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| LTech India Software Systems Pvt Ltd |
| Back Office Engine |
| Service Methods Details |

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| --- |
| Ajay Vyas  12/6/2016 |

Revision Sheet

|  |  |  |
| --- | --- | --- |
| **Release No.** | **Date** | **Revision Description** |
| 1 |  | Initial Document Release |
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Contents

[1. Introduction 5](#_Toc469403438)

[2. Methods 5](#_Toc469403439)

[2.1. AuthenticateLogin 5](#_Toc469403440)

[2.2. LogOut 6](#_Toc469403441)

[2.3. HandleIPAccessList 7](#_Toc469403442)

[2.4. HandleFeeMaster 7](#_Toc469403443)

[2.5. HandleHoliday 7](#_Toc469403444)

[2.6. HandleContractSession 8](#_Toc469403445)

[2.7. HandleContractSpecfication 8](#_Toc469403446)

[2.8. GetCurrencyList 8](#_Toc469403447)

[2.9. GetSecurityType 8](#_Toc469403448)

[2.10. GetMasterInfo 9](#_Toc469403449)

[2.11. HandleTimeSettings 9](#_Toc469403450)

[2.12. HandleTradingGateway 9](#_Toc469403451)

[2.13. HandleBrokers 9](#_Toc469403452)

[2.14. GetBrokerList 10](#_Toc469403453)

[2.15. GetModules 10](#_Toc469403454)

[2.16. GetLeverageList 10](#_Toc469403455)

[2.17. GetParticipaintList 11](#_Toc469403456)

[2.18. GetCountryDetails 11](#_Toc469403457)

[2.19. GetCollateralTypes 11](#_Toc469403458)

[2.20. GetAccounts 11](#_Toc469403459)

[2.21. InsertIntoAccount 12](#_Toc469403460)

[2.22. UpdateAccount 12](#_Toc469403461)

[2.23. GetAccountGroup 12](#_Toc469403462)

[2.24. GetBankInfo 12](#_Toc469403463)

[2.25. InsertIntoBankInfo 13](#_Toc469403464)

[2.26. UpdateBankInfo 13](#_Toc469403465)

[2.27. GetClientInfo 13](#_Toc469403466)

[2.28. InsertIntoClientInfo 13](#_Toc469403467)

[2.29. UpdateClientInfo 14](#_Toc469403468)

[2.30. GetCollateralInfo 14](#_Toc469403469)

[2.31. HandleCollateralTransInfo 14](#_Toc469403470)

[2.32. GetTradeOrdersDetails 14](#_Toc469403471)

[2.33. GetTradeDetails 15](#_Toc469403472)

[2.34. ModifyTrade 15](#_Toc469403473)

[2.35. NewTrade 15](#_Toc469403474)

[2.36. SettleTrade 15](#_Toc469403475)

[2.37. GetMapOrders 16](#_Toc469403476)

[2.38. HandleTGAccountConnetionSettings 16](#_Toc469403477)

[2.39. HandleVirtualDealer 16](#_Toc469403478)

[2.40. HandleCommonSettings 16](#_Toc469403479)

[2.41. GetCollateralTransactionHistory 17](#_Toc469403480)

[2.42. GetAccountIDsByAccountType 17](#_Toc469403481)

[2.43. AuthenticateClientID 17](#_Toc469403482)

[2.44. HandleInstClosingPrice 17](#_Toc469403483)

[2.45. HandleBrokerOperationsLog 18](#_Toc469403484)

[2.46. GetHistoricalData 18](#_Toc469403485)

[2.47. HandleAccountTransactionOperation 18](#_Toc469403486)

[3. Classes 19](#_Toc469403487)

[3.1. clsAccount 19](#_Toc469403488)

[3.2. clsAccountGroup 20](#_Toc469403489)

[3.3. clsAccountTransaction 21](#_Toc469403490)

[3.4. clsBank 21](#_Toc469403491)

[3.5. clsBroker 22](#_Toc469403492)

[3.6. BrokerSymbol 23](#_Toc469403493)

[3.7. Charges 23](#_Toc469403494)

[3.8. clsBrokerList 24](#_Toc469403495)

[3.9. clsBrokerOperationsLog 24](#_Toc469403496)

[3.10. clsClientInfo 25](#_Toc469403497)

[3.11. clsCollateralInfo 26](#_Toc469403498)

[3.12. clsCollateralTransInfo 27](#_Toc469403499)

[3.13. clsCollateralTypes 27](#_Toc469403500)

[3.14. clsCommonSettings 28](#_Toc469403501)

[3.15. clsContractSpecification 28](#_Toc469403502)

[3.16. clsSymbolSession 30](#_Toc469403503)

[3.17. clsSymbolSessionNew 30](#_Toc469403504)

[3.18. clsInstrumentSwaps 31](#_Toc469403505)

[3.19. clsLogin 31](#_Toc469403506)

[4. ENUMS 32](#_Toc469403507)

[4.1. public enum AccountOpType 32](#_Toc469403508)

[4.2. public enum DAYS 32](#_Toc469403509)

# Introduction

The aim of this document is to present the functionalities of the BO Engine Service. This project is developed using Visual Studio 2015 and DotNet Framework 4.5. This is a WCF service. Details of all methods and input/output variables are explained in this doc to help the Service consumer.

# Methods

This section contains the details of all methods exposed by service.

## AuthenticateLogin

This method Authenticate the client/Update client credentials and returns object of clsLogin Class.

public clsLogin AuthenticateLogin(string loginPwd, clsLogin login, string ipAddress)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| LoginPwd | String | LoginID + ”\_”+ LoginID |
| login | clsLogin | Complex type defined below |
| ipAddress | String | Terminal’s IPv4 Address |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | clsLogin | Complex type defined below |

**Input Parameters Description : login**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required** | **Description** | **Limit/Constraints** |
| LoginId | string | YES | Login ID |  |
| Password | string | YES | Password |  |
| BrokerId | int | NO (YES in case of update credentials) | Broker ID |  |
| Role | String | NO | Role |  |
| IPAddress | String | NO | Client NIC IPv4 Address |  |

**Output Parameters Description : Response**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| LoginId | string | Login ID |  |
| Password | string | Password |  |
| BrokerId | int | Broker ID |  |
| Role | String | Role |  |
| IPAddress | String | Client NIC IPv4 Address |  |
| BrokerName | string | Broker Name |  |
| BrokerNameID | Int? | Broker Name ID |  |
| BrokerCompany | string | Broker Company |  |
| IsEnable | Bool | Is Account is Active |  |
| ServerResponseMsg | string | Response Message | 1. "Login Successful" 2. "Already Login" 3. "Login Unsuccessful" 4. "UnAuthorize Access" |
| ServerResponseID | Int | Server Response |  |

## LogOut

Logs client out of the current session.

public void LogOut(string LoginIDPwd, clsBrokerOperationsLog brokerOperations)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| LoginIDPwd | string | LoginID + ”\_”+ LoginID |
| brokerOperations | clsBrokerOperationsLog | Complex type defined below |

**Output Parameters: None**

**Input Parameters Description : brokerOperations**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required** | **Description** | **Limit/Constraints** |
| SNo | int | YES | Serial Number |  |
| BrokerName | string | YES | Broker Name |  |
| BrokerID | int | YES | Broker ID |  |
| OperationName | string | YES | Operation Name |  |
| DateTime | DateTime | YES | Date Time |  |
| Message | string | YES | Message |  |
| IPAddress | string | YES | IPv4 Addresss |  |
| ServerResponseID | int | NO | ServerResponseID |  |

## HandleIPAccessList

Returns List of clsIPAccessList objects according to the operation type supplied.

public List<clsIPAccessList> HandleIPAccessList(string userId, OperationTypes opType, clsIPAccessList ipAccess)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userId | string | User ID |
| opType | OperationTypes (Enum) | Complex type defined below |
| ipAccess | clsIPAccessList | Complex type defined below |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List<clsIPAccessList> | Complex type defined below |

**Input Parameters Description : OpType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Input Parameters Description : ipAccess**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required** | **Description** | **Limit/Constraints** |
| ID | int | YES | ID |  |
| FromIP | string | YES | IP From |  |
| ToIp | string | YES | IP To |  |
| Comment | string | YES | Comment |  |
| Status | string | YES | Status |  |
| ServerResponseMsg | int | NO | Server Response |  |

**Output Parameters Description : Response**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| ID | int | ID |  |
| FromIP | string | IP From |  |
| ToIp | string | IP To |  |
| Comment | string | Comment |  |
| Status | string | Stauts |  |
| ServerResponseMsg | int | Server Response | 1. 50052 (Operation Success) 2. 50060 (Operation Failed) |

## HandleFeeMaster

public List<clsFeeMaster> HandleFeeMaster(string userId, OperationTypes opType, clsFeeMaster feeValue)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userId | string | User ID |
| opType | OperationTypes (Enum) | Complex type defined below |
| feeValue | clsFeeMaster | Complex type defined below |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List< clsFeeMaster > | Complex type defined below |

**Input Parameters Description : OpType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Input Parameters Description : feeValue**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required** | **Description** | **Limit/Constraints** |
| FeeId | int | YES | Fee ID |  |
| FeeName | string | YES | Fee Name |  |
| MinimumFeeValue | decimal | YES | Minimum Fee |  |
| MaximumFeevalue | decimal | YES | Maximum Fee |  |
| Interval | string | YES | Interval |  |
| IsTaxable | bool | YES | If Fee is Taxable |  |
| Description | string | YES | Description |  |
| FeesMode | string | YES | Mode of Fee |  |
| LevyOn | string | YES | Fee to Levy on |  |
| Days | string | YES | Days |  |
| ServerResponseID | int | NO | Server Response |  |

**Output Parameters Description : Response**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| FeeId | int | Fee ID |  |
| FeeName | string | Fee Name |  |
| MinimumFeeValue | decimal | Minimum Fee |  |
| MaximumFeevalue | decimal | Maximum Fee |  |
| Interval | string | Interval |  |
| IsTaxable | bool | If Fee is Taxable |  |
| Description | string | Description |  |
| FeesMode | string | Mode of Fee |  |
| LevyOn | string | Fee to Levy on |  |
| Days | string | Days |  |
| ServerResponseID | int | Server Response | 1. 50052 (Operation Success) 2. 50060 (Operation Failed) |

## HandleTaxMaster

public List<clsTaxMaster> HandleTaxMaster(string userId, OperationTypes opType, clsTaxMaster taxValue)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userId | string | User ID |
| opType | OperationTypes (Enum) | Complex type defined below |
| taxValue | clsTaxMaster | Complex type defined below |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List< clsTaxMaster > | Complex type defined below |

**Input Parameters Description : OpType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Input Parameters Description : taxValue**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required** | **Description** | **Limit/Constraints** |
| TaxID | int | YES | Tax ID |  |
| TaxName | string | YES | Tax Name |  |
| TaxPercent | decimal | YES | Tax Percentage |  |
| Amount | string | YES | Tax Amount |  |
| Description | string | YES | Description |  |
| ServerResponseID | int | NO | Server Response |  |

**Output Parameters Description : Response**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| TaxID | int | Tax ID |  |
| TaxName | string | Tax Name |  |
| TaxPercent | decimal | Tax Percentage |  |
| Amount | string | Tax Amount |  |
| Description | string | Description |  |
| ServerResponseID | int | Server Response | 1. 50052 (Operation Success) 2. 50060 (Operation Failed) |

## HandleHoliday

public List<clsHoliday> HandleHoliday(string userId, OperationTypes opType, clsHoliday holiday)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userId | string | User ID |
| opType | OperationTypes (Enum) | Complex type defined below |
| holiday | clsHoliday | Complex type defined below |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List< clsHoliday > | Complex type defined below |

**Input Parameters Description : OpType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Input Parameters Description : holiday**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required** | **Description** | **Limit/Constraints** |
| Day | DateTime | YES | Holiday date |  |
| FromTime | string | YES | Holiday starts |  |
| ToTime | string | YES | Holiday ends |  |
| Symbol | string | YES | Symbol |  |
| Description | string | YES | Description |  |
| Id | int | YES | ID |  |
| IsEnable | bool | YES | Is Holiday Active |  |
| IsEveryYear | bool | YES | Recurring Yearly? |  |
| ServerResponseID | int | NO | Server Response |  |

**Output Parameters Description : Response**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| Day | DateTime | Holiday starts |  |
| FromTime | string | Holiday ends |  |
| ToTime | string | Symbol |  |
| Symbol | string | Description |  |
| Description | string | ID |  |
| Id | int | Is Holiday Active |  |
| IsEnable | bool | Recurring Yearly? |  |
| IsEveryYear | bool | Server Response |  |
| ServerResponseID | int | Holiday date | 1. 50052 (Operation Success) 2. 50060 (Operation Failed) |

## HandleContractSession

public List<clsSymbolSessionNew> HandleContractSession(string userId, OperationTypes opType, List<int> instrumentIds)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userId | string | User ID |
| opType | OperationTypes (Enum) | Complex type defined below |
| instrumentIds | List<int> | List of Instrument IDs |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List<clsSymbolSessionNew> | Complex type defined below |

**Input Parameters Description : OpType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Output Parameters Description : Response**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| lstSession | List<clsSymbolSession> | List of Symbol Sessions |  |
| ServerResponseID | int | Server Response | 1. 50052 (Operation Success) 2. 50060 (Operation Failed) |

**Output Parameters Description : Response -- > lstSession**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| TradeSession | string | Trade Session |  |
| Day | DAYS | Day |  |
| QuoteSession | string | Quote Session |  |
| IsUseTimelimits | bool | Using Time Limits |  |
| StartDate | DateTime | Start Date |  |
| EndDate | DateTime | End Date |  |
| SessionEODMarketMaker | string | EOD Market Maker |  |

## HandleContractSpecfication

public List<clsContractSpecification> HandleContractSpecfication(string userId, OperationTypes opType, clsContractSpecification csInfo)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userId | string | User ID |
| opType | OperationTypes (Enum) | Complex type defined below |
| csInfo | clsContractSpecification | Complex type defined below |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List<clsContractSpecification> | Complex type defined below |

**Input Parameters Description : OpType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Input/Output Parameters Description : csInfo/Response**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required for Input** | **Description** | **Limit/Constraints,/Value** |
| Instruement\_ID | Int32 | YES | Instruement\_ID |  |
| SymbolName | string | YES | SymbolName |  |
| Description | string | YES | Description |  |
| Source | string | YES | Source |  |
| Digits | Int32 | YES | Digits |  |
| SettlingCurrency | string | YES | SettlingCurrency |  |
| MarginCurrency | string | YES | MarginCurrency |  |
| MaximumLots | int | YES | MaximumLots |  |
| BuySideTurnover | decimal | YES | BuySideTurnover |  |
| SellSideTurnover | decimal | YES | SellSideTurnover |  |
| MaximumAllowablePosition | int | YES | MaximumAllowablePosition |  |
| Hedged | int | YES | Hedged |  |
| LimitandStopLevel | Int32 | YES | LimitandStopLevel |  |
| TickSize | decimal | YES | TickSize |  |
| TickPrice | decimal | YES | TickPrice |  |
| ContractSize | int | YES | ContractSize |  |
| QuotationBaseValue | string | YES | QuotationBaseValue |  |
| Maintenance | int | YES | Maintenance |  |
| DeliveryType | string | YES | DeliveryType |  |
| DeliveryUnit | string | YES | DeliveryUnit |  |
| DeliveryQuantity | int | YES | DeliveryQuantity |  |
| MarketLot | int | YES | MarketLot |  |
| ExpiryDate | string | YES | ExpiryDate |  |
| StartDate | string | YES | StartDate |  |
| EndDate | string | YES | EndDate |  |
| TenderStartDate | string | YES | TenderStartDate |  |
| TenderEndDate | string | YES | TenderEndDate |  |
| DeliveryStartDate | string | YES | DeliveryStartDate |  |
| DeliveryEndDate | string | YES | DeliveryEndDate |  |
| DPRInitialPercentage | int | YES | DPRInitialPercentage |  |
| DPRInterval | int | YES | DPRInterval |  |
| InitialBuyMargin | int | YES | InitialBuyMargin |  |
| InitialSellMargin | int | YES | InitialSellMargin |  |
| MaintenanceBuyMargin | int | YES | MaintenanceBuyMargin |  |
| MaintenanceSellMargin | int | YES | MaintenanceSellMargin |  |
| ULAssest | string | YES | ULAssest |  |
| TradingCurrency | string | YES | TradingCurrency |  |
| Maximum\_Order\_Value | int | YES | Maximum\_Order\_Value |  |
| DPR\_Range\_Higher | int | YES | DPR\_Range\_Higher |  |
| FK\_SecurityTypeID | string | YES | FK\_SecurityTypeID |  |
| lstSession | List<clsSymbolSession> | YES | lstSession |  |
| SessionCount | int | YES | SessionCount |  |
| MaximumLostUnit | string | YES | MaximumLostUnit |  |
| MarketLostUnit | string | YES | MarketLostUnit |  |
| QuotationBaseValueUnit | string | YES | QuotationBaseValueUnit |  |
| Spread | Int32 | YES | Spread |  |
| InstrumentSwaps | clsInstrumentSwaps | YES | InstrumentSwaps |  |
| ServerResponseID | int | YES | ServerResponseID | 1. 50052 (Operation Success) 2. 50060 (Operation Failed)   **IN CASE OF RESPONSE** |
| QuoteOffTime | int | YES | QuoteOffTime |  |

## GetCurrencyList

public List<clsCurrency> GetCurrencyList(string userId)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userId | string | User ID |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List<clsCurrency> | Complex type defined below |

**Output Parameters Description : Response :** clsCurrency

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| Currency\_ID | int | Currency ID |  |
| CurrencyName | string | Currency Name |  |
| CurrencyDescription | string | Description of Currency |  |
| ServerResponseID | int | Server Response | 1. 50052 (Operation Success) 2. 50060 (Operation Failed) |

## GetSecurityType

public List<clsSecurityType> GetSecurityType(string userId)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userId | string | User ID |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List<clsSecurityType> | Complex type defined below |

**Output Parameters Description : Response :** clsSecurityType

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| SecurityTypeID | int | Security ID |  |
| SecurityName | string | Security Name |  |
| SecurityDescription | string | Description |  |
| Symbols | string | Symbols |  |
| ServerResponseID | int | Server Response | 1. 50052 (Operation Success) 2. 50060 (Operation Failed) |

## GetMasterInfo

public clsMasterInfo GetMasterInfo (string userId)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userID | string | User ID |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | clsMasterInfo | Complex type defined below |

**Output Parameters Description : Response :** clsMasterInfo

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| lstDeliveryUnit | List<String> | List of Delivery Units |  |
| lstOrderTypes | List<String> | List of Order Types |  |
| lstProductNames | List<String> | List of Product Names |  |
| lstDataTypes | List<String> | List of Data Type |  |
| lstIdleTimeOut | List<String> | List of Idle Timeouts |  |
| lstReconnectAfter | List<String> | List of Last Reconnection |  |
| DDRoles | Dictionary<int, string> | Dictionary of Pre-defined Roles. ( Key : RoleID) |  |
| DDSymbols | Dictionary<int, string> | Dictionary of Symbols. (Key Symbol/Instrument ID) |  |
| DDLPNames | Dictionary<int, string> | Dictonary of DDLPs. ( Key : Trading GateWays ID ) |  |
| DDClientAccountTypes | Dictionary<int, string> | Dictionary of Client Account Types. ( Key : Account Type ID ) |  |
| lstUnexpiredSymbols | List<String> | List of unsubscribed symbols |  |
| DDHedgeTypes | Dictionary<int, string> | Dictionary of Hedge Types. |  |
| DDTGSymbolsInfo | Dictionary<string, Dictionary<string, List<string>>> | Dictionary (Key :Name) of Dictionary (Key : SecurityName) of list of symbols |  |
| DDContractSize | Dictionary<string, int> | Dictionary of Contract Size. ( Key : Symbol Name ) |  |
| DDCommonSettings | Dictionary<string, string> | Dictionary of Common Settings. ( Key : Property ) |  |
| ServerResponseID | int | Server Response | 1. 50052 (Operation Success)  2. 50060 (Operation Failed) |

## HandleTimeSettings

public List<clsTimeSettings> HandleTimeSettings(string userIdPwd, OperationTypes opType, clsTimeSettings timeSettings)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userIdPwd | string | LoginID + ”\_”+ LoginID |
| opType | OperationTypes | Complex type defined below |
| timeSettings | clsTimeSettings | Complex type defined below |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List<clsTimeSettings> | Complex type defined below |

**Input Parameters Description : opType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Input Parameters Description : timeSettings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required** | **Description** | **Limit/Constraints** |
| Day | string | YES |  |  |
| TimeSpan | string | YES |  |  |
| ServerResponseID | int | NO | Server Response |  |

**Output Parameters Description : Response** clsTimeSettings

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Values** |
| Day | string | Day |  |
| TimeSpan | string | Time Span |  |
| ServerResponseID | int | Server Response | 1. 50052 (Operation Success)  2. 50060 (Operation Failed) |

## HandleTradingGateway

public List<clsTradingGateway> HandleTradingGateway(string userIdPwd, OperationTypes opType, clsTradingGateway tradingGateway)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userIdPwd | string | LoginID + ”\_”+ LoginID |
| opType | OperationTypes | Complex type defined below |
| tradingGateway | clsTradingGateway | Complex type defined below |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List<clsTradingGateway> | Complex type defined below |

**Input Parameters Description : opType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Input and Output Parameters Description : Response** clsTradingGateway

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Limit/Constraints** | **Values** |
| PKTradingGateWaysID | int | Trading Gateway ID |  |  |
| Name | string | Name |  |  |
| Description | String | Description |  |  |
| ServerIP | string | Server IP |  |  |
| Port | string | Port |  |  |
| DataType | string | Data Type |  |  |
| Login | string | Login |  |  |
| Password | string | Password |  |  |
| IdleTimeOut | Int | Idle Time Out |  |  |
| ReconnectAfter | int | Time to wait before reconnecting |  |  |
| SleepFor | int | Time to Idle |  |  |
| Attempts | int | Attempts |  |  |
| IsEnable | bool | Is Active |  |  |
| LstSymbol | List<string> | List of Symbols |  |  |
| LstSymbolAlias | List<string> | List of Symbol Alias |  |  |
| LstTotalSymbol | List<string> | List of Total Symbols |  |  |
| EnableRMS | bool | Is RMS Enabled |  |  |
| OrderPort | int | Port for Orders |  |  |
| LstSymbolConversionFormula | List<decimal> | Formula for Symbol Conversion |  |  |
| OrderIP | string | IP for Order |  |  |
| LstProductName | List<string> | List of Product Names |  |  |
| LstProductAlias | List<string> | List of Product Alias |  |  |
| ServerResponseID | int | Server Response |  | 1. 50052 (Operation Success)  2. 50060 (Operation Failed) |

## HandleBrokers

public List<clsBroker> HandleBrokers(string userIdPwd, int BrokerId, OperationTypes opType, clsBroker broker)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userIdPwd | string | LoginID + ”\_”+ LoginID |
| opType | OperationTypes | Complex type defined below |
| broker | clsBroker | Complex type defined below |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List< clsBroker > | Complex type defined below |

**Input Parameters Description : opType**

* GET
* INSERT
* UPDATE
* DELETE
* GET\_SESSION

**Input & Output Parameters Description :** clsBroker

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element Name** | **Type** | **Required for Input** | **Description** | **Values** |
| BrokerID | int |  |  |  |
|  |  |  |  |  |
| Name | string |  |  |  |
|  |  |  |  |  |
| Owner | string |  |  |  |
|  |  |  |  |  |
| Leverage | string |  |  |  |
|  |  |  |  |  |
| State | string |  |  |  |
|  |  |  |  |  |
| IsEnable | bool |  |  |  |
|  |  |  |  |  |
| BrokerType | string |  |  |  |
|  |  |  |  |  |
| Address | string |  |  |  |
|  |  |  |  |  |
| City | string |  |  |  |
|  |  |  |  |  |
| Phone1 | string |  |  |  |
|  |  |  |  |  |
| Phone2 | string |  |  |  |
|  |  |  |  |  |
| Fax | string |  |  |  |
|  |  |  |  |  |
| EMail | string |  |  |  |
|  |  |  |  |  |
| MarginCallLevel1 | int |  |  |  |
|  |  |  |  |  |
| MarginCallLevel2 | int |  |  |  |
|  |  |  |  |  |
| MarginCallLevel3 | int |  |  |  |
|  |  |  |  |  |
| News | string |  |  |  |
|  |  |  |  |  |
| MaximumOrders | string |  |  |  |
|  |  |  |  |  |
| Maximumsymbols | string |  |  |  |
|  |  |  |  |  |
| LstSymbol | List<BrokerSymbol> |  |  |  |
|  |  |  |  |  |
| LstTotalSymbols | List<BrokerSymbol> |  |  |  |
|  |  |  |  |  |
| LstFeeType | List<string> |  |  |  |
|  |  |  |  |  |
| LstTaxType | List<string> |  |  |  |
|  |  |  |  |  |
| LstCharges | List<charges> |  |  |  |
|  |  |  |  |  |
| BrokerParent | int |  |  |  |
|  |  |  |  |  |
| Roles | string |  |  |  |
|  |  |  |  |  |
| RoleId | int |  |  |  |
|  |  |  |  |  |
| RoleName | string |  |  |  |
|  |  |  |  |  |
| LoginID | string |  |  |  |
|  |  |  |  |  |
| ServerResponseID | int |  | Server Response | 1. 50052 (Operation Success)  2. 50060 (Operation Failed) |

## GetBrokerList

public List<clsBrokerList> GetBrokerList(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userIdPwd | string | LoginID + ”\_”+ LoginID |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| Response | List<clsBrokerList> | Complex type defined below |

**Output Parameters Description : Response :** clsBrokerList

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | **Type** | **Description** | **Limit/Constraints** |
| BrokerTypesID | int | Broker Type ID |  |
| BrokerType | string | Broker Type |  |
| Description | String | Description |  |
| ServerResponseID | int | Server Response | 1. 50052 (Operation Success)  2. 50060 (Operation Failed) |

## GetModules

public List<clsModule> GetModules(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
| userIdPwd | string | LoginID + ”\_”+ LoginID |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
| GetModules | List<clsModule> | Complex type defined below |

## GetLeverageList

public List<clsLeverage> GetLeverageList(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetParticipaintList

public List<clsParticipaintList> GetParticipaintList(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetCountryDetails

public List<clsCountryDetail> GetCountryDetails(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetCollateralTypes

public List<clsCollateralTypes> GetCollateralTypes(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetAccounts

public List<clsAccount> GetAccounts(string userIdPwd, int clientID, AccountOpType opType)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## InsertIntoAccount

public clsAccount InsertIntoAccount(string userIdPwd, clsAccount account)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## UpdateAccount

public clsAccount UpdateAccount(string userIdPwd, clsAccount account, AccountOpType opType)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetAccountGroup

public List<clsAccountGroup> GetAccountGroup(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetBankInfo

public List<clsBank> GetBankInfo(string userIdPwd, int clientID)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## InsertIntoBankInfo

public clsBank InsertIntoBankInfo(string userIdPwd, clsBank bank)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## UpdateBankInfo

public clsBank UpdateBankInfo(string userIdPwd, clsBank bank)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetClientInfo

public List<clsClientInfo> GetClientInfo(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## InsertIntoClientInfo

public clsClientInfo InsertIntoClientInfo(string userIdPwd, clsClientInfo clientInfo)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## UpdateClientInfo

public clsClientInfo UpdateClientInfo(string userIdPwd, clsClientInfo clientInfo)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetCollateralInfo

public List<clsCollateralInfo> GetCollateralInfo(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## HandleCollateralTransInfo

public List<clsCollateralTransInfo> HandleCollateralTransInfo(string userIdPwd, int accountGroupID, OperationTypes opType, clsCollateralTransInfo collateralTransInfo)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetTradeOrdersDetails

public List<clsTrades> GetTradeOrdersDetails(string userIdPwd, DateTime startDate, DateTime endDate)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetTradeDetails

public List<clsTrades> GetTradeDetails(string userIdPwd, DateTime startDate, DateTime endDate)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## ModifyTrade

public clsModifyTrades ModifyTrade(string userId, clsModifyTrades ModifyTrades)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## NewTrade

public clsNewOrder NewTrade(string userId, clsNewOrder NewTrades)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## SettleTrade

public clsSettleTrade SettleTrade(string userId, clsSettleTrade settleTrade)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetMapOrders

public List<clsMapOrders> GetMapOrders(string userIdPwd)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## HandleTGAccountConnetionSettings

public List<clsTGAccountConnectionSettings> HandleTGAccountConnetionSettings(string userIdPwd, OperationTypes opType, BOEngineServiceClasses.clsTGAccountConnectionSettings TGACSettings)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## HandleVirtualDealer

public List<clsVirtualDealerInfo> HandleVirtualDealer(string userId, OperationTypes opType, clsVirtualDealerInfo virtualDealer)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## HandleCommonSettings

public List<clsCommonSettings> HandleCommonSettings(string userId, OperationTypes opType, clsCommonSettings commonSettings)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetCollateralTransactionHistory

public List<clsCollateralTransInfo> GetCollateralTransactionHistory(string userIdPwd, int accountGroupID, int CollateralTypeID)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetAccountIDsByAccountType

public List<string> GetAccountIDsByAccountType(string userIdPwd, int AccountTypeID)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## AuthenticateClientID

public bool AuthenticateClientID(string userIdPwd, string clientID)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## HandleInstClosingPrice

public List<clsInstrumentClosingPrice> HandleInstClosingPrice(string userId, clsInstrumentClosingPrice instrumentClosingPrice, OperationTypes operationType)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## HandleBrokerOperationsLog

public List<clsBrokerOperationsLog> HandleBrokerOperationsLog(string LoginPwd, clsBrokerOperationsLog brokerOperations, DateTime fromDate, DateTime ToDate, OperationTypes opTypes)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## GetHistoricalData

public List<clsHistoricalData> GetHistoricalData(string LoginPwd, string symbolName, string periodicity, int barsNo, clsHistoricalData historicalInfo

, OperationTypes opTypes)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## HandleAccountTransactionOperation

public List<clsAccountTransaction> HandleAccountTransactionOperation(string userIdPwd, OperationTypes opType, clsAccountTransaction account)

**Input Parameters:**

|  |  |  |
| --- | --- | --- |
| **Input Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

**Output Parameters:**

|  |  |  |
| --- | --- | --- |
| **Output Parameter** | **Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

# Classes

## clsAccount

public class clsAccount

{

[DataMember]

public int AccountId { get; set; }

[DataMember]

public int ClientId { get; set; }

[DataMember]

public int AccountGroupId { get; set; }

[DataMember]

public decimal Balence { get; set; }

[DataMember]

public decimal Equity { get; set; }

[DataMember]

public bool Deleted { get; set; }

[DataMember]

public decimal UsedMargin { get; set; }

[DataMember]

public int LeverageId { get; set; }

[DataMember]

public bool IsHedgingAllowed { get; set; }

[DataMember]

public bool IsTradeEnable { get; set; }

[DataMember]

public int CurrencyId { get; set; }

[DataMember]

public decimal BuySideTurnOver { get; set; }

[DataMember]

public decimal SellSideTurnOver { get; set; }

[DataMember]

public int RelatedBankId { get; set; }

[DataMember]

public decimal PaymentAmount { get; set; }

[DataMember]

public string PaymentType { get; set; }

[DataMember]

public string PaymentMode { get; set; }

[DataMember]

public DateTime PaymentDate { get; set; }

[DataMember]

public string LPName { get; set; }

[DataMember]

public string LPAccountID { get; set; }

[DataMember]

public string ChequeFdNo { get; set; }

[DataMember]

public bool IsLive { get; set; }

[DataMember]

public int HedgeTypeID { get; set; }

[DataMember]

public string Remark { get; set; }

[DataMember]

public int EditAccountTransactionID { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsAccountGroup

public class clsAccountGroup

{

[DataMember]

public int AccountGroupID { get; set; }

[DataMember]

public string AccountGroupName { get; set; }

[DataMember]

public string Owner { get; set; }

[DataMember]

public int LeverageId { get; set; }

[DataMember]

public decimal Charges { get; set; }

[DataMember]

public bool IsEnable { get; set; }

[DataMember]

public int BrokerTypeID { get; set; }

[DataMember]

public string BrokerAddress { get; set; }

[DataMember]

public string BrokerCity { get; set; }

[DataMember]

public string BrokerState { get; set; }

[DataMember]

public string BrokerPhone1 { get; set; }

[DataMember]

public string BrokerPhone2 { get; set; }

[DataMember]

public string BrokerFax { get; set; }

[DataMember]

public string BrokerEmail { get; set; }

[DataMember]

public int ParentBrokerId { get; set; }

[DataMember]

public string Password { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsAccountTransaction

public class clsAccountTransaction

{

[DataMember]

public int AccountId { get; set; }

[DataMember]

public decimal PaymentAmount { get; set; }

[DataMember]

public string PaymentType { get; set; }

[DataMember]

public string PaymentMode { get; set; }

[DataMember]

public DateTime PaymentDate { get; set; }

[DataMember]

public string ChequeFdNo { get; set; }

[DataMember]

public string Remark { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsBank

public class clsBank

{

[DataMember]

public Int32 BankID { get; set; }

[DataMember]

public string AccountHolderName { get; set; }

[DataMember]

public string BankAccountID { get; set; }

[DataMember]

public string BankName { get; set; }

[DataMember]

public int BankCountryID { get; set; }

[DataMember]

public string BankCity { get; set; }

[DataMember]

public string BankZipCode { get; set; }

[DataMember]

public string BankAddress { get; set; }

[DataMember]

public string BankAddress2 { get; set; }

[DataMember]

public string BankPhone { get; set; }

[DataMember]

public string BankFax { get; set; }

[DataMember]

public string BankSwiftCode { get; set; }

[DataMember]

public Int32 ClientID { get; set; }

[DataMember]

public string BankAccountType { get; set; }

[DataMember]

public string BankIFSCCode { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsBroker

public class clsBroker

{

[DataMember]

public int BrokerID { get; set; }

[DataMember]

public string Name { get; set; }

[DataMember]

public string Owner { get; set; }

[DataMember]

public string Leverage { get; set; }

[DataMember]

public string State { get; set; }

[DataMember]

public bool IsEnable { get; set; }

[DataMember]

public string BrokerType { get; set; }

[DataMember]

public string Address { get; set; }

[DataMember]

public string City { get; set; }

[DataMember]

public string Phone1 { get; set; }

[DataMember]

public string Phone2 { get; set; }

[DataMember]

public string Fax { get; set; }

[DataMember]

public string EMail { get; set; }

[DataMember]

public int MarginCallLevel1 { get; set; }

[DataMember]

public int MarginCallLevel2 { get; set; }

[DataMember]

public int MarginCallLevel3 { get; set; }

[DataMember]

public string News { get; set; }

[DataMember]

public string MaximumOrders { get; set; }

[DataMember]

public string Maximumsymbols { get; set; }

[DataMember]

public List<BrokerSymbol> LstSymbol { get; set; }

[DataMember]

public List<BrokerSymbol> LstTotalSymbols { get; set; }

[DataMember]

public List<string> LstFeeType { get; set; }

[DataMember]

public List<string> LstTaxType { get; set; }

[DataMember]

public List<charges> LstCharges { get; set; }

[DataMember]

public int BrokerParent { get; set; }

[DataMember]

public string Roles { get; set; }

[DataMember]

public int RoleId { get; set; }

[DataMember]

public string RoleName { get; set; }

[DataMember]

public string LoginID { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## BrokerSymbol

public class BrokerSymbol

{

public int SymbolID { get; set; }

public string SymbolName { get; set; }

public int BidSpread { get; set; }

public int AskSpread { get; set; }

public int Spread { get; set; }

public bool IsVariable { get; set; }

public int RelativeBidChange { get; set; }

public int RelativeAskChange { get; set; }

}

## Charges

public class charges

{

public int ChargesID { get; set; }

public int BrokersGroupID { get; set; }

public int SymbolID { get; set; }

public string Symbol { get; set; }

public string Fee { get; set; }

public decimal FeeValue { get; set; }

public string Tax { get; set; }

public Double TaxValue { get; set; }

}

## clsBrokerList

public class clsBrokerList

{

[DataMember]

public int BrokerTypesID { get; set; }

[DataMember]

public string BrokerType { get; set; }

[DataMember]

public string Description { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsBrokerOperationsLog

public class clsBrokerOperationsLog

{

[DataMember]

public int SNo { get; set; }

[DataMember]

public string BrokerName { get; set; }

[DataMember]

public int BrokerID { get; set; }

[DataMember]

public string OperationName { get; set; }

[DataMember]

public DateTime DateTime { get; set; }

[DataMember]

public string Message { get; set; }

[DataMember]

public string IPAddress { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsClientInfo

public class clsClientInfo

{

[DataMember]

public int ClientId { get; set; }

[DataMember]

public string FirstName { get; set; }

[DataMember]

public string MidleName { get; set; }

[DataMember]

public string LastName { get; set; }

[DataMember]

public string Address1 { get; set; }

[DataMember]

public string Address2 { get; set; }

[DataMember]

public string City { get; set; }

[DataMember]

public string State { get; set; }

[DataMember]

public string Zip { get; set; }

[DataMember]

public string FaxNumber { get; set; }

[DataMember]

public string Mobile { get; set; }

[DataMember]

public string PassportId { get; set; }

[DataMember]

public string SSN { get; set; }

[DataMember]

public DateTime DOB { get; set; }

[DataMember]

public string Gender { get; set; }

[DataMember]

public bool Status { get; set; }

[DataMember]

public string Country { get; set; }

[DataMember]

public int FKCountryID { get; set; }

[DataMember]

public int FKNationalityID { get; set; }

[DataMember]

public string GroupName { get; set; }

[DataMember]

public int AccountGroupID { get; set; }

[DataMember]

public int FKParticipantType { get; set; }

[DataMember]

public string AccountType { get; set; }

[DataMember]

public int FKAccountTypeID { get; set; }

[DataMember]

public bool Deleted { get; set; }

[DataMember]

public decimal Balance { get; set; }

[DataMember]

public decimal Equity { get; set; }

[DataMember]

public string MasterPassword { get; set; }

[DataMember]

public string TradingPassword { get; set; }

[DataMember]

public string PrimaryPhone { get; set; }

[DataMember]

public string SecondaryPhone { get; set; }

[DataMember]

public DateTime RegistrationDate { get; set; }

[DataMember]

public string PrimaryEmailAddress { get; set; }

[DataMember]

public string SecondaryEmailAddress { get; set; }

[DataMember]

public string PAN { get; set; }

[DataMember]

public string Age { get; set; }

[DataMember]

public string LoginID { get; set; }

[DataMember]

public bool IsExists { get; set; }

[DataMember]

public decimal MarkupValue { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsCollateralInfo

public class clsCollateralInfo

{

[DataMember]

public int AccountGroupID { get; set; }

[DataMember]

public string AccountGroupName { get; set; }

[DataMember]

public string Owner { get; set; }

[DataMember]

public string Leverage { get; set; }

[DataMember]

public int ParentAccountGroupID { get; set; }

[DataMember]

public string ParentOwner { get; set; }

[DataMember]

public decimal TotalCollateral { get; set; }

[DataMember]

public decimal Unallocated { get; set; }

[DataMember]

public decimal Utilized { get; set; }

[DataMember]

public decimal PayInShortage { get; set; }

[DataMember]

public decimal PayOutShortage { get; set; }

[DataMember]

public decimal CollateralforTrading { get; set; }

[DataMember]

public bool IsEnable { get; set; }

[DataMember]

public string BrokerType { get; set; }

[DataMember]

public int BrokerTypeID { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsCollateralTransInfo

public class clsCollateralTransInfo

{

[DataMember]

public int AccountGroupId { get; set; }

[DataMember]

public int CollateralTypeId { get; set; }

[DataMember]

public string CollateralType { get; set; }

[DataMember]

public decimal Amount { get; set; }

[DataMember]

public decimal TotalAmount { get; set; }

[DataMember]

public string TransactionType { get; set; }

[DataMember]

public string TransactionDate { get; set; }

[DataMember]

public bool IsNewCollateralTrans { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsCollateralTypes

public class clsCollateralTypes

{

[DataMember]

public int CollateralTypeID { get; set; }

[DataMember]

public string CollateralType { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsCommonSettings

public class clsCommonSettings

{

[DataMember]

public int ID { get; set; }

[DataMember]

public string Property { get; set; }

[DataMember]

public string Value { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsContractSpecification

public class clsContractSpecification

{

[DataMember]

public Int32 Instruement\_ID { get; set; }

[DataMember]

public string SymbolName { get; set; }

[DataMember]

public string Description { get; set; }

[DataMember]

public string Source { get; set; }

[DataMember]

public Int32 Digits { get; set; }

[DataMember]

public string SettlingCurrency { get; set; }

[DataMember]

public string MarginCurrency { get; set; }

[DataMember]

public int MaximumLots { get; set; }

[DataMember]

public decimal BuySideTurnover { get; set; }

[DataMember]

public decimal SellSideTurnover { get; set; }

[DataMember]

public int MaximumAllowablePosition { get; set; }

[DataMember]

public int Hedged { get; set; }

[DataMember]

public Int32 LimitandStopLevel { get; set; }

[DataMember]

public decimal TickSize { get; set; }

[DataMember]

public decimal TickPrice { get; set; }

[DataMember]

public int ContractSize { get; set; }

[DataMember]

public string QuotationBaseValue { get; set; }

[DataMember]

public int Maintenance { get; set; }

[DataMember]

public string DeliveryType { get; set; }

[DataMember]

public string DeliveryUnit { get; set; }

[DataMember]

public int DeliveryQuantity { get; set; }

[DataMember]

public int MarketLot { get; set; }

[DataMember]

public string ExpiryDate { get; set; }

[DataMember]

public string StartDate { get; set; }

[DataMember]

public string EndDate { get; set; }

[DataMember]

public string TenderStartDate { get; set; }

[DataMember]

public string TenderEndDate { get; set; }

[DataMember]

public string DeliveryStartDate { get; set; }

[DataMember]

public string DeliveryEndDate { get; set; }

[DataMember]

public int DPRInitialPercentage { get; set; }

[DataMember]

public int DPRInterval { get; set; }

[DataMember]

public int InitialBuyMargin { get; set; }

[DataMember]

public int InitialSellMargin { get; set; }

[DataMember]

public int MaintenanceBuyMargin { get; set; }

[DataMember]

public int MaintenanceSellMargin { get; set; }

[DataMember]

public string ULAssest { get; set; }

[DataMember]

public string TradingCurrency { get; set; }

[DataMember]

public int Maximum\_Order\_Value { get; set; }

[DataMember]

public int DPR\_Range\_Higher { get; set; }

[DataMember]

public string FK\_SecurityTypeID { get; set; }

[DataMember]

public List<clsSymbolSession> lstSession { get; set; }

[DataMember]

public int SessionCount { get; set; }

[DataMember]

public string MaximumLostUnit { get; set; }

[DataMember]

public string MarketLostUnit { get; set; }

[DataMember]

public string QuotationBaseValueUnit { get; set; }

[DataMember]

public Int32 Spread { get; set; }

[DataMember]

public clsInstrumentSwaps InstrumentSwaps { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

[DataMember]

public int QuoteOffTime { get; set; }

}

## clsSymbolSession

public class clsSymbolSession

{

[DataMember]

public string TradeSession { get; set; }

[DataMember]

public DAYS Day { get; set; }

[DataMember]

public string QuoteSession { get; set; }

[DataMember]

public bool IsUseTimelimits { get; set; }

[DataMember]

public DateTime StartDate { get; set; }

[DataMember]

public DateTime EndDate { get; set; }

[DataMember]

public string SessionEODMarketMaker { get; set; }

}

## clsSymbolSessionNew

public class clsSymbolSessionNew

{

[DataMember]

public List<clsSymbolSession> lstSession { get; set; }

[DataMember]

public int ServerResponseID { get; set; }

}

## clsInstrumentSwaps

public class clsInstrumentSwaps

{

[DataMember]

public decimal LongPosition { get; set; }

[DataMember]

public decimal ShortPosition { get; set; }

[DataMember]

public bool IsEnable { get; set; }

}

## clsLogin

public class clsLogin

{

[DataMember]

public string LoginId

[DataMember]

public string Password

[DataMember]

public int BrokerId

[DataMember]

public string Role

[DataMember]

public string IPAddress

[DataMember]

public string BrokerName

[DataMember]

public int? BrokerNameID

[DataMember]

public string BrokerCompany

[DataMember]

public bool IsEnable

[DataMember]

public string ServerResponseMsg

[DataMember]

public int ServerResponseID

}

# ENUMS

# AccountOpType

ACCOUNT,

ACCOUNT\_TRANSACTION

# DAYS

SUN = 1,

MON,

TUE,

WED,

THU,

FRI,

SAT

# OperationTypes

GET,

INSERT,

UPDATE,

DELETE,

GET\_SESSION