AlgoAction

BRIDGE

TO

ARROW API 2.0

DOCUMENTATION

Document version 1.0

AlgoAction

REVISION HISTORY

Name	Date	Version	ARROW API Version	Summary of Changes
GopalaKrishnan N		1.0	2.0	Created

REVIEW HISTORY

Reviewer Name	Doc Version Reviewed	Date sent for review	Date Review Filed	Approved/Rejected (With Reasons)

Table of Contents

1. GENERAL INSTRUCTIONS

1.1 AA BRIDGE SETUP DOWNLOAD URL

http://algoaction.in/AABridge/AAServerARROW2/AAServerARROW2-Setup.msi

1.2 AA BRIDGE TEST AMIBROKER AFL URL

http://algoaction.in/AABridge/AAServerARROW2/AAServerARROW2.afl

1.3 AA BRIDGE COM DETAIL

COM Name : AAServerARROW2

CLASS Name : Main

Example : Server.CreateObject(AAServerARROW2.Main);

1.4 METHOD REQUEST PARAMETERS

- All the input as well as output data type will be in string format unless its mentioned in method explanation section.
- All Input validations should be done before submitting the request.

1.5 METHOD RESPONSE PARAMETERS

The response comes as JSON object and response table in each method description explains you about JSON object parameters

Parameter with in JSON object will be in String format

2. METHODS

2.1 PLACE ORDER

S.NO	METHOD PROPERTIES	DESCRIPTION
1	Name	PlaceOrder
2	Description	Allows you to place all types of orders except BO
3	Input	YES
4	Input encryption	NO
5	Response encryption	NO

INPUT

S.No	PARAMETER	DESCRIPTION
1	user_apikey	User ARROW API Key
2	api_secret	User ARROW API Secret
3	s_prdt_ali	Possible Values BO:BO||CNC:CNC||CO:CO||MIS:MIS||NRML:NRML
4	Tsym	Trading Symbol
5	Exch	Exchange.(NSE, BSE, NFO, CDS, MCX, NCDEX, BFO, MCXSXFO, MCXSX)
6	Ttranstype	Buy/Sell Flag. (B- BUY; S- SELL)
7	Ret	Retention. (DAY, IOC)
8	Prctyp	Order Type(L - LIMIT, MKT - MARKET, SL - SL-LIMIT, SL-M - SL-MARKET)
9	qty	Order Quantity
10	discqty	Disclosed Quantity
11	MktPro	Market Protection(Default "NA")
12	Price	Price
13	TrigPrice	Trigger Price
14	Pcode	Product (BO, CNC, CO, MIS, NRML)
15	AMO	After Market Order(YES,NO)

RESPONSE

1.SUCCESS

S.No	PARAMETER	DESCRIPTION
1	NOrdNo	Nest Order Number
2	Stat	Ok

SAMPLE OUTPUT:-

{"NOrdNo":"181222000000039","stat":"Ok"}

2.ERROR

S.No	PARAMETER	DESCRIPTION
1	Emsg	Error Message
2	Stat	Not_Ok

SAMPLE OUTPUT:-

{"Emsg":"Session Expired","stat":"Not_Ok"}

S.No	Error Messages	DESCRIPTION
1	Session Expired	User Session Expired
2	Not able to Retrieve PlaceOrder	
3	Error Occurred	

2.2 PLACE BRACKET ORDER

S.NO	METHOD PROPERTIES	DESCRIPTION
1	Name	PlaceBOOrder
2	Description	Allows you to place BRACKET ORDERS
3	Input	YES
4	Input encryption	NO
5	Response encryption	NO

INPUT

S.No	PARAMETER	DESCRIPTION
1	user_apikey	User ARROW API Key
2	api_secret	User ARROW API Secret
3	s_prdt_ali	Possible Values BO:BO||CNC:CNC||CO:CO||MIS:MIS||NRML:NRML
4	TokenNo	Symbol Token
5	exch	Exchange.(NSE, BSE, NFO, CDS, MCX, NCDEX, BFO, MCXSXFO, MCXSX)
6	Ttranstype	Buy/Sell Flag. (B- BUY; S- SELL)
7	Ret	Retention. (DAY, IOC)
8	qty	Order Quantity
9	discqty	Disclosed Quantity
10	Price	Price
11	ltpOratp	LTP or ATP
12	SqrOffAbsOrticks	Square Off type (Absolute or Ticks)
13	SqrOffvalue	Square off value
14	SLAbsOrticks	Stop Loss type (Absolute or Ticks)
15	SLvalue	Stop Loss Value

16	trailingSL	Trailing Stop Loss optional (Y ,if required or else N)
17	tSLticks	Trailing SL value optional (if ‘trailingSL’ is Y)

NOTE:

- *If SqrAbsOrticks or SLAbsOrticks value is Absolute then the SqrOffvalue and SLvalue can be decimal values respectively and should be multiple of tick size for that scrip .*
- *If SqrAbsOrticks or SLAbsOrticks value is Ticks then the SqrOffvalue and SLvalue cannot be in decimal .*

RESPONSE

1.SUCCESS

S.No	PARAMETER	DESCRIPTION
1	nestOrderNumber	Nest Order Number
2	Stat	Ok

SAMPLE OUTPUT:-

{"NOrdNo":"181222000000039","stat":"Ok"}

2.ERROR

S.No	PARAMETER	DESCRIPTION
1	Emsg	Error Message
2	Stat	Not_Ok

SAMPLE OUTPUT:-

{"Emsg":"Session Expired","stat":"Not_Ok"}

S.No	Error Messages	DESCRIPTION
1	Session Expired	User Session Expired
2	Not able to Retrieve BO PlaceOrder	

3	Error Occurred	
4	Trailing Tick should be multiple of tick size : [tickValue in rupees]	
5	Stop Loss Absolute should be multiple of tick size : [tickValue in rupees]	

2.3 PLACE MULTIPLE ORDER

S.NO	METHOD PROPERTIES	DESCRIPTION
1	Name	PlaceMultiOrder
2	Description	Allows you to place Multiple all types of orders except BO
3	Input	YES
4	Input encryption	NO
5	Response encryption	NO

INPUT

S.No	PARAMETER	DESCRIPTION
1	Orders	JSON Object in String format

JSON OBJECT FORMAT

S.No	PARAMETER	DESCRIPTION
1	order_refno	Unique Order Reference number to get the response.
2	user_apikey	User ARROW API Key
3	api_secret	User ARROW API Secret
4	s_prdt_ali	Possible Values BO:BO||CNC:CNC||CO:CO||MIS:MIS||NRML:NRML
5	Tsym	Trading Symbol
6	Exch	Exchange.(NSE, BSE, NFO, CDS, MCX, NCDEX, BFO, MCXSXFO, MCXSX)

7	Ttranstype	Buy/Sell Flag. (B- BUY; S- SELL)
8	Ret	Retention. (DAY, IOC)
9	Prctyp	Order Type(L - LIMIT, MKT - MARKET, SL - SL-LIMIT, SL-M - SL-MARKET)
10	Qty	Order Quantity
11	Discqty	Disclosed Quantity
12	MktPro	Market Protection(Default "NA")
13	Price	Price
14	TrigPrice	Trigger Price
15	Pcode	Product (BO, CNC, CO, MIS, NRML)
16	AMO	After Market Order(YES,NO)

SAMPLE INPUT:-

{"orders":
[
{"order_refno":"1","user_apikey":"","api_secret":"","s_prdt_ali":"BO:BO||CNC:CNC||CO:CO||MIS:MIS||NRML:NRML","Tsym":"IDFCBANK-EQ","exch":"NSE","Ttranstype":"B","Ret":"DAY","prctyp":"MKT","qty":"1","discqty":"0","MktPro":"NA","Price":"0","TrigPrice":"0","Pcode":"CNC","AMO":"NO"},
{
"order_refno":"2","user_apikey":"","api_secret":"","s_prdt_ali":"BO:BO||CNC:CNC||CO:CO||MIS:MIS||NRML:NRML","Tsym":"IDFCBANK-EQ","exch":"NSE","Ttranstype":"B","Ret":"DAY","prctyp":"MKT","qty":"1","discqty":"0","MktPro":"NA","Price":"0","TrigPrice":"0","Pcode":"CNC","AMO":"NO"}
]
}

RESPONSE

Refer PlaceOrder Method.

2.3 PLACE MULTIPLE BO ORDER

S.NO	METHOD PROPERTIES	DESCRIPTION
1	Name	PlaceMultiBOOrder
2	Description	Allows you to place Multiple Bracket Orders
3	Input	YES
4	Input encryption	NO
5	Response encryption	NO

INPUT

S.No	PARAMETER	DESCRIPTION
1	Orders	JSON Object in String format

JSON OBJECT FORMAT

S.No	PARAMETER	DESCRIPTION
1	order_refno	Unique Order Reference number to get the response.
2	user_apikey	User ARROW API Key
3	api_secret	User ARROW API Secret
4	s_prdt_ali	Possible Values BO:BO||CNC:CNC||CO:CO||MIS:MIS||NRML:NRML
5	TokenNo	Symbol Token
6	Exch	Exchange.(NSE, BSE, NFO, CDS, MCX, NCDEX, BFO, MCXSXFO, MCXSX)
7	Ttranstype	Buy/Sell Flag. (B- BUY; S- SELL)
8	Ret	Retention. (DAY, IOC)
9	Qty	Order Quantity
10	Discqty	Disclosed Quantity
11	Price	Price
12	ltpOratp	LTP or ATP

13	SqrOffAbsOrticks	Square Off type (Absolute or Ticks)
14	SqrOffvalue	Square off value
15	SLAbsOrticks	Stop Loss type (Absolute or Ticks)
16	SLvalue	Stop Loss Value
17	trailingSL	Trailing Stop Loss optional (Y ,if required or else N)
18	tSLticks	Trailing SL value optional (if 'trailingSL' is Y)

SAMPLE INPUT:-

{"orders":
[
{"order_refno":"1","user_apikey":"","api_secret":"","s_prdt_ali":"BO:BO||CNC:CNC||CO:CO||MIS:MIS||NRML:NRML","TokenNo":"11184","exch":"NSE","Ttranstype":"B","Ret":"DAY","qty":"1","discqty":"0","Price":"0","ltpOratp":"LTP","SqrOffAbsOrticks":"Absolute","SqrOffvalue":"1","SLAbsOrticks":"Absolute","SLvalue":"1","trailingSL":"Y","tSLticks":"1"},
{
"order_refno":"2","user_apikey":"","api_secret":"","s_prdt_ali":"BO:BO||CNC:CNC||CO:CO||MIS:MIS||NRML:NRML","TokenNo":"11184","exch":"NSE","Ttranstype":"B","Ret":"DAY","qty":"1","discqty":"0","Price":"0","ltpOratp":"LTP","SqrOffAbsOrticks":"Absolute","SqrOffvalue":"1","SLAbsOrticks":"Absolute","SLvalue":"1","trailingSL":"Y","tSLticks":"1"}
]
}

RESPONSE

Refer PlaceBOOrder Method.

3. GENERAL ERRORS

Following errors will be thrown by AlgoAction/ARROW without connecting to the Trading System.

ERROR

S.No	PARAMETER	DESCRIPTION
1	error_no	Error Number
2	error_msg	Error Message
3	error_type	Error Type

SAMPLE OUTPUT:-

{"error_no":"1000","error_msg":"No Active Session Available","error_type":"E"}

S.No	Error Messages	DESCRIPTION
1	AlgoAction license has expired	
2	No Active Session Available	User has not logged in to the AlgoAction
3	Invalid API Key	
4	Invalid Access Token	
5	Invalid Session ID	