POST			
Description	Create presession			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	Encrypted TouchID token
Produce	application/json			
Result	*(see below)*			

```
AccountSettings {  /* Will return exact information with normal login */
    "msg": String,
    "code": int,
    "pwdStatus": String,
    "accountActivatedFlag": String,
    "accountType": String,
    "pwdAttempts": int,
    "lastLoginTime": String,
    "pwdChangeNotifyStatus": int,
    "pwdChangeNotifyMsg": int,
    "twofa":
    {
        "status": boolean,
        "linkUsers": [
            {
                "nric": String,
                "nafUserName": String,
                "devices": [
                    {
                        "id": String,
                        "type": String,
                        "spid": String
                    }
                ]
            }
        ]
    }
}
```

2.2.2.4 Register Touch ID

URL	/global/onefa/touched/register

Verb	POST			
Description	Create presession			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	Current password and touch ID token to encrypt with E2EE change password method
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int
	}			

2.2.2.5 Touch ID Terms & Condition

URL	/global/onefa/touchid/termcondition			
Verb	GET			
Description	Get disclaimer by screen type			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "disclaimerContent": String
	}			

2.2.2.6 Touch ID Re-Authenticate

URL	/global/onefa/reauthenticate			
Verb	POST			
Description	Create presession			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int
	}			

2.2.2.7 Change Password

URL	/global/onefa/changepassword
Verb	POST
Description	change password

Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
Produce	application/json			

Result	{
	    "msg": String
	    "code": int
	}			

2.2.2.8 Logout

URL	/global/onefa/logout			
Verb	POST			
Description	logout			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	    "msg": String
	    "code": int
	}			

2.2.2.9 2FA-Info

URL	/global/twofa			
Verb	GET			
Description	retrieve 2FA-info			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	    "msg": String
	    "code": int
	    "status": boolean,
	    "linkUsers": [
	        {
	            "nric": String,
	            "nafUserName": String,
	            "devices": [
	                {
	                    "id": String,
	                    "type": String,
	                    "spid": String
	                }
	            ]			

	``` }] }```			

2.2.2.10   2FA-OutOfBound

URL	/global/twofa/outofboundotp			
Verb	POST			
Description	send SMS OTP			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	nafUserName	@Header	String	
	twoFADeviceId	@Header	String	
	spid	@Header	String	
Produce	application/json			
Result	```{ "msg": String "code": int "status": boolean, "linkUsers": [{ "nric": String, "nafUserName": String, "devices": [{ "id": String, "type": String, "spid": String }] }]}```			

2.2.2.11   2FA-Authenticate

URL	/global/twofa/authenticate			
Verb	POST			
Description	Authenticate 2FA			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	nafUserName	@Header	String	
	twoFADeviceId	@Header	String	
	spid	@Header	String	
	type	@Header	String	
	twoFAData	@Header	String	
	challenge	@Header	String	
Produce	application/json			
Result	```{ "msg": String "code": int```			

	}

2.2.3 Watchlist

2.2.3.1 Pre-login

URL	/global/watchlist/prelogin			
Verb	GET			
Description	Retrieve Pre-login watch list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
Produce	application/json			

Result	<pre>{
	   "msg": String,
	   "code": int,
	   "name": String,
	   "id": long,
	   "counters": [
	     {
	       "name": String,
	       "code": String,
	       "index": int,
	       "symbol": String,
	       "market": String,
	       "exchange": String,
	       "exchangeDisplay": String,
	       "globalChartExchange": String,
	       "product": String,
	       "pmpTopic": String,
	       "counterID": String,
	     }
	   ]
	}</pre>			

2.2.3.2 Names

URL	/global/watchlist			
Verb	GET			
Description	Retrieve watchlist data			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	Default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	<pre>{
	    "msg": String,
	    "code": int,
	    [{
	       "name": String,
	       "id": int,
	       "counterListURI": String
	       "index": int
	    }]
	}</pre>			

2.2.3.3 Details

URL	/global/watchlist/{watchListID}			
Verb	GET			
Description	Retrieve watch list details by watch list ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": int,
	  "id": long,
	  "counters": [
	    {
	      "name": String,
	      "code": String,
	      "index": int,
	      "symbol": String,
	      "market": String,
	      "exchange": String,
	      "exchangeDisplay": String,
	      "globalChartExchange": String,
	      "product": String,
	      "pmpTopic": String,
	      "counterID": String,
	      "delayIndicator": String
	    }
	  ]
	}</pre>			

2.2.3.4 Add

URL	/global/watchlist/{id}/add			
Verb	POST			
Description	Add counter to watchlist			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Form	String	product/market/exchange/code
	symbol	@Form	String	
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": int,
	  "id": long,
	  "counters": [
	    {
	      "name": String,
	      "code": String,
	      "index": int,</pre>			

```
            "symbol": String,
            "market": String,
            "exchange": String,
            "exchangeDisplay": String,
            "globalChartExchange": String,
            "product": String,
            "pmpTopic": String,
            "counterID": String,
        }
    ]
}
```

2.2.3.5 Rename

URL	/global/watchlist/{id}/rename			
Verb	POST			
Description	Rename watchlist			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	nameNew	@Form	String	
Produce	application/json			
Result	```{ "msg": String, "code": int, "watchlistDataList": [{ "counterlistURI": String, "index": int, "name": String, "watchlistID": long }]}```			

2.2.3.6 Remove

URL	/global/watchlist/{id}/remove			
Verb	POST			
Description	Remove counter from watchlist			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterIDs	@Form	String List	product/market/exchange/code
Produce	application/json			
Result	```{ "msg": String, "code": int, "id": long, "counters": [{ "name": String, "code": String,```			

_____

```
            "index": int,
            "symbol": String,
            "market": String,
            "exchange": String,
            "exchangeDisplay": String,
            "globalChartExchange": String,
            "product": String,
            "pmpTopic": String,
            "counterID": String,
          }
        ]
}
```

2.2.3.7 Move

URL	/global/watchlist/move			
Verb	POST			
Description	Move counter to another watchlist			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	fromWatchlistID	@Form	int	
	toWatchlistID	@Form	int	
	counterIDs	@Form	String List	product/market/exchange/code
Produce	application/json			
Result				

```
{
  "msg": String,
  "code": int,
  "moveCounters": [String],
  "id": long,
  "counters": [
    {
      "name": String,
      "code": String,
      "index": int,
      "symbol": String,
      "market": String,
      "exchange": String,
      "exchangeDisplay": String,
      "globalChartExchange": String,
      "product": String,
      "pmpTopic": String,
      "counterID": String,
    }
  ]
}
```

2.2.3.8 Sort

URL	/global/watchlist/{watchListID}/sort			
Verb	POST			
Description	Sort watch list counter by counter ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	

	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	sorts	@Form	String []	{"counterID/oldIndex/newIndex"}
Produce	application/json			

Result	{
	  "msg": String,
	  "code": int,
	  "id": long,
	  "counters": [
	    {
	      "name": String,
	      "code": String,
	      "index": int,
	      "symbol": String,
	      "market": String,
	      "exchange": String,
	      "exchangeDisplay": String,
	      "globalChartExchange": String,
	      "product": String,
	      "pmpTopic": String,
	      "counterID": String,
	      "delayIndicator": String
	    }
	  ]
	}			

***Note: No need to pass the param value for the counter at destination index. For example, to move the counterID "ST/SG/SGX/DBS.SG" from index 2 to new index 1, just simply pass sorts param as "ST/SG/SGX/DBS.SG/2/1" and no need to care about the current counter at index 1. The server side will handle it. Need to pass every user drag and drop action so that the server side can sort correctly.

2.2.3.9 UpdateSequence

URL	/global/watchlist/{watchListID}/updatesequence			
Verb	POST			
Description	Sort watch list counter by counter ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	sequence	@Form	String	counterID, counterID
Produce	application/json			

Result	{
	  "msg": String,
	  "code": int,
	  "id": long,
	  "counters": [
	    {
	      "name": String,			

```
            "code": String,
            "index": int,
            "symbol": String,
            "market": String,
            "exchange": String,
            "exchangeDisplay": String,
            "globalChartExchange": String,
            "product": String,
            "pmpTopic": String,
            "counterID": String,
            "delayIndicator": String
        }
      ]
    }
```

***Note: Please pass all counter id list as comma separated sequence. E.g (sequence: ST/SG/SGX/DBS.SG, ST/SI/SGX/IXP/N.SG)

2.2.4 Counter

2.2.4.1 Pre-login

For Pre-Login Price lists

URL	/global/counter/prelogin			
Verb	GET			
Description	Retrieve Pre-login lists			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": int,
	  "preloginList": [
	    {
	      "title": String, /*Indices, STI Component Stocks, FX/GOLD*/
	      "uri": String
	    }
	  ]
	}</pre>			

2.2.4.2 Pre-login World Indices

For Pre-Login World Indices Price

URL	/st/counter/prelogin/worldindices			
Verb	GET			
Description	Retrieve World Indices price information			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": int,
	  "columns": [
	    {
	      "title": String, /*Name, Last Trade, Change, Change (%)*/
	      "property": String /*name, lastDone, change, changePercent*/
	    }
	  ],
	  "counterData": [
	    {
	      "counterID": String,
	      "name": String,
	      "change": String,
	      "changePercent": String,
	      "lastDone": String
	    }
	  ]
	}</pre>			

2.2.4.3 Pre-login STI Component

_____

For Pre-Login STI Price

URL	/st/counter/prelogin/indexcomponent/sgx/{indexCode}			
Verb	GET			
Description	Retrieve STI component stocks information			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	indexCode	@Path	String	STI
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": int,
	  "columns": [
	    {
	      "title": String, /*Name, Last Done, Change, Change (%), Volume*/
	      "property": String /*name, lastDone, change, changePercent, volume*/
	    }
	  ],
	  "counterData": [
	    {
	      "counterID": String,
	      "name": String,
	      "change": String,
	      "changePercent": String,
	      "volume": String,
	      "lastDone": String
	    }
	  ]
	}</pre>			

2.2.4.4 Search Counter

URL	/global/counter/search			
Verb	GET			
Description	Search counter			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	productFlag	@Query	int	Default: 127 Product binary flag or Sum of Product binary flag
	module	@Query	int	Default: 0 TRADE: 1
	market	@Query	String	
	Exchange	@Query	String	
	keyword	@Query	String	
	count	@Query	int	Default: 10
Produce	application/json			

Result	<pre>SearchResult {
	  "msg": String,
	  "code": int,
	  "counterList": [
	    Counter {</pre>			

```
                                "name": String,
                                "code": String,
                                "index": int,
                                "symble": String,
                                "market": String,
                                "exchange": String,
                                "exchangeDisplay": String,
                                "globalChartExchange": String,
                                "product": String,
                                "productIcon": String,
                                "counterID": String
                    /* product/exchange/market/code */        }
                        ]
                    }
```

*** Need to have Search function in UT, CFD and FT/FX API. Those function must accept module (require if there's a control to be tradable or viewable), keyword and count. And must return the above Counter result except counterId, product and productIcon.

2.2.4.5 Counter Prices

URL	/global/counter/pricelist			
Verb	GET			
Description	Retrieve price information			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	size	@Query	int	counter ids size
	counterIDs	@Query	String List	product/market/exchange/code
Produce	application/json			
Result	(see below)			

```
{
    "msg": String,
    "code": int,
    "priceList":     [
      {
            "product": String,
            "productIcon": String,
            "counterName": int,
            "lastDone": String,
            "change": String,
            "changePercent": String,
            "bid": String,
            "ask": String,
            "bVolK": String,
            "sVolK": String,
            "volK": String,
            "open": String,
            "high": String,
            "low": String,
            "prevClose": String,
            "currency": String,
            "asset": String,
            "oneYearReturn": String,
            "threeYearReturn": String,
            "minInvestment": String,
```

```
                            "subInvestment": String,
                            "serviceCharge": String,
                            "pmpTopic": String,
                            "symbol":String,
                            "spread": String,
                            "spTickSize": String,
                            "delayIndiciator":String ( "*" OR "")
                        }
                    ]
                }
```

***   Need to have Get Prices function in UT, CFD and FT/FX API. Those function must accept list of
        counters. And must return
        Stocks/CFD   - counterName, lastdone, change, changePercent, bid, ask, bVolK, sVolK, volK,
                        open, high, low, prevClose,symbol,delayIndiciator,product,productIcon.
        UT   - counterName, lastDone, currency, assest, oneYearReturn, threeYearReturn,
                        minInvestment, subInvestment, ,product,productIcon.
        FUT/FX   - counterName, lastDone, change, changePercent, bid, ask, bVolK, sVolK, volK,
                        open, high, low, prevClose,symbol,product,productIcon (**Prices for Futures
                        don't have thousand separator (comma)**)

2.2.4.6 Counter Info (short and details)

URL	global/counter/info			
Verb	GET			
Description	Sort watch list counter by counter ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	priceMode	@Query	int	default: 1 (1 – SHORT, 2 – DETAILS)
	counterID	@Query	String	
Produce	application/json			
Result	(see below)			

```
{
    "msg": String,
    "code": int,
    "product": String,
    "productIcon": String,
    "counterName": String,
    "delayIndicator": String,
    "lastDone": String,
    "change": String,
    "changePercent": String,
    "bid": String,
    "ask": String,
    "bVolK": String,
    "sVolK": String,
    "volK": String, /* DETAIL ONLY */
    "open": String, /* DETAIL ONLY */
    "prevClose": String, /* DETAIL ONLY */
    "low": String,
    "high": String,
    "remark": String, /* ST DETAIL ONLY */
    "remarkDesc": String, /* ST DETAIL ONLY */
    "fiftyTwoWkHigh": String, /* ST/CFD DETAIL ONLY */
```

```
        "fiftyTwoWkLow": String, /* ST/CFD DETAIL ONLY */
        "cpf": boolean, /* ST DETAIL ONLY */
        "lastDoneDate": String, /* ST/UT */
        "cfdContractInfo": {  /* CFD DETAIL ONLY */
               "commission": String,
               "dayCommission": String,
               "marginRequirement": String,
               "tradeAllowed": String,
               "longFinanceChg": String,
               "shortFinanceChg": boolean,
               "mincommission": String,
               "note": String,
             },
        "pmpTopic": String
           }
      ]
  }
```

***   UT, CFD and FT/FX API also should have similar function
         UT   - No bid, ask, high, low, volume
         CFD   - No lastdone, bVol, sVol for INDX
remarkDescURL to retrieve from Common Settings

UT Counter Info (Short) (UT Service)

URL	ut/counter/info			
Verb	GET			
Description	Sort watch list counter by counter ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	priceMode	@Query	int	default: 1 (1 – SHORT, 2 – SHORT)
	counterID	@Query	String	
Produce	application/json			

Result	<pre>{
	    "msg": String,
	    "code": int,
	    "product": String,
	    "productIcon": String,
	    "counterName": String,
	    "lastDone": String,
	    "change": String,
	    "changePercent": String,
	    "lastDoneDate": String
	}</pre>			

CFD Counter Info (Short) (CFD Service)

URL	cfd/counter/info			
Verb	GET			
Description	Sort watch list counter by counter ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	

	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	priceMode	@Query	int	default: 1 (1 – SHORT, 2 – DETAILS)
	counterID	@Query	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "product": String,
	    "productIcon": String,
	    "counterName": String,
	    "delayIndicator": String,
	    "lastDone": String,
	    "change": String,
	    "changePercent": String,
	    "bid": String,
	    "ask": String,
	    "bVolK": String,
	    "sVolK": String,
	    "low": String,
	    "high": String,
	    "pmpTopic": String
	}			

CFD Counter Info (Detail) (CFD Service)

URL	cfd/counter/info			
Verb	GET			
Description	Sort watch list counter by counter ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	priceMode	@Query	int	default: 1 (1 – SHORT, 2 – DETAILS)
	counterID	@Query	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "product": String,
	    "productIcon": String,
	    "counterName": String,
	    "delayIndicator": String,
	    "lastDone": String,
	    "change": String,
	    "changePercent": String,
	    "bid": String,
	    "ask": String,
	    "bVolK": String,
	    "sVolK": String,
	    "volK": String, /* DETAIL ONLY */
	    "open": String, /* DETAIL ONLY */
	    "prevClose": String, /* DETAIL ONLY */			

```
        "fiftyTwoWkHigh": String, /* DETAIL ONLY */
        "fiftyTwoWkLow": String, /* DETAIL ONLY */
        "low": String,
        "high": String,
        "cfdContractInfo": {  /* CFD DETAIL ONLY */
                "commission": String,
                "dayCommission": String,
                "marginRequirement": String,
                "tradeAllowed": String,
                "longFinanceChg": String,
                "shortFinanceChg": boolean,
                "mincommission": String,
                "note": String,
            },
        "pmpTopic": String
}
```

Stock Counter Info (Short) (ST Service)

URL	st/counter/info			
Verb	GET			
Description	Sort watch list counter by counter ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	priceMode	@Query	int	default: 1 (1 – SHORT, 2 – DETAILS)
	counterID	@Query	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "product": String,
	    "productIcon": String,
	    "counterName": String,
	    "delayIndicator": String,
	    "lastDone": String,
	    "change": String,
	    "changePercent": String,
	    "bid": String,
	    "ask": String,
	    "bVolK": String,
	    "sVolK": String,
	    "low": String,
	    "high": String,
	    "lastDoneDate": String,
	    "pmpTopic": String
	}			

Stock Counter Info (Detail) (ST Service)

URL	st/counter/info		
Verb	GET		
Description	Sort watch list counter by counter ID		
Parameters	deviceId	@Header	String

	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	priceMode	@Query	int	default: 1 (1 – SHORT, 2 – DETAILS)
	counterID	@Query	String	
Produce	application/json			
Result	(see below)			

```
{
    "msg": String,
    "code": int,
    "product": String,
    "productIcon": String,
    "counterName": String,
    "delayIndicator": String,
    "lastDone": String,
    "change": String,
    "changePercent": String,
    "bid": String,
    "ask": String,
    "bVolK": String,
    "sVolK": String,
    "volK": String,
    "open": String,
    "prevClose": String,
    "low": String,
    "high": String,
    "remark": String,
    "remarkDesc": String,
    "fiftyTwoWkHigh": String,
    "fiftyTwoWkLow": String,
    "cpf": boolean,
    "lastDoneDate": String,
    "pmpTopic": String
}
```

2.2.4.7 Top Counters

For Stocks Supported Exchange

URL	/st/counter/exchange			
Verb	GET			
Description	Retrieve supported exchange			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			
Result	(see below)			

```
{
  "msg": String,
  "code": int,
  "markets": [
    {
      "exchange": String,
      "exchangeDisplay": String,
```

```
            "market": String
        }
    ]
}
```

For Stocks Top Mover

URL	/st/counter/top			
Verb	GET			
Description	Retrieve the top counters for Stock			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	market	@Query	String	
	exchange	@Query	String	
	top	@Query	int	default: 30
	type	@Query	int	(1: Volume, 2:Gainer, 3:Loser)
Produce	application/json			
Result	(see below)			

```
{
  "msg": String,
  "code": int,
  "topCounters": [
    {
      "ask": String,
      "bVolK": String,
      "bid": String,
      "change": String,
      "changePercent": String,
      "counterName": String,
      "counterID": String,
      "delayIndiciator": String,
      "high": String,
      "lastDone": String,
      "low": String,
      "open": String,
      "prevClose": String,
      "product": String,
      "productIcon": String,
      "sVolK": String,
      "volK": String
    }
  ]
"pmpTopic": String
}
```

For UT Top Mover

URL	/ut/counter/top			
Verb	GET			
Description	Retrieve the top counters for Stock			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1

	accountNo	@Header	String	
	sessionId	@Header	String	
	top	@Query	int	default: 30
	rankType	@Query	int	default: 0 (0: TOP, 1:Worst)
	rankOption	@Query	int	default: 2 (1: weekly 2 : monthly 10: daily)
	assets	@Query	String []	(All, Alternative Investments, Balanced, Bond, Cash & Equivalents, Commodities, Currencies, Equities)
Produce	application/json			

Result	{
	   "msg": String,
	   "code": int,
	   "utTopCounters": [
	     {
	       "bid": String,
	       "change": String,
	       "changePercent": String,
	       "counterName": String,
	       "counterID": String,
	       "date": String,
	       "oneYearReturn": String,
	       "product": String,
	       "productIcon": String,
	       "returnPrice": String,
	       "threeYearRetrun": String
	     }
	   ]
	}			

UT Assets

URL	/ut/counter /assets			
Verb	GET			
Description	Retrieve assets to fill data for UT Top Mover "All Categories " dropdown			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": int,
	   "utAssetlist": String[]
	}			

2.2.4.8 Indices

URL	/st/counter/indices

Verb	GET			
Description	Retrieve market indices price			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	market	@Query	String	
	exchange	@Query	String	
Produce	application/json			

Result	<pre>{
	   "msg": String,
	   "code": int,
	   "topCounters": [
	      {
	         "product": String,
	         "productIcon": String,
	          "counterName": int,
	         "lastDone": String,
	         "change": String,
	         "changePercent": String,
	         "bid": String,
	         "ask": String,
	         "bVolK": String,
	         "sVolK": String,
	         "volK": String,
	         "open": String,
	         "high": String,
	         "low": String,
	         "prevClose": String,
	
	         "pmpTopic": String,
	         "delayIndiciator": String,
	         "symbol": String
	      }
	   ]
	}</pre>			

2.2.4.9 Stocks Market Depth

URL	/st/counter/marketdepth			
Verb	GET			
Description	To check market depth access right and retrieve data for SG / HK			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	<pre>{
	   "msg": String,
	   "code": Int,
	   "pmpTopic": String,
	   "marketDepth": /* Only when PMP Market Depth disabled */
	   [{
	      "buyVol" : String,</pre>			

_____

| | ```
      "buy" : String,
      "sell" : String,
      "sellVol" : String
   }]
}
``` |

2.2.4.10   Stocks Time and Sales

URL	/st/counter/timesales			
Verb	GET			
Description	To retrieve time & sales data			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
	from	@Query	String	HH:mm
	to	@Query	String	HH:mm
	size	@Query	Int	Default: 100
	page	@Query	Int	Default: 1
Produce	application/json			
| Result | ```
{
   "msg": String,
   "code": Int,
   "totalPage": Int,
   "timeSales": [{
      "time" : String,
      "price" : String,
      "vol" : String
   }]
}
``` | | | |

2.2.4.11   UT Funds Details General Info

URL	/ut/counter/generalinfo			
Verb	GET			
Description	To retrieve Funds detail general info			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			
| Result | ```
{
   "msg": String,
   "code": Int,
   "price4Week": {
      "high" : String,
      "highDate" : String,
      "low" : String,
      "lowDate" : String
   },
   "fundInfo": {
      "currency" : String,
      "source" : String,
      "psplRisk" : String,
      "cpfRisk" : String,
``` | | | |

```
                                "assetClass" : String,
                                "sector" : String,
                                "launchDate" : String,
                                "launchPrice" : String,
                                "geography" : String,
                                "benchmarkIndex" : String,
                                "priceType" : String,
                                "priceMadeKnownOn" : String,
                                "cutOffTime" : String
                            },
                            "investmentObjective": String,
                            "investmentAmmount": [{
                                "desc" : String,
                                "cash" : String,
                                "cpfoaia" : String,
                                "cpfsaia" : String,
                                "srsia" : String
                            }],
                            "relevantCharges": [{
                                "desc" : String,
                                "cash" : String,
                                "cpfoaia" : String,
                                "cpfsaia" : String,
                                "srsia" : String
                            }],
                            "lipperRatings": [{
                                "classification" : String,
                                "totalReturn" : String,
                                "consistentReturn" : String,
                                "preservation" : String,
                                "expense" : String
                            }],
                            "morningstarRatings": [{
                                "overall" : String,
                                "threeYears" : String,
                                "fiveYears" : String,
                                "tenYears" : String
                            }]
                        }
```

2.2.4.12   UT Funds Details Documents

URL	/ut/counter/documents			
Verb	GET			
Description	To retrieve Funds detail documentations			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "documents": [{
	    "title" : String,
	    "url" : String,
	    "date" : String
	  }]
	}			

2.2.4.13   UT Funds Details Manager Info

_____

URL	/ut/counter/managerinfo			
Verb	GET			
Description	To retrieve Funds manager info			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "name": String,
	  "logo": String,
	  "address": String,
	  "url": String,
	  "about": String,
	  "philosophy": String
	}			

2.2.4.14   UT Funds Details Performance Info

URL	/ut/counter/performance			
Verb	GET			
Description	To retrieve Funds detail performance info			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "fundName": String,
	  "performanceReturn": [{
	    "period" : String,
	    "value" : String
	  }],
	  "annualizedReturn": [{
	    "period" : String,
	    "value" : String
	  }]
	}			

For comparison, call this function with target counterID

2.2.4.15   UT Funds Details RSP Info

URL	/ut/counter/rsp			
Verb	GET			
Description	To retrieve Funds detail rsp info			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	

	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	```
	{
	  "msg": String,
	  "code": Int,
	  "approved": Boolean,
	  "approvedListURL": String, /* Only not Approved */
	  "learnMoreURL": String, /* Only Approved */
	  "monthlyRSP": [{ /* Only Approved */
	     "desc" : String,
	     "cash" : String,
	     "cpfoaia" : String,
	     "cpfsaia" : String,
	     "srsia" : String
	  }],
	  "quarterlyRSP": [{ /* Only Approved */
	     "desc" : String,
	     "cash" : String,
	     "cpfoaia" : String,
	     "cpfsaia" : String,
	     "srsia" : String
	  }]
	}
	``			

2.2.5 Stock Analytics

2.2.5.1 Stock Analytics Basic Stock Info

URL	/st/stockanalytics/stockinfo			
Verb	GET			
Description	Retrieve stock analytics basic stock info			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": Int,
	  "lastUpdated": String,
	  "stockData": {
	     "currencyCode" : String,
	     "marketCapitalization" : String,
	     "commonShareOutstanding" : String,
	     "week52High" : String,
	     "week52HighDate" : String,
	     "week52Low" : String,
	     "week52LowDate" : String,
	     "week52Return" : String,
	     "averageDailyVolume" : String,
	     "beta" : String
	  },
	  "stockValuation": {
	     "currencyCode" : String,
	     "historicalPERatio" : String,
	     "peRatio" : String,
	     "pbv" : String,
	     "bvps" : String,
	     "epsttm" : String
	  },
	  "stockDividend": {
	     "currencyCode" : String,
	     "annualDivPerShare" : String,
	     "divYieldTTM" : String,
	     "divYieldAnnual" : String,
	     "payoutRatio" : String,
	     "growthRate3Year" : String
	  },
	  "stockMargin": {
	     "grossMargin" : String,
	     "operatingProfitMargin" : String,
	     "netProfitMargin" : String
	  },
	  "financialStrength": {
	     "currencyCode" : String,
	     "currentRatio" : String,
	     "quickRatio" : String,
	     "longTermDebtEquity" : String,
	     "totalDebtEquity" : String,
	     "interestCoverageRatio" : String,
	     "freeCashFlowToFirm" : String
	  },
	  "peerComparison": [{
	     "industryPeer" : String,
	     "roa" : String,</pre>			

<table>
<tr><td></td><td>

```
            "roe" : String,
            "pe" : String,
            "divYield" : String,
            "flagCurrentCompany" : Boolean
        }]
    }
```

</td></tr>
</table>

2.2.5.2 Stock Analytics Financial Summary

URL	/st/stockanalytics/financialsummary			
Verb	GET			
Description	Retrieve stock analytics financial summary			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	<pre>{
	    "msg": String,
	    "code": Int,
	    "lastUpdated": String,
	    "financialSummary": String,
	    "annualFinancialStatement": [{
	        "cssClass" : String,
	        "description" : String,
	        "values" : [String]
	    }],
	    "annualRatioAndOtherData": [{
	        "cssClass" : String,
	        "description" : String,
	        "values" : [String]
	    }],
	    "quarterFinancialStatement": [{
	        "cssClass" : String,
	        "description" : String,
	        "values" : [String]
	    }],
	    "quarterRatioAndOtherData": [{
	        "cssClass" : String,
	        "description" : String,
	        "values" : [String]
	    }]
	}</pre>			

2.2.5.3 Stock Analytics Business Summary

URL	/st/stockanalytics/businesssummary			
Verb	GET			
Description	Retrieve			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			
Result	{			

| | ```
"msg": String,
"code": Int,
"businessSummary": String,
"lastUpdated": String
}
``` |

2.2.5.4 Stock Analytics Analyst Estimate

URL	/st/stockanalytics/analystestimate			
Verb	GET			
Description	Retrieve			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			
| Result | ```
{
   "msg": String,
   "code": Int,
   "lastUpdated": String,
   "recommendations": [{
      "description" : String,
      "currentWeek" : String
   }],
   "targetPrice": {
      "phillipPotentialChange" : String,
      "phillipRecommendation" : String,
      "phillipTargetPrice" : String,
      "priceCurrency" : String,
      "reuterPotentialChange" : String,
      "reuterRecommendation" : String,
      "reuterTargetPrice" : String,
      "reuterLastTradedPrice" : String,
      "reuterLastTradedPriceDate" : String
   }
}
``` | | | |

2.2.5.5 Stock Analytics Disclaimer

URL	/st/stockanalytics/disclaimer			
Verb	GET			
Description	Retrieve			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			
| Result | ```
{
   "msg": String,
   "code": Int,
   "disclaimer": String
}
``` | | | |

2.2.6 Chart

2.2.6.1 PMPChartPreAuth

URL	/global/chart/globalchartpreauth			
Verb	GET			
Description	Retrieve global chart pre auth			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
	authCode	@Query	String	Default:" To pass value after called 1st time
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "authCode": String,
	  "contractInfo": {
	    "contractCode": String,
	    "contractName": String,
	    "exchangeCode": String,
	    "marketCode": String,
	    "serverHisDaily": String,
	    "serverHisMinutely": String,
	    "serverLiveMinutely": String,
	    "serverHisDailyD": String,
	    "serverHisMinutelyD": String,
	    "serverLiveMinutelyD": String,
	    "topicHisDaily": String,
	    "topicHisMinutely": String,
	    "topicLiveMinutely": String,
	    "historyMinDate": String,
	    "historyDayDate": String,
	    "pmpPublishDate": String
	  }
	}			

2.2.7 Trade
2.2.7.1 Stocks Trade Info

URL	/st/trade/info			
Verb	GET			
Description	Retrieve counter information for trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean,
	   "counterID": String,
	   "exchange": String,
	   "exchangeDisplay": String,
	   "market": String,
	   "symbol": String,
	   "companyName": String,
	   "companyCode": String,
	   "currency": String,
	   "lastDone": Decimal,
	   "expireDate": String,
	   "securityType": String,
	   "securitySubType": String,
	   "lotSize": Int,
	   "buyLotSize": Int,
	   "sellLotSize": Int,
	   "paymentMode": [String],
	   "bidSize": Decimal,
	   "upperLimit": Decimal,
	   "lowerLimit": Decimal,
	   "bidSizeItems": [
	     {
	       "min": Decimal,
	       "max": Decimal,
	       "val": Decimal
	   }],
	   "settlementCurrency": [String],
	   "actions": [String] }			

2.2.7.2 Stocks Order Type Settings

URL	/st/trade/settings			
Verb	GET			
Description	Retrieve advanced order type settings			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			
Result	{ "msg": String,			

_____

```
      "markets": [{
        "market": String,
        "orderTypes": [{
          "name": String,
          "value": String,
          "gtd": Boolean
        }]
      }]
    }
```

2.2.7.3 Stocks Refresh Limit Balance

URL	/st/trade/limitbalance			
Verb	GET			
Description	Retrieve limit balance			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "buyLimit": String,
	  "sellLimit": String,
	  "availBal": String
	}			

2.2.7.4 Stocks Validate Order

URL	/st/trade/validate			
Verb	POST			
Description	Validate stocks order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	counterID	@Form	String	
	action	@Form	int	1 – Buy, 2 – Sell, 5 – Short Sell
	orderType	@Form	Char	LO – Limit Order, SLO – Stop Limit, LIT – Limit-if-Touch
	limitPrice	@Form	Decimal	
	triggerPrice	@Form	Decimal	
	quantity	@Form	Int	
	settlementCurrency	@Form	String	ISO Currency Code
	payment	@Form	int	1 – CPF, 2 – SRS, 0 - Cash
	triggerPriceType	@Form	int	default: 0 2 – Last Done, 3 – Bid 1 – Ask
	validity	@Form	int	0 – Day,

				6 - GTD
	gtd	@Form	Date	yyyy-MM-dd
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean,
	   "noteTitle": String,
	   "noteMsg": String,
	   "authToken" : String
	 }			

2.2.7.5 Stocks Submit Order

URL	/st/trade/submit			
Verb	POST			
Description	Submit stocks order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	authToken	@Header	String	
	counterID	@Form	String	
	action	@Form	String	
	orderType	@Form	String	
	limitPrice	@Form	Decimal	
	stopPrice	@Form	Decimal	
	quantity	@Form	Int	
	settlementCurrency	@Form	String	
	payment	@Form	String	
	triggerPriceType	@Form	String	
	validity	@Form	String	
	gtd	@Form	String	yyyy-MM-dd
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean,
	   "orderDetailsURI": String
	 }			

2.2.7.6 CFD Trade Info

URL	/cfd/trade/info			
Verb	GET			
Description	Retrieve counter information for trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			
Result	{ "msg": String,			

```
                    "code": Int,
                    "passwordRequire": Boolean,
                    "twoFARequire": Boolean,
                    "availCash": String,
                    "creditLimit": String,
                    "counterID": String,
                    "exchange": String,
                    "companyName": String,
                    "companyCode": String,
                    "currency": String,
                    "bid": Decimal,
                    "ask": Decimal,
                    "lotSize": Int,
                    "requireMargin": Decimal,
                    "multiplier": Decimal,
                    "decimalPosition": Int,
                    "bidSize": [{
                        "fromPrice": Decimal,
                        "size": Decimal,
                        "toPrice": Decimal
                    }],
                    "orderTypes": [{
                        "duration": {
                          "timeInForce": Int,
                          "timeInForceDisplay": String,
                          "validityDay": Int
                        },
                        "limitSpread": {
                          "max": Int,
                          "min": Int,
                          "size": Int
                        },
                        "operator": [{
                            "text": String,
                            "value": Int
                        }],
                        "orderType": Int,
                        "orderTypeDisplay": String,
                        "trailingStep": {
                          "max": Int,
                          "min": Int,
                          "size": Int
                        },
                        "triggerTypes": [{
                            "text": String,
                            "value": Int
                        }]
                    }],
                    "actions": [{
                        "text": String,
                        "value": Int
                    }]
                }
```

2.2.7.7 CFD Refresh Limit Balance

URL	/cfd/trade/limitbalance			
Verb	GET			
Description	Retrieve available cash and credit limit			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	

Produce	application/json

Result	```
	{
	  "msg": String,
	  "code": Int,
	  "availCash": String,
	  "creditLimit": String
	}
	``

2.2.7.8 CFD Get Limit Order no

URL	/cfd/trade/limitorder			
Verb	GET			
Description	Retrieve limit order no			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			

Result	```
	{
	  "msg": String,
	  "code": Int,
	  "orders": [{
	    "orderNo": String,
	    "action": String,
	    "companyName": String,
	    "qty": String,
	    "price": String
	  }]
	}
	``			

2.2.7.9 CFD Validate Order

URL	/cfd/trade/validate			
Verb	POST			
Description	Validate CFD / DMA order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	counterID	@Form	String	
	orderType	@Form	String	
	action	@Form	int	
	timeInForce	@Form	int	
	expireTime	@Form	String	yyyyMMdd
	limitPrice	@Form	Decimal	
	quantity	@Form	Int	
	ifDoneLimitOrderNo	@Form	String	
	ocoStopLimitPrice	@Form	Decimal	
	ocoStopLimitQuantity	@Form	int	
	stopPrice	@Form	Decimal	
	trailingStep	@Form	Decimal	
	limitSpread	@Form	Decimal	
	triggerPriceType	@Form	int	
	conditionOperator	@Form	int	

	conditionCompanyCode	@Form	String	
	conditionPrice	@Form	Decimal	
Produce	application/json			

Result	<pre>{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean,
	   "authToken" : String
	}</pre>			

Mobile 2.0 and CFD API Parameter Mapping

Mobile 2.0	CFD API	Type	Description	Market Order	Limit Order	Stop Limit Order	Trailing Stop Order	If Done Order	OCO Order	Contingency Order
accountNo	AccountNo	string		Yes	Yes	Yes	Yes	Yes	Yes	Yes
counterID	ExchangeCode	string		Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Market	string		Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ContractType	string		Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CompanyCode	string		Yes	Yes	Yes	Yes	Yes	Yes	Yes
orderType	OrderType	int		Yes	Yes	Yes	Yes	Yes	Yes	Yes
action	Side	int		Yes	Yes	Yes	Yes	Yes	Yes	Yes
timeInForce	TimeInForce	int		Yes	Yes	Yes	Yes	Yes	Yes	Yes
expireTime	ExpireTime	string		Yes	Yes	Yes	Yes	Yes	Yes	Yes
limitPrice	Price	decimal		Yes	Yes	Yes		Yes	Yes	Yes
quantity	Quantity	int		Yes	Yes	Yes	Yes	Yes	Yes	Yes
ifDoneLimitOrderNo	IfDoneLimitOrderNo	string	If Done order only					Yes		
ocoStopLimitPrice	OCOStopLimitPrice	decimal	OCO order only						Yes	
ocoStopLimitQuantity	OCOStopLimitQuantity	int	OCO order only						Yes	
stopPrice	StopPrice	decimal				Yes			Yes	
trailingStep	Step	decimal	Trailing stop order only				Yes			
limitSpread	Spread	decimal	Trailing stop order only				Yes			
triggerPriceType	TriggerType	int				Yes	Yes		Yes	Yes
conditionOperator	ConditionOperator	int	Contingency order only							Yes
conditionCompanyCode	ConditionCompanyCode	string	Contingency order only							Yes
conditionPrice	ConditionPrice	decimal	Contingency order only							Yes
N.A.	CurrencyCode	string	Default ''	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	TradingSession	int	Default '0'	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	SubmittedBy	string	Default accountNo	Yes	Yes	Yes	Yes	Yes	Yes	Yes

2.2.7.10   *CFD Submit Order*

URL	/cfd/trade/submit			
Verb	POST			
Description	Submit CFD / DMA order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	

	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	authToken	@Header	String	
	counterID	@Form	String	
	orderType	@Form	String	
	action	@Form	int	
	timeInForce	@Form	int	
	expireTime	@Form	String	yyyyMMdd
	limitPrice	@Form	Decimal	
	quantity	@Form	Int	
	ifDoneLimitOrderNo	@Form	String	
	ocoStopLimitPrice	@Form	Decimal	
	ocoStopLimitQuantity	@Form	int	
	stopPrice	@Form	Decimal	
	trailingStep	@Form	Decimal	
	limitSpread	@Form	Decimal	
	triggerPriceType	@Form	int	
	conditionOperator	@Form	int	
	conditionCompanyCode	@Form	String	
	conditionPrice	@Form	Decimal	
Produce	application/json			
Result	```{
"msg": String,
"code": Int,
"passwordRequire": Boolean,
"twoFARequire": Boolean,
"orderDetailsURI": String
}```			

2.2.7.11   UT Trade Info

URL	/ut/trade/info			
Verb	GET			
Description	Retrieve counter information for trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
Produce	application/json			
Result	```{
"msg": String,
"code": Int,
"passwordRequire": Boolean,
"twoFARequire": Boolean,
"availableCash": String,
"bidPrice": String,
"dealingDate": String,
"name": String,
"counterID": String,
"fundCode": String,
"buyInfo": { /* If fund cannot buy, will return null*/
"fundSources": [{
"text": String,
"value": Int
}],```			

```
        "minIniInvAmt": String,
        "minSubInvAmt": String,
        "paymentCurrencies": [{
            "text": String,
            "value": String
        }]
    },
    "sellInfoList": [{/* If fund cannot Sell, will return null. Multiple items when have
multisource*/
        "availableUnit": String,
        "fundSource": {
          "text": String,
          "value": String
        },
        "minHoldingAmt": String,
        "minHoldingUnit": String,
        "minRedeemAmt": String,
        "minRedeemUnit": String,
        "noOfDecUnits": Int,
        "paymentCurrencies": [{
            "text": String,
            "value": String
        }]
    }],
    "switchInfoList": [{ /* If fund cannot Switch, will return null. Multiple items
when have multisource */
        "availableUnit": String,
        "fundSource": {
          "text": String,
          "value": String
        },
        "minHoldingAmt": String,
        "minHoldingUnit": String,
        "minRedeemAmt": String,
        "minRedeemUnit": String,
        "noOfDecUnits": String,
        "paymentCurrencies": [{
            "text": String,
            "value": String
        }]
    }],
    "actions": [{
        "text": String,
        "value": String
    }]
}
```

PDF documentation to retrieve from UT counter detail documentations.
Switch In fund data retrieve from this function as well.

2.2.7.12   UT Trade Search Switch In Fund

URL	/ut/trade/switchincounter			
Verb	GET			
Description	Search for switch in fund			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	keyword	@Query	String	
	fundSource	@Query	Int	
Produce	application/json			
Result	{			

_____

```
              "msg": "Success",
              "code": "1",
              "counterList": [{
                "name": String,
                "code": String,
                "index": Int,
                "market": String,
                "exchange": String,
                "exchangeDisplay": String,
                "globalChartExchange": String,
                "product": String,
                "counterID": String,
                "productIcon": String
              }]
            }
```

2.2.7.13   UT Validate Order

URL	/ut/trade/validate			
Verb	POST			
Description	Validate UT trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	Language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Form	String	
	action	@Form	String	
	fundSource	@Form	String	
	paymentCurrency	@Form	String	
	invAmount	@Form	String	
	unit	@Form	String	
	switchInID	@Form	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "passwordRequire": Boolean,
	  "twoFARequire": Boolean,
	  "disclaimerURL": String,
	  "termConditionURL": String,
	  "declarationOptions": [{
	    "allowTrade": Boolean,
	    "title": String,
	    "desc": String,
	    "alertMsg": String
	  }]
	}			

2.2.7.14   UT Submit Order

URL	/ut/trade/submit			
Verb	POST			
Description	Submit UT trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	Language	@Form	int	default: 1
	accountNo	@Header	String	

	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	counterID	@Form	String	
	action	@Form	String	
	fundSource	@Form	String	
	paymentCurrency	@Form	String	
	invAmount	@Form	String	
	unit	@Form	String	
	switchInID	@Form	String	
	emailNotification	@From	Boolean	
	declaration	@Form	Boolean	
	termCondition	@Form	Boolean	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean,
	   "orderDetailsURI": String
	}			

2.2.7.15   UT Add to Basket Order

URL	/ut/trade/basket/add			
Verb	POST			
Description	Add to basket Order			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	Language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Form	String	
	fundSource	@Form	String	
	paymentCurrency	@Form	String	
	invAmount	@Form	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int
	}			

2.2.7.16   UT Get Basket Order

URL	/ut/trade/basket/get			
Verb	GET			
Description	Retrieve basket Order			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean,
	   "basketOrders": [{			

```
            "counterID": String,
            "basketID": String,
            "fundName": String,
            "fundSource": String,
            "paymentCurrency": String,
            "invAmount": String,
            "salesCharge": String,
            "nav": String


        }]
    }
```

2.2.7.17   UT Get Basket Order with grouping

URL	/ut/trade/basket/getbygroup			
Verb	GET			
Description	Retrieve basket Order			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": Int,
	  "passwordRequire": Boolean,
	  "twoFARequire": Boolean,
	  "basketOrders": {
	    String(currency): [{
	       "counterID": String,
	       "basketID": String,
	       "fundName": String,
	       "fundSource": String,
	       "paymentCurrency": String,
	       "invAmount": String,
	       "salesCharge": String,
	       "nav": String
	    }]
	  }
	}</pre>			

2.2.7.18   UT Update Basket Order

URL	/ut/trade/basket/update			
Verb	POST			
Description	Update basket Order			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	Language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	

	updateEntry	@Form	String	JSON Format
				[{
				  "basketID":"2",
				  "invAmount":"1000",
				  "fundCode":"501303"
				}]

Produce	application/json			
Result	{			

	`"msg": String,`
	`"code": Int`
	`}`			

2.2.7.19   UT Delete Basket Order

URL	/ut/trade/basket/delete			
Verb	POST			
Description	Update basket Order			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	Language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	basketIDs	@Form	String	With comma separator. Ex: 1,3,5
Produce	application/json			

Result	`{`
	`   "msg": String,`
	`   "code": Int`
	`}`			

2.2.7.20   UT Validate Basket Order

URL	/ut/trade/basket/validate			
Verb	POST			
Description	Validate UT trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	Language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	`{`
	`   "msg": String,`
	`   "code": Int,`
	`   "passwordRequire": Boolean,`
	`   "twoFARequire": Boolean,`
	`   "disclaimerURL": String,`
	`   "termConditionURL": String,`
	`   "declarationOptions": [{`
	`      "allowTrade": Boolean,`
	`      "title": String,`
	`      "desc": String,`
	`      "alertMsg": String`
	`   }]`
	`}`			

2.2.7.21   UT Submit Basket Order

URL	/ut/trade/basket/submit			
Verb	POST			
Description	Submit UT trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	Language	@Form	int	default: 1

	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	emailNotification	@From	Boolean	
	declaration	@Form	Boolean	
	termCondition	@Form	Boolean	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean
	}			

2.2.7.22   UT Basket Order Count

URL	/ut/trade/basket/count			
Verb	GET			
Description	Submit UT trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "count": Int
	}			

2.2.7.23   UT SalesCharge Buy

URL	/ut/trade/salescharge/buy			
Verb	GET			
Description	Submit UT trade			
Parameters	deviceId	@Header	String	
	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
	fundSource	@Query	String	
	invAmount	@Header	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "salesCharge": BigDecimal
	}			

2.2.7.24   UT SalesCharge SwitchIn

URL	/ut/ trade/salescharge/switchin			
Verb	GET			
Description	Submit UT trade			
Parameters	deviceId	@Header	String	

_____

	Apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	Language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	sIFundCode	@Query	String	counterID
	sIFundSource	@Query	String	
	sOFundCode	@Query	String	counterID
	sOFundSource	@Query	String	
	sOUnit	@Header	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "salesCharge": BigDecimal
	}			

2.2.8 Order Status

2.2.8.1 Today Order Status List

URL	/global/order/today			
Verb	GET			
Description	Retrieve today order data			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			
Result	(see below)			

```
{
  "msg": String,
  "code": Int,
  "passwordRequire": Boolean,
  "twoFARequire": Boolean,
  "newOrderPMPTopic": String,
  "orders": [
      {
          "counterID": String,
          "name": String,
          "symbol": String,
          "product": String,
          "productIcon": String,
          "action": String,
          "status": String,
          "statusColor": String,
          "submittedPrice": String,
          "submittedQty": String,
          "submittedTime": String,
          "executedPrice": String,
          "executedQty": String,
          "updatedTime": String,
          "orderNo": String,
          "lotSize": String,
          "stopPrice": String,
          "stopLimitPrice": String,
          "trailingStop": String,
          "triggerType": String,
          "units": String,
          "investedAmmount": String,
          "nav": String,
          "netSalesCharge": String,
          "receivedTime": String,
          "executedTime": String,
          "ammendURI": String,
          "withdrawURI": String,
          "isTradeable": Boolean,
          "isInfoAvailable": Boolean,
          "orderDetailsURI": String,
          "orderPMPTopic": String
          "orderType" : String
          "orderStatusDesc":String
          "isWithdrawable":Boolean
          "cancelURI":String (UT only)
          "referenceNo":String
          "delayIndicator":String (ST,CFD)
      }
  ]
}
```

ST/CFD: Front end application needs to subscribe two PMP topics (new order and update order). New order udpate then need to invoke this function to retrieve the latest order status. Application must handle for the update case.

Need to request ODS and FT/FX team to have the PMP order status for UT and FT/FX.

2.2.8.2 Past Order Status List

URL	/global/order/history/{pastOrderDate}			
Verb	GET			
Description	Retrieve past order data with date			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	pastOrderDate	@Path	String	Format: yyyyMMdd
Produce	application/json			
Result	(see below)			

```
{
  "msg": String,
  "code": Int,
  "orders": [
    {
      "counterID": String,
      "name": String,
      "symbol": String,
      "product": String,
      "productIcon": String,
      "action": String,
      "status": String,
      "statusColor": String,
      "submittedPrice": String,
      "submittedQty": String,
      "submittedTime": String,
      "executedPrice": String,
      "executedQty": String,
      "updatedTime": String,
      "orderNo": String,
      "stopPrice": String,
      "stopLimitPrice": String,
      "trailingStop": String,
      "triggerType": String,
      "units": String,
      "investedAmmount": String,
      "nav": String,
      "netSalesCharge": String,
      "receivedTime": String,
      "executedTime": String,
      "isTradeable": Boolean,
      "isInfoAvailable": Boolean,
      "orderDetailsURI": String
      "orderType" : String
      "orderStatusDesc":String
      "cancelURI":String (UT only)
      "referenceNo":String
      "delayIndicator":String (ST,CFD)
    }
  ]
}
```

2.2.8.3 Past Order Status Dates

URL	/global/order/history/dates			
Verb	GET			
Description	Retrieve past order dates			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			
Result	```{ "msg": String, "code": Int, "dates": [{ "display": String, "historyURI": String }] }```			

GTD for both ST and CFD. To have at least two options (GTD + yesterday date)

2.2.8.4 Stocks Order Details

URL	/st/order/{orderNo}			
Verb	GET			
Description	Retrieve stocks order details			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	orderNo	@Path	String	
	counterID	@Query	String	
	isToday	@Query	boolean	default: true
Produce	application/json			
Result	```{ "msg": String, "code": Int, "passwordRequire": Boolean, "twoFARequire": Boolean, "counterID": String, "name": String, "product": String, "productIcon": String, "action": String, "status": String, "statusDesc": String, "statusColor": String, "submittedPrice": String, "executedPrice": String, "submittedQty": String, "executedQty": String, "orderNo": String, "lotSize": int, "orderType": String, "stopPrice": String, "triggeredType": String,```			

_____

```
    "validity": String,
    "gtd": String,
    "paymentMode": String,
    "settlementCurrency": String,
    "currency": String,
    "message": String,
    "amendURI": String,
    "withdrawURI": String
    "orderHistory": [
        {
            "message": String
            "price": String,
            "qty": String,
            "status": String,
            "statusDesc": String,

            "time": String,

        }
    ]
}
```

2.2.8.5 Stocks Withdraw Order

URL	/st/order/{orderNo}/withdraw			
Verb	POST			
Description	Withdraw stocks order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	orderNo	@Path	String	
	counterID	@Form	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean
	}			

2.2.8.6 Stocks Amend Order

URL	/st/order/{orderNo}/amend			
Verb	POST			
Description	Amend stocks order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	orderNo	@Path	String	
	amendQty	@Form	int	
	counterID	@Form	String	
Produce	application/json			
Result	{			

| | ```
  "msg": String,
  "code": Int,
  "passwordRequire": Boolean,
  "twoFARequire": Boolean
}
``` |

2.2.8.7 CFD Order Details

URL	/cfd/order/{orderNo}			
Verb	GET			
Description	Retrieve CFD Order Details			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	orderNo	@Path	String	
	counterID	@Query	String	
	isToday	@Query	boolean	default: true
Produce	application/json			
| Result | ```
{
  "msg": String,
  "code": Int,
  "passwordRequire": Boolean,
  "twoFARequire": Boolean,
  "counterID": String,
  "name": String,
  "product": String,
  "productIcon": String,
  "action": String,
  "status": String,
  "statusDesc": String,
  "statusColor": String,
  "orderType": String,
  "orderNo": String,
  "currency": String,
  "stopPrice": String,
  "stopPriceTrigger": String,
  "trailingStep": String,
  "limitSpread": String,
  "contingencyCondition": String
  "ifDoneOrderNo": String,
  "tradeType": String,
  "settlementCurrency": String,
  "validity": String,
  "gtd": String,
  "message": String,
  "withdrawURI": String,
  "correspondOrderNo": String,
  "orderHistory": [
    {
      "status": String,
      "qty": String,
      "price": String,
      "time": String,
      "message": String
    }
  ]
}
``` | | | |

2.2.8.8 CFD Withdraw Order

URL	/cfd/order/{orderNo}/withdraw			
Verb	POST			
Description	Withdraw CFD / DMA order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	orderNo	@Path	String	
	counterID	@Form	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "passwordRequire": Boolean,
	  "twoFARequire": Boolean
	}			

2.2.8.9 UT Order Details

URL	/ut/order/{orderNo}			
Verb	GET			
Description	Retrieve UT order details			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	orderNo	@Path	int	
	counterID	@Query	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "passwordRequire": Boolean,
	  "twoFARequire": Boolean,
	  "counterID": String,
	  "name": String,
	  "product": String,
	  "productIcon": String,
	  "action": String,
	  "status": String,
	  "statusDesc": String,
	  "statusColor": String,
	  "orderType": String,
	  "orderNo": String,
	  "fundSource": String,
	  "currency": String,
	  "paymentCurrency": String,
	  "ammount": String,
	  "nav": String,
	  "transactionDate": String,
	  "salesCharge": String,
	  "message": String,
	  "withdrawURI": String,
	  "cancelURI": String,
	  "qty": String,
	  "indicativeTransactionDate": String,
	  "orderHistory": [			

```
                                  {
                                     "message": String
                                     "price": String,
                                     "qty": String,
                                     "status": String,
                                     "statusDesc": String,
                                     "time": String,
                                  }
                               ]
                            }
```

2.2.8.10   UT Withdraw Order

URL	/ut/order/{orderNo}/withdraw			
Verb	POST			
Description	Withdraw UT order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	orderNo	@Path	int	
	counterID	@Form	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean
	 }			

2.2.8.11   UT Cancel Order

URL	/ut/order/{orderNo}/cancel			
Verb	POST			
Description	Cancel UT order			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	orderNo	@Path	int	
	counterID	@Form	String	
Produce	application/json			

Result	{
	   "msg": String,
	   "code": Int,
	   "passwordRequire": Boolean,
	   "twoFARequire": Boolean
	 }			

2.2.9 News

2.2.9.1 My News Settings

URL	/global/news/settings			
Verb	GET			
Description	Get news settings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": Int,
	  "autoDetect": [{
	     "title": String,
	     "value": Int,
	     "checked": Boolean
	  }],
	  "language": [{/*To confirm if this options still need*/
	     "title": String,
	     "value": Int,
	     "checked": Boolean
	  }],
	  "asset": [{
	     "title": String,
	     "value": Int,
	     "checked": Boolean
	  }],
	  "source": [{
	     "title": String,
	     "value": Int,
	     "checked": Boolean
	  }],
	  "subject": [{
	     "title": String,
	     "value": Int,
	     "checked": Boolean
	  }],
	  "industry": [{
	     "title": String,
	     "value": Int,
	     "checked": Boolean
	  }],
	  "country": [{
	     "title": String,
	     "value": Int,
	     "checked": Boolean
	  }]
	}</pre>			

2.2.9.2 Update My News Settings

URL	/global/news/settings/update			
Verb	POST			
Description	Update news settings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	

_____

	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	autoDetect	@Form	Int	
	language	@Form	String	Selected value with comma separator. Ex:EN,CN
	asset	@Form	String	Selected value with comma separator. Ex:ut,st,fut
	source	@Form	String	Selected value with comma separator. Ex:1,2,3,4
	subject	@Form	String	Selected value with comma separator. Ex:all,marketoutlook
	industry	@Form	String	Selected value with comma separator. Ex:1,2,3,4
	country	@Form	String	Selected value with comma separator. Ex:1,2,3,4
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int
	}			

2.2.9.3 My News

URL	/global/news/mynews			
Verb	GET			
Description	Get my news list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	count	@Query	Int	default: 30
	keyword	@Query	String	Search keyword
Produce	application/json			

Result	{
	  "msg": String,
	  "code": int,
	  "newsHeadline": [
	    {
	      "title": String,
	      "description": String,
	      "publishedTime": String,
	      "source": String,
	      "logoURL": String, /* Logo image URL */
	      "contentURI": String, /* Content URI */
	      "publishedDateTime": Long /* Timestamp, for sorting purposes */
	    }
	  ]
	}			

2.2.9.4 News Category

URL	/st/news/category

Verb	GET			
Description	Get news category			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	```
	{
	   "msg": String,
	   "code": int,
	   "newsCategory": [
	     {
	       "code": String,
	       "description": String,
	       "headlineURI": String /* News headlines URI */
	     }
	   ]
	}
	``			

2.2.9.5 News Headlines

URL	/st/news/headlines/{category}			
Verb	GET			
Description	Get news category			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	category	@Path	String	
	count	@Query	Int	default: 30
	keyword	@Query	String	Search keyword
Produce	application/json			

Result	```
	{
	   "msg": String,
	   "code": int,
	   "newsHeadline": [
	     {
	       "title": String,
	       "description": String,
	       "publishedTime": String,
	       "source": String,
	       "logoURL": String, /* Logo image URL */
	       "contentURI": String, /* Content URI */
	       "publishedDateTime": Long /* Timestamp, for sorting purposes */
	     }
	   ]
	}
	``			

2.2.9.6 News Content

URL	/st/news/content/{newsID}			
Verb	GET			
Description	Get news category			
Parameters	deviceId	@Header	String	

---

	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	newsID	@Path	String	
Produce	application/json			

Result	```{
	   "msg": String,
	   "code": int,
	   "contentType": String,
	   "date": String,
	   "description": String,
	   "id": null,
	   "title": String,
	   "content": String,
	   "source": String,
	   "logourl": String /* Logo image URL */
	}```			

2.2.9.7 Related News

URL	/st/news/related			
Verb	GET			
Description	Get news category			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	
	count	@Query	Int	default: 30
Produce	application/json			

Result	```{
	   "msg": String,
	   "code": int,
	   "newsHeadline": [
	     {
	       "title": String,
	       "description": String,
	       "publishedTime": String,
	       "source": String,
	       "logoURL": String, /* Logo image URL */
	       "contentURI": String, /* Content URI */
	       "publishedDateTime": Long /* Timestamp, for sorting purposes */
	     }
	   ]
	}```			

2.2.9.8 News Prelogin

URL	/st/news/prelogin			
Verb	GET			
Description	Get news category			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	

	osVersion	@Query	String	
	language	@Query	int	default: 1
	count	@Query	Int	default: 30
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": int,
	  "newsHeadline": [
	    {
	      "title": String,
	      "description": String,
	      "publishedTime": String,
	      "source": String,
	      "logoURL": String, /* Logo image URL */
	      "contentURI": String, /* Content URI */
	      "publishedDateTime": Long /* Timestamp, for sorting purposes */
	    }
	  ]
	}</pre>			

2.2.9.9 UT News Category

URL	/ut/news/category			
Verb	GET			
Description	Get news category for UT			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	<pre>{
	  "msg": String,
	  "code": int,
	  "newsCategory": [
	    {
	      "code": String,
	      "description": String,
	      "headlineURI": String /* News headlines URI */
	    }
	  ]
	}</pre>			

2.2.9.10   UT News Headlines

URL	/ut/news/headlines/{category}			
Verb	GET			
Description	Get news category for UT			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	category	@Path	String	
	count	@Query	Int	default: 30
	keyword	@Query	String	Search keyword
Produce	application/json			

| Result | ```
{
  "msg": String,
  "code": int,
  "newsHeadline": [
    {
      "title": String,
      "description": String,
      "publishedTime": String,
      "source": String,
      "logoURL": String, /* Logo image URL */
      "contentURI": String, /* Content URI */
      "publishedDateTime": Long /* Timestamp, for sorting purposes */
    }
  ]
}
``` |
|---|---|

2.2.9.11   UT News Content

URL	/ut/news/content/{newsID}			
Verb	GET			
Description	Get news category for UT			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	newsID	@Path	String	
Produce	application/json			
| Result | ```
{
  "msg": String,
  "code": int,
  "contentType": String,
  "date": String,
  "description": String,
  "id": null,
  "title": String,
  "content": String,
  "source": String,
  "logourl": String /* Logo image URL */
}
``` | | | |

2.2.10 Alerts

2.2.10.1   Alert Count

URL	/global/alert/count			
Verb	GET			
Description	Get alert unread count			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	priceAlertTimeStamp	@Query	String	yyyyMMddHHmmss(24 hours format)
	orderAlertTimeStamp	@Query	String	yyyyMMddHHmmss(24 hours format)
	accountAlertSTTimeSt amp	@Query	String	yyyyMMddHHmmss(24 hours format)
	accountAlertCFDTime Stamp	@Query	String	yyyyMMddHHmmss(24 hours format)
	accountAlertUTTimeSt amp	@Query	String	yyyyMMddHHmmss(24 hours format)
	accountAlertFTTimeSt amp	@Query	String	yyyyMMddHHmmss(24 hours format)
	announcementTimeSt amp	@Query	String	yyyyMMddHHmmss(24 hours format)
Produce	application/json			

Result	```
	{
	    "msg": String,
	    "code": int,
	    "price": int,
	    "order": int,
	    "account": int,
	    "announcement": int
	}
	``			

2.2.10.2   Price Alert List

URL	/global/alert/price			
Verb	GET			
Description	Get price alert list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	priceAlertTimeStamp	@Query	String	yyyyMMddHHmmss(24 hours format)
Produce	application/json			

Result	```
	{
	    "msg": String,
	    "code": int,
	    "timeStamp": String,
	    "triggered": [{
	      "counterID": String,
	      "product": String,
	      "productIcon": String,
	``			

```
          "counterName": String,
          "delayIndicator":String,
          "alerts": [{
            "alertID":Long,
            "alertField": String,
            "operator": String,
            "alertValue": String,
            "updatedTime": String,
            "highlight": Boolean,
            "latestValue": String
          }]
        }],
        "unTriggered": [{
          "counterID": String,
          "product": String,
          "productIcon": String,
          "counterName": String,
          "delayIndicator":String,
          "alerts": [{
            "alertID":Long,
            "alertField": String,
            "operator": String,
            "alertValue": String,
            "updatedTime": String,
            "highlight": Boolean,
            "latestValue": String
          }]
        }]
      }
```

2.2.10.3 Price Alert By Counter ID

URL	/global/alert/price/detail			
Verb	GET			
Description	Get price alert by counter ID			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Query	String	Product/Market/Exchange/CounterCode
Produce	application/json			
Result	(see below)			

```
{
    "msg": String,
    "code": int,
    "counterID": String,
    "product": String,
    "productIcon": String,
    "counterName": String,
    "delayIndicator":String,
    "alerts": [{
      "alertID": String,
      "alertType": String,
      "alertValue": String
    }]
}
```

2.2.10.4   Price Alert Update

URL	/global/alert/price/update			
Verb	POST			
Description	Update price alert rules			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	counterID	@Form	String	
	rules	@Form	String	JSON format [{ "alertID": String, "alertType": String, "alertValue": String, "alertSwitch": String }] -If alertID is null and alertSwitch is true, this rules will be new. -If alertSwitch is false the the rule will be removed.
Produce	application/json			
Result	``` { "msg": String, "code": int, "disclaimer": String, "alerts": [{ "alertID": String, "alertField": String, "operator": String, "alertValue": String }] } ```			

AlertType values & Definition

Key	Description
last_done_down	less than last done value
last_done_up	greater than last done value
bid_price_down	less than bid price
bid_price_up	greater than bid price
ask_price_down	less than ask price
ask_price_up	greater than ask price
pct_change_down	less than change percentage value
pct_change_up	greater than change percentage value
trade_vol_up	greater than **volume(K)** value

2.2.10.5   Price Alert Delete

URL	/global/alert/price/delete			
Verb	POST			
Description	Delete price alert			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	

	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	alertIDs	@Form	String	[{ counterID: String, alertIDs: [{ alertID: String }] }]
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int
	}			

2.2.10.6   Order Alert List

URL	/global/alert/order			
Verb	GET			
Description	Get order alert list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	orderAlertTimeStamp	@Query	String	yyyyMMddHHmmss(24 hours format)
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "timeStamp":String,
	    "orderAlerts": [{
	      "counterID": String,
	      "product": String,
	      "productIcon": String,
	      "counterName": String,
	      "orderNo": String,
	      "refNo": String,
	      "orderType": String,
	      "orderStatus": String,
	      "action": String,
	      "price": String,
	      "quantity": String,
	      "execTime": String,
	      "highlight": Boolean
	    }]
	}			

2.2.10.7   Pre-Login Announcement

URL	/global/alert/prelogin/announcement			
Verb	GET			
Description	Get announcement list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	count	@Query	int	default: 3

	language @Query int default: 1
Produce	application/json
| Result | ```
{
    "msg": String,
    "code": int,
    "timeStamp": String,
    "announcements": [{
      "announcementID": String,
      "product": String,
      "title": String,
      "time": String,
      "highlight": Boolean
    }]
}
``` |

Note: Able to retrieve from external file for downtime announcement

2.2.10.8   Pre-Login Announcement Detail

URL	/global/alert/prelogin/announcement/{announcementID}			
Verb	GET			
Description	Get announcement list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	announcementID	@Path	int	
Produce	application/json			
| Result | ```
{
    "msg": String,
    "code": int,
    "product": String,
    "announcementID": String,
    "title": String,
    "time": String,
    "content": String
}
``` | | | |

Note: Able to retrieve from external file for downtime announcement

2.2.10.9   Announcement

URL	/global/alert/announcement			
Verb	GET			
Description	Get announcement list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	product	@Query	String	productkey
	announcementTimeStamp	@Query	String	format : yyyyMMddHHmmss
Produce	application/json			
| Result | ```
{
    "msg": String,
    "code": int,
    "timeStamp": String,
    "announcements": [{
``` | | | |

```
            "announcementID": String,
            "product": String,
            "title": String,
            "time": String,
            "highlight": Boolean
        }]
    }
```

2.2.10.10 Announcement Detail

URL	/global/alert/announcement/{announcementID}			
Verb	GET			
Description	Get announcement list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	product	@Query	String	productkey
	announcementID	@Path	int	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "product": String,
	    "announcementID": String,
	    "title": String,
	    "time": String,
	    "content": String
	}			

2.2.10.11 Stocks Account Alert

URL	/st/alert/account			
Verb	GET			
Description	Get Stocks account alert			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountAlertSTTimeStamp	@Header	Long	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "timeStamp": Long,
	    "marginCallAmount": String,
	    "marginCallDate": String,
	    "ledgerDeficits": [{
	      "currency": String,
	      "deficit": String
	    }],
	    "ledgerDeficitDate": String
	}			

2.2.10.12 CFD Account Alert

URL	/cfd/alert/account			
Verb	GET			
Description	Get CFD account alert			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountAlertCFDTimeStamp	@Header	Long	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "timeStamp": Long,
	    "marginCallAmount": String,
	    "marginCallDate": String,
	    "ledgerDeficits": [{
	      "currency": String,
	      "deficit": String
	    }],
	    "ledgerDeficitDate": String
	 }			

2.2.10.13 UT Account Alert

URL	/ut/alert/account			
Verb	GET			
Description	Get UT account alert			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "timeStamp": Long,
	    "cashAmount": String,
	    "cashDate": String,
	    "cpfoaAmount": String,
	    "cpfsaAmount": String,
	    "srsAmount": String,
	    "cpfDate": String
	 }			

2.2.10.14 Alert Settings

URL	/global/alert/settings
Verb	GET
Description	Get Alert Settings

Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	notificationToken	@Header	String	
Produce	application/json			

Result	<code>{
	    "msg": String,
	    "code": int,
	    "alertSettings": [{
	      "key": String,
	      "display": String,
	      "value": Boolean,
	      "subSettings": [{ /*For order alert status settings */
	        "key": String,
	        "display": String,
	        "value": Boolean
	      }]
	    }]
	}</code>			

2.2.10.15 Alert Settings Update

URL	/global/alert/settings/update			
Verb	POST			
Description	Update Alert Settings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	settingKey	@Form	String	Same as alert settings return properties Setting keys(sorted by display order) are : AllAlerts, 9001, 9100, 9108, 9101, 9102, 9103, 9104, 9105, 9109, 9106, 9107, 9110, 9201, 9202, 9203, 9301
	settingValue	@Form	Boolean	
Produce	application/json			

Result	<code>{
	    "msg": String,
	    "code": int
	}</code>			

2.2.10.16 Check Notification Device

URL	/global/alert/device
Verb	GET
Description	Check notification token device

Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int
	}			

FE App must keep the account numbers that have been set.

2.2.10.17 Update Notification Device

URL	/global/alert/device/update			
Verb	POST			
Description	Update notification device			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	notificationToken	@Form	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int
	}			

2.2.10.18 Update Notification Token

URL	/global/alert/updatetoken			
Verb	POST			
Description	Update Push Notification Alert Token			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	notificationToken	@Form	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int
	}			

2.2.11 Online Forms

2.2.11.1   Stocks Withdrawal Form Info.

URL	/st/onlineforms/withdrawal			
Verb	GET			
Description	Get online withdrawal information			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Header	String	
Produce	application/json			
Result	(see below)			

```
{
    "msg": String,
    "code": int,
    "passwordRequire": Boolean,
    "twoFARequire": Boolean,
    "currencies": [ String ],
    "processDates": [ String ], /*yyyyMMdd*/
    "otherAccounts": [{
        "text": String, /* (RemisierCd) Ccode (SpelCd) */
        "acctNo": String,
        "spelCd": String,
        "remisierCd":String
    }],
    "rewardOptions": [{
        "text": String,
        "code": String,
        "amount": Decimal
    }],
    "withdrawalType": [{
        "text": String,
        "value": String, /*DEPOSIT_LOCAL_BANK / CHEQUE_DEPOSIT / ...*/
        "supportedCurrency": [ String ]
    }]
}
```

2.2.11.2   Stocks Withdrawal Form Validate

URL	/st/onlineforms/withdrawal/validate			
Verb	POST			
Description	Validate online withdrawal form			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	accountType	@Header	String	
	withdrawalType	@Form	String	
	amount	@Form	Decimal	
	currency	@Form	String	
	processDate	@Form	String	yyyyMMdd
	remarks	@Form	String	

	ttAcctNo	@Form	String	
	ttAcctName	@Form	String	
	ttBank	@Form	String	
	ttDetail	@Form	String	
	ttBranch	@Form	String	
	ttSwiftCd	@Form	String	
	ttInterBank	@Form	String	
	ttInterSwiftCd	@Form	String	
	taAcctNo	@Form	String	
	taSpelCd	@Form	String	
	taRemisierCd	@Form	String	
	taDetails	@Form	String	
	dcBank	@Form	String	
	dcAcctNo	@Form	String	
	rpCode	@Form	String	
	rpOthers	@Form	String	
Produce	application/json			

Result	{
	    "msg": String, /* If success, to return confirmation text and note*/
	    "code": int,
	    "passwordRequire": Boolean,
	    "twoFARequire": Boolean,
	    "authToken": String,
	    "confirmMsg" : String,
	    "note" : String
	}			

2.2.11.3   Stocks Withdrawal Form Submit

URL	/st/onlineforms/withdrawal/submit			
Verb	POST			
Description	Submit online withdrawal form			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	authToken	@Header	String	
	accountType	@Header	String	
	withdrawalType	@Form	String	
	amount	@Form	Decimal	
	currency	@Form	String	
	processDate	@Form	String	yyyyMMdd
	remarks	@Form	String	
	ttAcctNo	@Form	String	
	ttBank	@Form	String	
	ttDetail	@Form	String	
	ttBranch	@Form	String	
	ttSwiftCd	@Form	String	
	ttInterBank	@Form	String	
	ttInterSwiftCd	@Form	String	
	taAcctNo	@Form	String	
	taSpelCd	@Form	String	
	taRemisierCd	@Form	String	
	taDetails	@Form	String	
	dcBank	@Form	String	
	dcAcctNo	@Form	String	
	rpCode	@Form	String	

	rpOthers	@Form	String	
Produce	application/json			

Result	{
	     "msg": String,
	     "code": int,
	     "passwordRequire": Boolean,
	     "twoFARequire": Boolean
	 }			

2.2.11.4 Stocks Currency Conversion Form Info

URL	/st/onlineforms/currencyconversion			
Verb	GET			
Description	Get currency conversion form information			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Header	String	M/V/C
Produce	application/json			

Result	{
	     "msg": String,
	     "code": int,
	     "passwordRequire": Boolean,
	     "twoFARequire": Boolean,
	     "optIn": Boolean, /* false to show Opt In Form*/
	     "currencies": [String],
	     "processDates": [String], /*yyyyMMdd*/
	     "conversionType": [{
	       "text": String,
	       "value": String
	     }]
	 }			

2.2.11.5 Stocks Currency Conversion Form Validate

URL	/st/onlineforms/currencyconversion/validate			
Verb	POST			
Description	Validate online currency conversion form			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Header	String	M/V/C
	encryptedPIN	@Header	String	
	processDate	@Form	String	yyyyMMdd
	conversionType	@Form	String	
	sourceCurrency	@Form	String	
	sourceAmount	@Form	String	
	targetCurrency	@Form	String	
	targetAmount	@Form	String	
	offsetSourceCurrency	@Form	String	
	offsetTargetCurrency	@Form	String	

	remarks	@Form	String	
Produce	application/json			

Result	{
	     "msg": String, /* If success, to return confirmation text */
	     "code": int,
	     "passwordRequire": Boolean,
	     "twoFARequire": Boolean,
	     "authToken": String,
	     "confirmMessage": String
	
	 }			

2.2.11.6 Stocks Currency Conversion Form Submit

URL	/st/onlineforms/currencyconversion/submit			
Verb	POST			
Description	Submit online currency conversion form			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Header	String	M/V/C
	authToken	@Header	String	
	processDate	@Form	String	yyyyMMdd
	conversionType	@Form	String	
	sourceCurrency	@Form	String	
	sourceAmount	@Form	String	
	targetCurrency	@Form	String	
	targetAmount	@Form	String	
	offsetSourceCurrency	@Form	String	
	offsetTargetCurrency	@Form	String	
	remarks	@Form	String	
Produce	application/json			

Result	{
	     "msg": String,
	     "code": int,
	     "passwordRequire": Boolean,
	     "twoFARequire": Boolean
	 }			

2.2.11.7 Stocks Online Form History

URL	/st/onlineforms/history			
Verb	GET			
Description	Get Stocks Online Forms History			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Header	String	
	period	@Query	String	yyyyMM
Produce	application/json			
Result	{ "msg": String,			

```
    "code": int,
    "passwordRequire": Boolean,
    "twoFARequire": Boolean,
    "history": [{
        "description": String,
        "status": String,
        "formType": String, /* WITHDRAWAL/CURRENCY_CONVERSION*/
        "processNo": String,
        "time": String,
        "cancelable": Boolean,
        "adminRemark": String,
        "clientRemark": String,
    }]
}
```

2.2.11.8   Stocks Online Form Cancel

URL	/st/onlineforms/cancel			
Verb	POST			
Description	Cancel Stocks Online Forms			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Header	String	
	encryptedPIN	@Header	String	
	wdProcessNos	@Form	String	With , separator
	ccProcessNos	@Form	String	With , separator
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "passwordRequire": Boolean,
	    "twoFARequire": Boolean
	}			

2.2.11.9   CFD Withdrawal Form Info

URL	/cfd/onlineforms/withdrawal			
Verb	GET			
Description	Get online withdrawal information			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "passwordRequire": Boolean,
	    "twoFARequire": Boolean,
	    "currencies": [String],
	    "otherAccounts": [{
	        "text": String, /*Ccode(SpelCd)*/			

```
            "acctNo": String,
            "spelCd": String
        }],
        "withdrawalType": [{
            "text": String,
            "value": String
        }]
    }
```

2.2.11.10 CFD Withdrawal Form Validate

URL	/cfd/onlineforms/withdrawal/validate			
Verb	POST			
Description	Validate online withdrawal form			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	withdrawalType	@Form	String	
	amount	@Form	Decimal	
	currency	@Form	String	
	remarks	@Form	String	
	taAcctNo	@Form	String	
	taSpelCd	@Form	String	
	taDetails	@Form	String	
	dcBank	@Form	String	
	dcAcctNo	@Form	String	
Produce	application/json			

Result	{
	    "msg": String, /* If success, to return confirmation text */
	    "code": int,
	    "passwordRequire": Boolean,
	    "twoFARequire": Boolean,
	    "authToken": String,
	    "confirmMessage": String,
	    "note": String
	}			

2.2.11.11 CFD Withdrawal Form Submit

URL	/cfd/onlineforms/withdrawal/submit			
Verb	POST			
Description	submit online withdrawal form			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	authToken	@Header	String	
	withdrawalType	@Form	String	
	amount	@Form	Decimal	
	currency	@Form	String	
	remarks	@Form	String	
	taAcctNo	@Form	String	

	taSpelCd	@Form	String	
	taDetails	@Form	String	
	dcBank	@Form	String	
	dcAcctNo	@Form	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "passwordRequire": Boolean,
	    "twoFARequire": Boolean
	
	}			

2.2.11.12 CFD Currency Conversion Form Info

URL	/cfd/onlineforms/currencyconversion			
Verb	GET			
Description	Get currency conversion form information			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "passwordRequire": Boolean,
	    "twoFARequire": Boolean,
	    "currencies": [String],
	    "conversionType": [{
	      "text": String,
	      "value": String
	    }]
	}			

2.2.11.13 CFD Currency Conversion Form Validate

URL	/cfd/onlineforms/currencyconversion/validate			
Verb	POST			
Description	Validate online currency conversion form			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	conversionType	@Form	String	
	sourceCurrency	@Form	String	
	sourceAmount	@Form	String	
	targetCurrency	@Form	String	
	targetAmount	@Form	String	
	remarks	@Form	String	
Produce	application/json			

Result	{
	    "msg": String, /* If success, to return confirmation text */
	    "code": int,			

```
        "passwordRequire": Boolean,
        "twoFARequire": Boolean,
        "authToken": String,
        "confirmMessage": String
    }
```

2.2.11.14 CFD Currency Conversion Form Submit

URL	/cfd/onlineforms/currencyconversion/submit			
Verb	POST			
Description	Submit online currency conversion form			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	authToken	@Header	String	
	conversionType	@Form	String	
	sourceCurrency	@Form	String	
	sourceAmount	@Form	String	
	targetCurrency	@Form	String	
	targetAmount	@Form	String	
	remarks	@Form	String	
Produce	application/json			

Result	`{`
	`    "msg": String,`
	`    "code": int,`
	`    "passwordRequire": Boolean,`
	`    "twoFARequire": Boolean`
	`}`			

2.2.11.15 CFD Online Form History

URL	/cfd/onlineforms/history			
Verb	GET			
Description	Get CFD Online Forms History			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	period	@Query	String	yyyyMM
Produce	application/json			

Result	`{`
	`    "msg": String,`
	`    "code": int,`
	`    "passwordRequire": Boolean,`
	`    "twoFARequire": Boolean,`
	`    "history": [{`
	`        "description": String,`
	`        "status": String,`
	`        "formType": String, /* 1/2 */`
	`        "processNo": String,`
	`        "time": String,`
	`        "cancelable": Boolean,`
	`        "remarks": String`			

|  | ```
    }]
}
``` |  |  |  |

2.2.11.16 CFD Online Form Cancel

URL	/cfd/onlineforms/cancel			
Verb	POST			
Description	Cancel CFD Online Forms			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	
	wdProcessNos	@Form	String	With , separator
	ccProcessNos	@Form	String	With , separator
Produce	application/json			
| Result | ```
{
    "msg": String,
    "code": int,
    "passwordRequire": Boolean,
    "twoFARequire": Boolean,
    "cancelList": [{
       "processNo": String,
       "onlineFormType": String
    }]
}
``` |  |  |  |

2.2.11.17 Stocks Withdrawal Form Note

URL	/st/onlineforms/withdrawal/note			
Verb	GET			
Description	Get online withdrawal form note			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	withdrawalType	@ Query	String	
	currency	@ Query	String	
Produce	application/json			
| Result | ```
{
    "msg": String,
    "code": int,
    "note": String
}
``` |  |  |  |

2.2.11.18 CFD Withdrawal Form Note

URL	/cfd/onlineforms/withdrawal/note			
Verb	GET			
Description	Get online withdrawal form note			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	

	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	withdrawalType	@ Query	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "note": String
	}			

2.2.12 Outstanding Position

2.2.12.1   Outstanding Position List

URL	/global/osposition			
Verb	GET			
Description	Get Outstanding Position List			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			
Result	(see below)			

```
{
    "msg": String,
    "code": int,
    "osPosition": [{
        "groupHeader": String, /*Due: 1-Apr-2016*/
        "groupSummary": String, /*-263.00 (SGD Base)*/
        "groupSummaryColor": String, /*Red / Green*/
        "list": [{
            "counterID": String,
            "detailURI": String, /* ST (Contract, Contra) / UT (From You,
UT To You )*/
            "id": String,
            "product": String,
            "productIcon": String,
            "name": String,
            "amountDue": String, /* +1,909.00 USD */
            "amountDueColor": String /*Red / Green*/
        }]
    }]
}
```

2.2.12.2   Stocks Outstanding Position Detail (Contract)

URL	/st/osposition/contract			
Verb	GET			
Description	Get Stocks Outstanding Position Detail for contract			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Query	String	
	id	@Query	String	
Produce	application/json			
Result	(see below)			

```
{
    "msg": String,
    "code": int,
    "counterID": String,
    "contractNo": String,
    "contractDate": String,
    "dueDate": String,
    "price": String,
    "quantity": String,
```

```
        "settlementAmount": String, /* 20,980.00 SGD */
        "paymentMode": String,
        "exchangeRate": String
    }
```

2.2.12.3   Stocks Outstanding Position Detail (Contra)

URL	/st/osposition/contra			
Verb	GET			
Description	Get Stocks Outstanding Position Detail for contra			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Query	String	
	id	@Query	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "counterID": String,
	    "contraNo": String,
	    "date": String,
	    "dueDate": String,
	    "exchangeRate": String,
	    "paymentMode": String,
	    "paymentDue": String,
	    "paymentDueColor": String, /*Red / Green*/
	    "contracts": [{
	       "contractNo": String,
	       "action": String, /* Buy / Sell */
	       "contractDate": String, /* 10-Oct-2015 */
	       "particulars": String,
	       "amount": String, /* 20,980.00 SGD */
	       "amountColor": String /*Red / Green*/
	    }]
	}			

2.2.12.4   UT Outstanding Position Detail (From You)

URL	/ut/osposition/fromyou			
Verb	GET			
Description	Get UT Outstanding Payment Detail from you			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	id	@Query	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "counterID": String,
	    "fundName": String,			

```
        "transactionNo": String,
        "transactionDate": String, /* 10-Oct-2015 */
        "investmentType": String,
        "transactionType": String,
        "orderSource": String,
        "orderStatus": String,
        "fundSource": String,
        "currency": String,
        "noOfDays": String,
        "amount": String,
        "settlementDate": String,  /* 10-Oct-2015 */
        "giro": String
    }
```

2.2.12.5   UT Outstanding Position Detail (To You)

URL	/ut/osposition/toyou			
Verb	GET			
Description	Get UT Outstanding Payment Detail from you			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	id	@Query	String	
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "counterID": String,
	    "fundName": String,
	    "transactionNo": String,
	    "transactionDate": String, /* 10-Oct-2015 */
	    "fundSouce": String,
	    "currency": String,
	    "amount": String,
	    "dueDate": String, /* 10-Oct-2015 */
	    "giro": String,
	    "eps": String,
	    "bank": String,
	    "bankAccount": String
	}			

2.2.13 Portfolio

2.2.13.1   Equity Balance List

URL	/global/portfolio/equitybalance			
Verb	GET			
Description	Get portfolio equity balance			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			
Result	``` { "msg": String, "code": int, "clientName": String, "accountType": String, "total": String, /* SGD 100,000.00 */ "balanceInfo": [{ "type": String, /* ST, FT, CFD, UT */ "lastUpdated": String, /* 10-Oct-2015 5:00PM */ "balance": String, /* 100,000.00 */ "currency": String, /* SGD */ "typeIcon": String }] } ```			

2.2.13.2   Stocks Account Details

URL	/st/portfolio/accountdetails			
Verb	GET			
Description	Get stocks account details			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	accountType	@Header	String	
Produce	application/json			
Result	``` { "msg": String, "code": int, "lastUpdated": String, /* 10-Oct-2015 5:00PM */ "details": [{ "currency": String, /* SGD Base, SGD, etc*/ "balanceAsYesterday": String, /* 100,000.00 or -100,000.00*/ "fundReceivedToday": String, "openingBalanceToday": String, "itemsDueForSettlement": String, "availableBalance": String, "allItemsOutstanding": String, "netAmount": String, "totalAssetValue": String, /* Below for V & M account */ "collateralValue": String, ```			

```
            "marginCall": String,
            "marginRatio": String,
            "creditLimit": String,
            "purchaseA": String,
            "purchaseB": String,
            "purchaseC": String,
            /* Below for V account */
            "cashCall": String
        }]
    }
```

2.2.13.3   CFD Account Details

URL	/cfd/portfolio/accountdetails			
Verb	GET			
Description	Get CFD account details			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	<pre>{
	    "msg": String,
	    "code": int,
	    "lastUpdated": String, /* 10-Oct-2015 5:00PM */
	    "currency": String, /* SGD Base */
	    "ledgerBalance": String, /* 100,000.00 or -100,000.00*/
	    "unrealizedPL": String,
	    "equityBalance": String,
	    "availableCash": String,
	    "maintenanceMargin": String,
	    "marginUtilization": String, /* 26.23% */
	    "creditLeft": String,
	    "creditLimit": String
	}</pre>			

2.2.13.4   UT Account Details

URL	/ut/portfolio/accountdetails			
Verb	GET			
Description	Get UT account details			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	<pre>{
	    "msg": String,
	    "code": int,
	    "lastUpdated": String, /* 10-Oct-2015 5:00PM */
	    "details": [{
	        "currency": String, /* SGD Base, SGD, etc*/
	        "availableCash": String, /* 100,000.00 or -100,000.00*/
	        "totalCost": String,</pre>			

	`"marketValue": String,`
	`"unrealizedPL": String,`
	`"gainLossPct": String /* 26.23% */`
	`}]`
	`}`

2.2.13.5   Stocks Holdings (Unrealized Profit Loss)

URL	/st/portfolio/holdings			
Verb	GET			
Description	Get Stocks holdings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	`{`
	`    "msg": String,`
	`    "code": int,`
	`    "total": String,`
	`    "currency": String, /* SGD Base */`
	`    "lastUpdated": String,`
	`    "holdings": [{`
	`        "exchange": String, /* Exchange Grouping */`
	`        "currencies": [{`
	`            "currency": String, /* Traded Currency Grouping */`
	`            "unrealizedPL": String,`
	`            "list": [{`
	`                "counterID": String,`
	`                "name": String,`
	`                "unrealizedPL": String,`
	`                "qty": String,`
	`                "mktValue": String,`
	`                "aveCostPrice": String,`
	`                "closingPrice": String,`
	`                "tradedCurr": String,`
	`                "suspendedQty": String,`
	`                "totalCost": String`
	`            }]`
	`        }]`
	`    }]`
	`}`			

Note: Holdings Details data get from list. (All fields available)

2.2.13.6   CFD Positions List

URL	/cfd/portfolio/positions			
Verb	GET			
Description	Get CFD positions list			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	

Produce	application/json
| Result | ```
{
    "msg": String,
    "code": int,
    "total": String,
    "currency": String, /* SGD Base */
    "lastUpdated": String,
    "holdings": [{
        "product": String, /* CFD & DMA Grouping */
        "productIcon": String,
        "list": [{
            "counterID": String, /* Counter Grouping */
            "product": String
            "productIcon": String
            "name": String,
            "unrealizedPL": String,
            "qty": String,
            "rolloverPrice": String,
            "entryPrice": String,
            "markToMarket": String,
            "currency": String,
            "detailURI": String, /* Empty if have subList */
            "subList": [{
                "counterID": String,
                "detailURI": String,
                "name": String,
                "unrealizedPL": String,
                "qty": String,
                "rolloverPrice": String,
                "entryPrice": String,
                "markToMarket": String,
                "currency": String
            }]
        }]
    }]
}
``` |

2.2.13.7   CFD Positions Details

URL	/cfd/portfolio/positions/{tradeDate}/{orderNo}/{subOrderNo}			
Verb	GET			
Description	Get CFD position detail			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	tradeDate	@Path	String	
	orderNo	@Path	String	
	subOrderNo	@Path	String	
	counterID	@Query	String	
Produce	application/json			
| Result | ```
{
    "msg": String,
    "code": int,
    "lastUpdated": String,
    "counterID": String,
    "contractNo": String,
``` | | | |

```
        "description": String,
        "action": String,
        "entryPrice": String,
        "qty": String,
        "currency": String,
        "rolloverPrice": String,
        "markToMarket": String,
        "maintenanceMargin": String,
        "unrealizedPL": String,
        "unrealizedFC": String,
        "tradedDate": String,
        "expiryDate": String
    }
```

2.2.13.8 UT Holdings

URL	/ut/portfolio/holdings			
Verb	GET			
Description	Get UT Holdings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			
Result	(see below)			

```
{
    "msg": String,
    "code": int,
    "total": String,
    "currency": String, /* SGD Base */
    "lastUpdated": String,
    "holdings": [{
        "currency": String, /* Traded Currency Grouping */
        "unrealizedPL": String,
        "list": [{
            "counterID": String,
            "name": String,
            "unrealizedPL": String,
            "units": String,
            "indicativeNAV": String,
            "costPrice": String,
            "currency": String,
            "cost": String,
            "marketValue": String,
            "fundCode": String,
            "isinCode": String,
            "unrealizedPL": String,
            "changePct": String /* 26.23% */
        }]
    }]
}
```

Note: Holdings Details data get from list. (All fields available)

2.2.13.9 General Disclaimer (Portfolio, Account Detail, Holdings, etc)

URL	/global/portfolio/disclaimer
Verb	GET

Description	Get disclaimer by screen type			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	product	@Query	String	
	disclaimerType	@Query	String	Posible value: Portfolio Holdings FXInvest OSPosition OnlineForms
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "disclaimerContent": String
	}			

2.2.14 Transaction History

2.2.14.1   Stocks Transaction History List

URL	/st/transactionhistory			
Verb	GET			
Description	Get Stocks Transaction History List			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	currency	@Query	String	
	month	@Query	String	YYYYMM
	accountType	@Query	String	
	pageSize	@Query	int	default: 50
	pageIndex	@Query	Int	default: 1
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "totalRow": int,
	    "lastUpdated": String,
	    "currencies": [String],
	    "transHistory": [{
	      "currency": String,
	      "date": String, /* 10-Oct-2015 */
	      "description": String,
	      "debit": String,
	      "credit": String,
	      "balance": String
	    }]
	}			

Note: UT transaction history display same data as stocks
Currency grouping will be done at front end, as monthly transaction will have a lot of data so have to apply paging.

2.2.14.2   CFD Transaction History List

URL	/cfd/transactionhistory			
Verb	GET			
Description	Get CFD Transaction History List			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	currency	@Query	String	
	month	@Query	String	YYYYMM
Produce	application/json			

Result	{
	    "msg": String,
	    "code": int,
	    "currencies": [String],
	    "lastUpdated": String,			

```
                "transHistory": [{
                    "date": String, /* 10-Oct-2015 */
                    "currencies": [{
                        "currency": String,
                        "subtotal": String,
                        "list": [{
                            "description": String,
                            "amount": String
                        }]
                    }]
                }]
            }
```

2.2.15 Settings

2.2.15.1   Hotline

URL	/global/settings/hotline			
Verb	GET			
Description	Retrieve hotlines numbers			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
Produce	application/json			
| Result | ```
{
  "msg": String,
  "code": Int,
  "stocks": String,
  "cfddma": String,
  "ftfx": String,
  "contactUsCategories": [
    {
      "text": String,
      "value": String
    }
  ]
}
``` | | | |

2.2.15.2   Menu

URL	/global/settings/menu			
Verb	GET			
Description	Retrieve Menu Settings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	module	@Query	String	
Produce	application/json			
| Result | ```
{
  "msg": String,
  "code": Int,
  "Menu": [
    {
      "displayName": String,
      "id": String,
      "index": Int
    }
  ]
}
``` | | | |

2.2.15.3   Remisier

URL	/global/settings/remisier			
Verb	GET			
Description	Retrieve remisier info			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	

_____

	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	Remisier [{
	    "type": String, /* AE or TR*/
	    "name": String,
	    "code": String,
	    "email": String,
	    "officeNumber": String,
	    "mobileNumber": String
	}]			

2.2.15.4 Product Access

URL	/global/settings/productaccess			
Verb	GET			
Description	Retrieve product Access			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": int,
	  "ST": {
	    "access": Boolean,
	    "binaryFlag": int,
	    "icon": String,
	    "name": String,
	    "searchEnabled": Boolean
	  },
	  "CFD": {
	    "access": Boolean,
	    "binaryFlag": int,
	    "icon": String,
	    "name": String,
	    "searchEnabled": Boolean
	  },
	  "CFDDMA": {
	    "access": Boolean,
	    "binaryFlag": int,
	    "icon": String,
	    "name": String,
	    "searchEnabled": Boolean
	  },
	  "FT": {
	    "access": Boolean,
	    "binaryFlag": int,
	    "icon": String,
	    "name": String,
	    "searchEnabled": Boolean
	  },
	  "FX": {
	    "access": Boolean,
	    "binaryFlag": int,
	    "icon": String,
	    "name": String,			

```
          "searchEnabled": Boolean
        },
        "FXMN": {
          "access": Boolean,
          "binaryFlag": int,
          "icon": String,
          "name": String,
          "searchEnabled": Boolean
        },
        "UT": {
          "access": Boolean,
          "binaryFlag": int,
          "icon": String,
          "name": String,
          "searchEnabled": Boolean
        },
        "allSearchValue": int
      }
```

2.2.15.5   PMP Settings

URL	/global/settings/pmp			
Verb	GET			
Description	Retrieve PMP Settings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			
Result	(see below)			

```
{
  "msg": String,
  "code": Int,
  "module": {
    "counterDetails": Boolean,
    "liveChart": Boolean,
    "marketDepth": Boolean,
    "timeSales": Boolean,
    "top30": Boolean,
    "watchlist": Boolean
  },
  "liveChart": { /*alternative URLs will only return when have multiple URLs*/
    "alternativeHistoricalURLs": [ String ],
    "alternativeLiveURLs": [ String ],
    "historicalURL": String,
    "liveURL": String,
    "topicURL": String
  },
  "enabledProducts": [
    {
      "markets": [
        { /*alternative URLs will only return when have multiple URLs*/
          "alternativeDelayedURLs": [ String ],
          "alternativeURLs": [ String ],
          "market": String,
          "primaryDelayedURL": String,
          "primaryURL": String
        }
      ], /*alternative URLs will only return when have multiple URLs*/
      "orderStatusAlternativeURL": [ String ],
      "orderStatusURL": String,
      "product": String
    }
  ]
```

| | | } | | |

2.2.15.6   Retrieve Client Settings

URL	/global/settings/account			
Verb	GET			
Description	Retrieve user customized settings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
Produce	application/json			

Result	{
	  "msg": String,
	  "code": Int,
	  "sessionExpire": {
	    "text": String,
	    "value": String
	  },
	  "passwordConfirmation": Boolean,
	  "landingScreen": {
	    "text": String,
	    "value": String /* menu item's id*/
	  },
	  "defaultProduct": {
	    "text": String,
	    "value": String /* product key (ST,CFD,UT,FUT,FX) */
	  },
	  "language": {
	    "text": String,
	    "value": String /* language id (1: EN, 2: CN) */
	  }
	}			

Note:
Remember my Account, Theme, Font size, Short Cut will not keep on server
Touch ID configuration won't return from Server
Application must maintain supported language list on front end app, if server return un-supported language must set to default language which is EN.
If client's landing screen selected as last view page, front end app must keep the last view page on application. Landing Screen option can retrieve from settings/menu

2.2.15.7   Update Client Settings

URL	/global/settings/account/update			
Verb	POST			
Description	Update user customized settings			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	encryptedPIN	@Header	String	Only for disable passwordConfirmation
	settingType	@Form	String	Possible value: sessionExpire landingScreen

				defaultProduct language passwordConfirmati on
settingValue	@Form	String		
Produce	application/json			
Result	{ "msg": String, "code": Int }			

2.2.15.8   Settings Options

URL	/global/settings/options/{settingType}			
Verb	GET			
Description	Retrieve user customized settings options			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Query	String	
	language	@Query	int	default: 1
	accountNo	@Header	String	
	sessionId	@Header	String	
	settingType	@Path	String	Possible value: sessionExpire landingScreen defaultProduct language
Produce	application/json			
Result	{ "msg": String, "code": Int, "settingOptions": [{ "text": String, "value": String }] }			

2.2.15.9   Contact Us

URL	/global/settings/contactus			
Verb	POST			
Description	To send contact us message			
Parameters	deviceId	@Header	String	
	apikey	@Header	String	
	versionNo	@Header	String	
	osVersion	@Form	String	
	language	@Form	int	default: 1
	accountNo	@Header	String	Required for post-login
	sessionId	@Header	String	Required for post-login
	category	@Form	String	
	message	@Form	String	
	email	@Form	String	Client email address, required for pre-login
	name	@Form	String	Client name, required for pre-login
Produce	application/json			
Result	{ "msg": String, "code": Int			

	}	

III.   Input/Output files used

3.1   Input/Output file format design (with Samples attached)
3.2   Database connections used

IV.   Error Message/Warning Message List

V.   Archival and Record Retention List[1]

Type of Records Retained	Period of Retention (*from the time when the files are created or used by the application/ system)	Where Doc Retained (i) electronic (indicate system e.g. docuware / shared drive – indicate location) (ii) Warehouse (indicate service provider e.g. Crown)	Indexing (e.g. MM/YY, By client's name- Alphabetic order by surname)

Note[1]: Sample is given in Appendix 1.

VI.   Program List

VII.   Acceptance Form

Project Name :	
Document Name :	
Company Name :	
Project Manager :	
Designation :	

Signature/Date :	

Appendix 1

Type of Records Retained	Period of Retention (*from the time when the files are created or used by the application/ system)	Where Doc Retained (i) electronic (indicate system e.g. docuware / shared drive – indicate location) (ii) Warehouse (indicate service provider e.g. Crown)	Indexing (e.g. MM/YY, By system Module and sub-module name)
File lists/description of transaction related audit log: **File Name/Description 1** **File Name/Description 2** **...** **File Name/Description n**	7 years	1. Log files less than **X** year is stored in: ServerName\Path\ 2.Log files more than **X** year are stored in: XX[1]	System/Module/sub module/YYYYMMDD.log
File lists/description of Non-transaction audit logs: **File Name/Description 1** **File Name/Description 2** **...** **File Name/Description n**	5 years	1.Log files less than **X** year is stored in: ServerName\Path\ 2. Log files more than **X** years are stored in: XX[1]	Module/sub module /YYYYMMDD.log
File lists/description of Data file, report generated/used by the application/system: **File Name/Description 1** **File Name/Description 2** **...** **File Name/Description n**	5 years	1. Log files less than **X** year year are stored in ServerName\Path\ 2. Log files more than **X** year are stored in XX[1]	YYYYMMDD.log

[1] Location example: CD, Avamar, Log-Bk Server Avamar (Replicate to the DR Avamar), Tape