



Technical Workshop: Structured Negotiations– UDS (*User Defined Strategy*) – *Special fees*

SCHEDULE

Product specifications

Negotiation

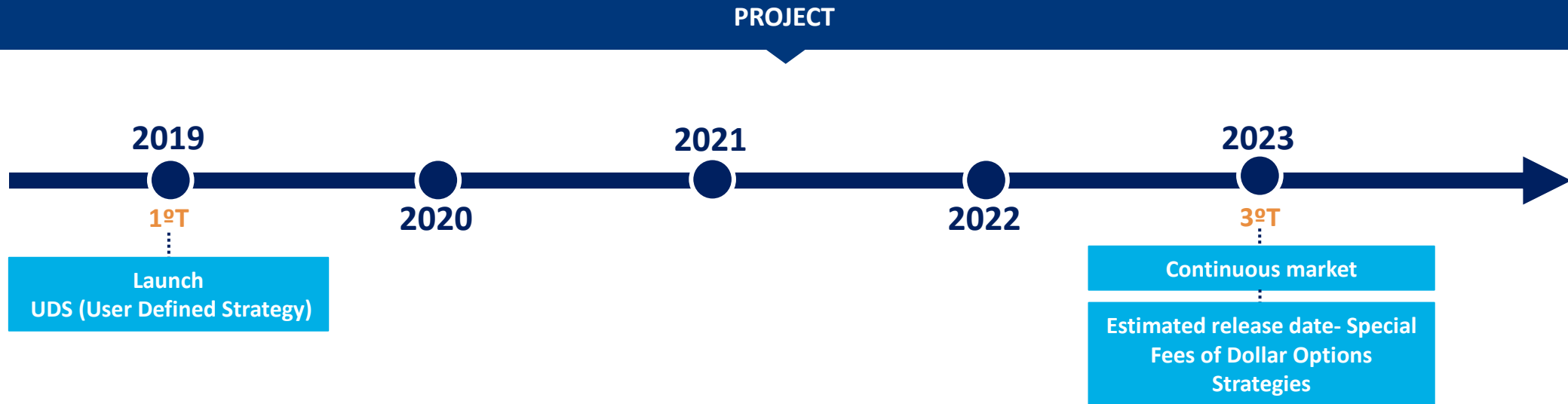
Allocation and Control of Position

Risk Management and LiNe

Fees

Sinacor

Product Specifications



➤ **What is UDS:**

- **UDS (User Defined Strategy)** is a functionality to create and register **strategies** (combined negotiation of securities) of various products in own books, among them, Dollar Option

Benefits:

- **Flexibility** to create strategies
- **No execution risk** of legs
- Identification for special fee treatment
- Greater **transparency** in price formation
- Attraction of **new clients**

PROJECT

Main Strategies UDS: Flexibility to create strategies

FF – Future x Future and Options x Options	FO – Futuro x Opção	13 – Ratio 1 x 3
3C – 3 Way – Straddle x Call	3P – Straddle x Put	SR – Strip
HS – Horizontal Straddle	12 – Ratio 1 x 2	VT – Vertical
RR – Risk Reversal	ST – Straddle	BO – Butterfly
XT – Christmas Tree	CO – Condor	GN – Genérica
SG – Straddle	23 – Ratio 2 x 3	GT – Guts
BX – Box	3W – 3 Way	...
	DB – Double	
	DG – Diagonal	

General rules:

- Trading of derivative strategies will only be allowed if they are configured in the same trading core on the PUMA Trading System B3.
- Trading of derivative strategies will only be accepted by the negotiation system if they have the same standard lot and the same minimum price increment (tick size)

PROJECT

Current Scenario

Auctions

- Due to the absence of negotiation tunnels (auction and rejection), all transactions via UDS are subject to the auction procedure.

Dollar Options- Independent fee (by Leg)

- Application of conventional fee on each leg of the structure (Full fee)



Improvements to be Delivered

Negotiation Tunnels

- **(08/28/2023) Continuous market-** Creation of negotiation tunnels for UDS, enabling continuous product trading

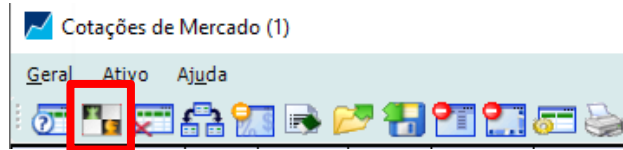
Dollar Options- Strategies Fees

- **(Schedule date- 25/09/2023) Fees for Dollar Options strategies** – Fee charging will consider all the legs of the strategy, with discounts based on the number of legs of the operation

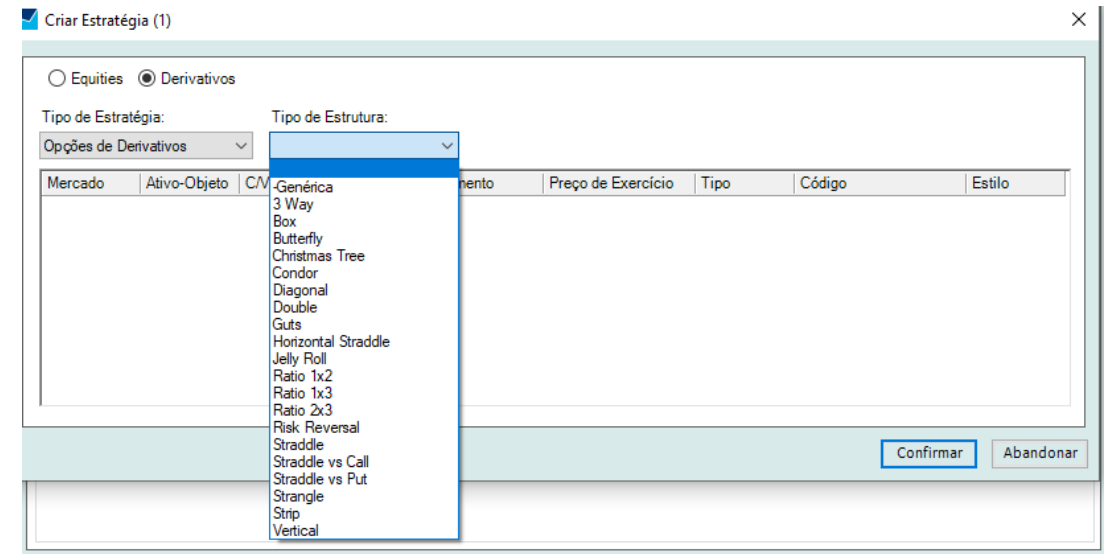
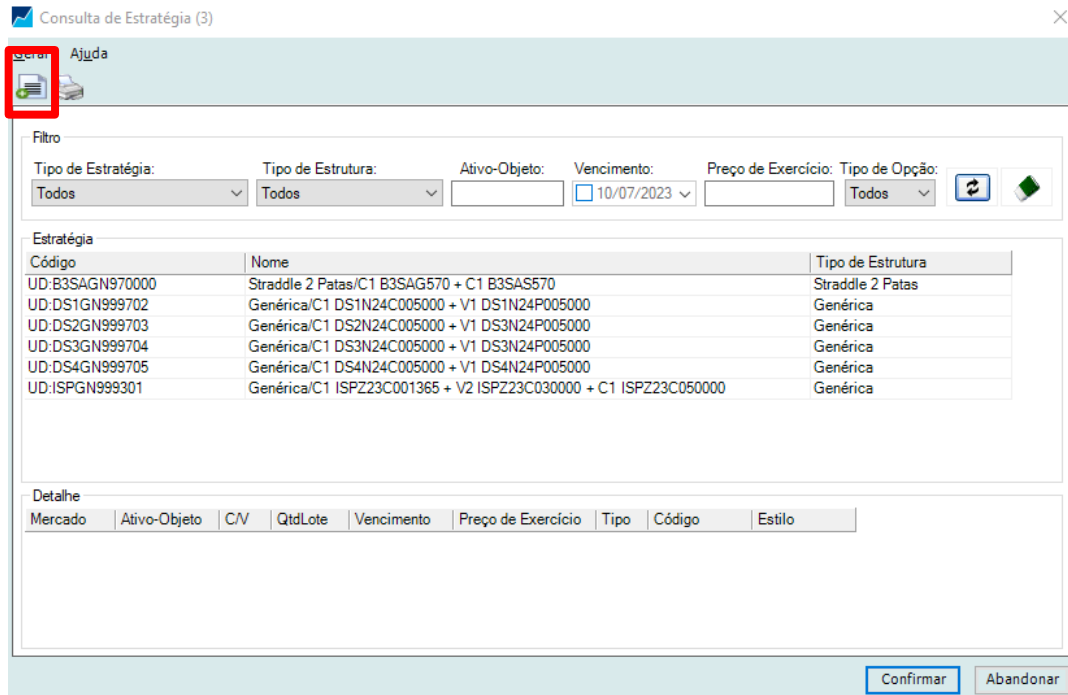
Negotiation

CREATION AND CONSULTATION OF UDS (BY ePUMA) - I

Specific screen for consulting/creating



(Atalho: Ctrl + Insert)



CREATION AND CONSULTATION OF UDS (BY ePUMA) - II

Statistical operations consultation

- Operations

Terminal de Operações (1)

Menu: Geral | Negociação | Termo | Exercício/Esp. Bloqueio/Contra Exercício | **Estratégia** | Derivativos | Câmbio | Posição Opções | Consultas | Ajuda

Hora	Usu	NºRef	NºOf	NºOf Sec	Tipo	Código	Preço	Qty	QtyDisp	Val	Cond	PreMéd	Cliente	DeskId
10:23:21	HIR	8AAF2D22AA78632E	9287360524	9238000261	C	UD:B3SAGN970000	15,00	100			Dia	TX	15,00000	
10:23:21	HIR	3CEB0B10632F81BE	9287360525	9238000262	V	UD:B3SAGN970000	15,00	100			Dia	TX	15,00000	

Data	Hora	Usu	NºRef	Id Oferta	NºOf	NºOf Sec	Tipo	C/V/D	Código	Nome	Qty	Preço	QtyDisp	C
10/07/2023	10:23:21	HIR	3CEB0B10632F81BE	66DFBB6E3E93C2C2	9287360525	9238000262	NEG	V	B3SAS570	B3SAE ON 6,70	100	7,50		
Negócio Realizado														
10/07/2023	10:23:21	HIR	8AAF2D22AA78632E	6C31BC6822A648FE	9287360524	9238000261	NEG	C	B3SAS570	B3SAE ON 6,70	100	7,50		
Negócio Realizado														

- Statistics

Cotações de Mercado (1)

Menu: Geral | Ativo | Ajuda

Código	Nome	Fase	Estado	Grupo	LPadrão	PreFec	PreAbe	PreMáx	PreMín	PreÚlt	PreMéd	QtyÚlt	HorÚlt	Osc	Dif	HorOFC	QtyOF
UD:B3SAGN970000	Straddle 2 Patas/C1 B3SAG570 + C1 B3SAS570	ABE		2S	100	65,00	15,00	15,00	15,00	15,00	15,00	100	10:23:21	0,00%	15,00		

CREATION AND CONSULTATION OF UDS (BY FIX MESSAGE)

Message for creation

- Any tool with support for the FIX protocol
- All strategies supported by PUMA
- *Execution Report* indicating the successful creation of the UDS

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56 TargetCompID..... OE007C
207 SecurityExchange..... BVMF
321 SecurityRequestType..... 1 (REQUEST SECURITY IDENTITY FOR THE SPECIFICATIONS PROVIDED)
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447 PartyIDSource..... D (PROPRIETARY CUSTOM CODE)
452 PartyRole..... 7 (ENTERING FIRM)
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447 PartyIDSource..... D (PROPRIETARY CUSTOM CODE)
452 PartyRole..... 36 (ENTERING TRADER)
448 PartyID..... DMA1
447 PartyIDSource..... D (PROPRIETARY CUSTOM CODE)
452 PartyRole..... 54 (SENDER LOCATION)
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22 SecurityIDSource..... 4 (ISIN NUMBER)
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55 Symbol..... UD:DOLGN999501
207 SecurityExchange..... BVMF
320 SecurityReqID..... SD230710104842648
322 SecurityResponseID..... 74578
323 SecurityResponseType..... 1 (ACCEPT SECURITY PROPOSAL AS IS)
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447 PartyIDSource..... D (PROPRIETARY CUSTOM CODE)
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555 NoLegs..... 2
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623 LegRatioQty..... 1
624 LegSide..... 1
600 LegSymbol..... DOLZ29
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624 LegSide..... 2
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```

Allocation e Control of Position

ALLOCATION OF OPERATIONS

- The asset allocation will be carried out at the level of the strategies' legs since the breakdown occurs still in the trading system.
- Allocation process will follow the same rules of regular operations:
 - The allocation for each leg must respect the original strategy for fee charging purposes, but the allocation system will not enforce control over the proportion of each allocation;
 - For the recognition of the original strategy, the following fields must be observed: 'Strategy Type', 'Strategy Symbol', and 'Secondary Match Traded'.
- In the trade capture message (bvmf.012) and in the give-up trade message (bvmf.019), the mentioned fields will be provided.
- The allocation reconciliation process via files will be the same as adopted for the other products.

Risk Management and LiNe

RISK MANAGEMENT

PRE AND POST NEGOTIATION (LINE AND CORE)

- UDS special fee will not have any alterations in risk systems (Line and Core)

Fees

CURRENT MODEL

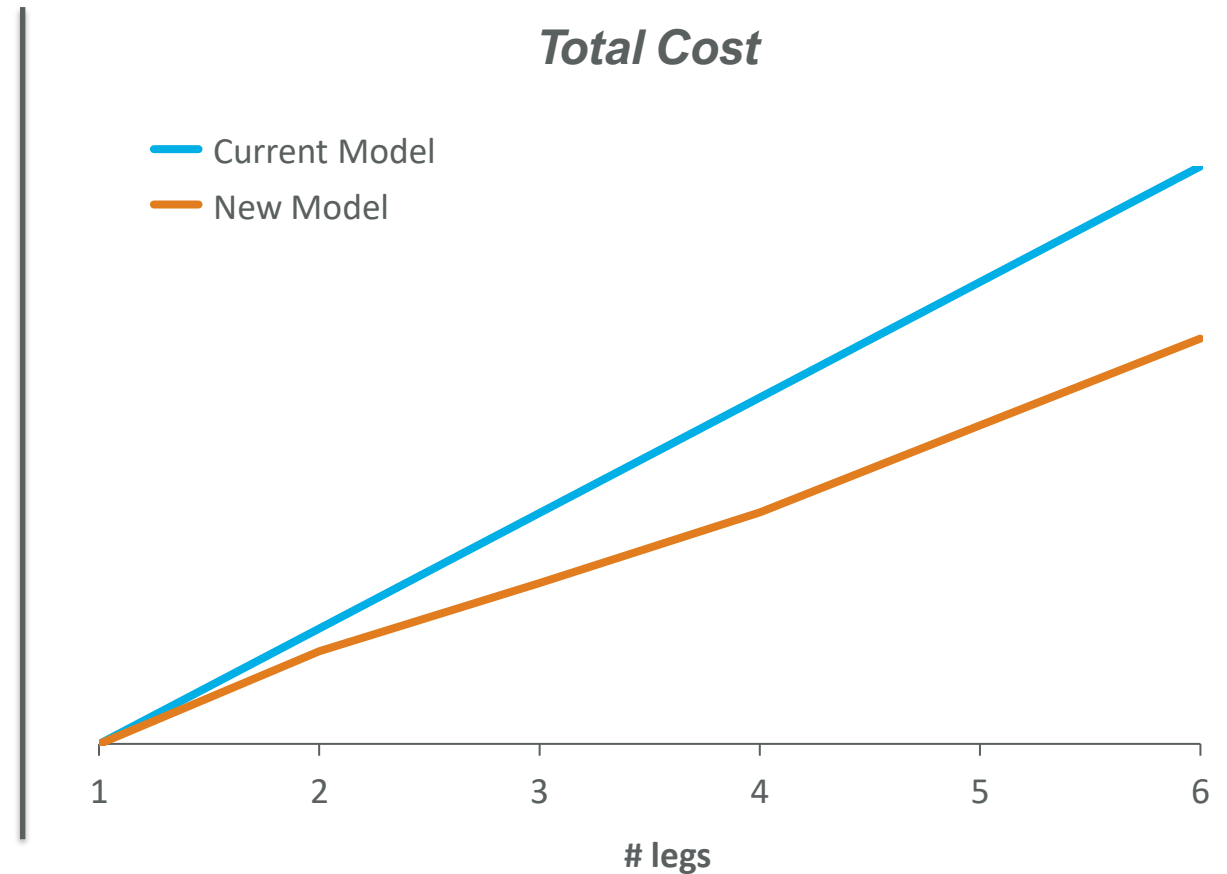
The fee charging for Dollar Options options will now consider the number of legs in each structure

Current Model

- Fee in US\$ per contract
- Same price per contract for structures and individual options

New Model

- Fee remains in US\$ per contract
- Contracts negotiate by UDS will have reduced costs depending on the quantity of legs in the structure
- Individual options will match day trade with the legs of the structure

Total Cost

NEW MODEL

① **Calculation of the number of legs**

1. Ratio Calculation – Division between the quantity of each vertex and the smallest quantity present in a vertex of the same UDS. The ratio calculation will be rounded to 2 decimal places.

$$Ratio_i = \frac{Q_i}{\min(Q_i)}$$

All trades executed via UDS with ratios equal to or less than 3 will be charged as a structure.

2. Number of legs

- If the trade does not have any ratio greater than 3, the number of legs is equal to the sum of the ratios.
- If not, the number of legs is equal to 1

Example

Trade	Ticker	Side	Qty	Ratio	Legs
1	DOLF24P5500	Buy	100	1	2
1	DOLF24C5200	Sell	100	1	2
2	DOLF24P5500	Sell	140	1	1
3	WDOF24P5500	Buy	50	5	1
3	WDOF24C5200	Sell	10	1	1
4	DOLF24P5500	Buy	50	1	1
5	DOLF24C5200	Sell	50	1	1

NEW MODEL

2 Calculation of structure factor

- 1. Current Model**– The ADV and fee are adjusted only by the difference in contracts, according to the ADV weight and contract factor.
- 2. New Model** – Besides the difference in contracts, ADV and fees will be adjusted based on the number of legs of the trade and the structure factor. The calculation is rounded to 2 decimal places.

$$Structure\ factor_i = Contract\ factor \times Structure\ weight$$

Contract	Contract Factor
DOL	1
WDO	0,30

Legs		Structure weight
From	To	
1	1,99	1
2	2,99	0,90
3	3,99	0,80
Above 4		0,75

Example

Trade	Ticker	Side	Qty	Legs	Structure factor
1	DOLF24P5500	Buy	100	2	0,90
1	DOLF24C5200	Sell	100	2	0,90
2	DOLF24P5500	Sell	140	1	1,00
3	WDOF24P5500	Buy	50	1	0,30
3	WDOF24C5200	Sell	10	1	0,30
4	DOLF24P5500	Buy	50	1	1,00
5	DOLF24C5200	Sell	50	1	1,00

NEW MODEL

③ **ADV Calculation**

1. **Current Model**– The sum of the volume traded in the previous month, weighted by the contract factor, divided by the number of trading days in the previous month.

$$ADV = \max\left(\frac{\sum(Q_i * \text{Contract Factor})}{\text{Number of trading days}}, 1\right)$$

2. **New Model**– The volume becomes weighted by the structure factor, calculated for each trade. The calculation is rounded to 0 decimal places.

$$ADV = \max\left(\frac{\sum(Q_i * \text{Contract Factor})}{\text{Number of trading days}}, 1\right)$$

Example

Trade	Ticker	Side	Qty	Legs	Structure factor	Adjusted Qty
1	DOLF24P5500	Buy	100	2	0,90	90
1	DOLF24C5200	Sell	100	2	0,90	90
2	DOLF24P5500	Sell	140	1	1,00	140
3	WDOF24P5500	Buy	50	1	0,30	15
3	WDOF24C5200	Sell	10	1	0,30	3
4	DOLF24P5500	Buy	50	1	1,00	50
5	DOLF24C5200	Sell	50	1	1,00	50

Considering that this investor always executes the same 5 trades, every day. In a month with 20 days, their ADV will be equal to 438."

MODEL

4 Calculation of single fee (no changes compared to the current model)

After calculating the ADV, you must calculate the single fee following these steps:

1. To find the value of the fee in USD using the formula, the result is rounded to 2 decimal places:

$$Single\ fee_{USD} = Single\ fee + \frac{Additional\ Value}{ADV}$$

2. To calculate the fee in BRL, apply the selling PTAX of the last business day of the previous month, rounding to 2 decimal places

$$Single\ fee_{BRL} = Single\ fee_{USD} \times PTAX$$

Example

Considering an exchange rate of R\$5.00 and that the investor had an ADV (Average Daily Volume) of 438, the calculation of the single fee, following the table, is:

ADV		Single Fee	Additional Value
From	To		
1	50	0,34	0,00
51	100	0,32	1,00
101	500	0,29	4,00
501	1.000	0,27	14,00
1.001	2.000	0,25	34,00

$$Single\ fee_{USD} = 0,29 + \frac{4}{438} = 0,30\ USD$$

$$Single\ fee_{BRL} = 0,30 \times 5 = 1,50\ BRL$$

NEW MODEL

6 Calculation of the single fee per trade (no changes compared to the current model)

After calculating the single fee, the structure factor should be applied to each trade, rounding the result to 2 decimal places.

$$\text{Single Fee Structure}_i = \text{Single Fee} \times \text{Structure Factor}$$

The day trade fee has a 70% discount on the single fee. The result is rounded to two decimal places.

Example

Trade	Ticker	Qty NDT/DT	Fator	Unit Cost NDT	Unit Cost DT
1	DOLF24P5500	10/90	0,90	1,35	0,41
1	DOLF24C5200	100/0	0,90	1,35	0,41
2	DOLF24P5500	0/140	1,00	1,50	0,45
3	WDOF24P5500	50/0	0,30	0,45	0,14
3	WDOF24C5200	50/0	0,30	0,45	0,14
4	DOLF24P5500	0/50	1,00	1,50	0,45
5	DOLF24C5200	50/0	1,00	1,50	0,45

Considering the costs of day trades and non-day trades, the total cost of operations for this investor would be R\$372.90.

OPERATIONAL IMPACTS

Archives

- Inclusion of an optional field - StrategyLegCode - to indicate the number of legs
- Available on archives BVBG.043 and 025
- The filling of this field is mandatory for the dollar options group
- Inclusion of the 'number of legs' field in record 80 of IMBARQ009

5.2.2.4	StrategyLegCode	StrtgyLegCd	[0..1]	ExternalStrategyLegCode	Indicates the number of strategy legs	Indica a quantidade de pernas da estratégia	R5
					0 - outright 1 - 0,01 to 1,99 leg 2 - 2 to 2,99 legs 3 - 3 to 3,99 legs 4 - 4 to 4,99 legs 5 - 5 to 5,99 legs 6 - over 6 legs	0 - outright 1 - 0,01 a 1,99 pernas 2 - 2 a 2,99 pernas 3 - 3 a 3,99 pernas 4 - 4 a 4,99 pernas 5 - 5 a 5,99 pernas 6 - acima de 6 pernas	

ns3:Sgmt	ns3:Mkt	ns3:Asst	ns3:DayTradInd	ns3:TradTxTp	ns3:StrtgyLegCd	ns3:Amt	Ccy	ns3:Amt10	Ccy11
5	3 DOL		FALSO	0	0	0,6	BRL	1,12	BRL
5	3 DOL		VERDADEIRO		0	0,18	BRL	0,34	BRL
5	3 DOL		FALSO	45	0	0,6	BRL	1,12	BRL
5	3 DOL		VERDADEIRO	45	0	0,18	BRL	0,34	BRL
5	3 DOL		FALSO	0	1	0,6	BRL	1,12	BRL
5	3 DOL		VERDADEIRO	0	1	0,18	BRL	0,34	BRL
5	3 DOL		FALSO	0	2	0,54	BRL	1,01	BRL
5	3 DOL		VERDADEIRO	0	2	0,16	BRL	0,31	BRL
5	3 DOL		FALSO	0	3	0,48	BRL	0,9	BRL
5	3 DOL		VERDADEIRO	0	3	0,14	BRL	0,27	BRL
5	3 DOL		FALSO	0	4	0,45	BRL	0,84	BRL
5	3 DOL		VERDADEIRO	0	4	0,14	BRL	0,25	BRL
5	3 DOL		FALSO	0	5	0,45	BRL	0,84	BRL
5	3 DOL		VERDADEIRO	0	5	0,14	BRL	0,25	BRL
5	3 DOL		FALSO	0	6	0,45	BRL	0,84	BRL
5	3 DOL		VERDADEIRO	0	6	0,14	BRL	0,25	BRL

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Sinacor

SINACOR

- Inclusion of the 'UDS' domain in the 'Strategy Type' field on the 'Orders and Trades' screen of the BM&F 'Orders and Trades' module

Consulta de Ordens e Negocios

SINACOR CERT3020 ▶ Controle de Ordens BM&F ▶ Ordens e Negócios

Pesquisa [Aberto - 5/9/2023]

* Data: 4/28/2023

Mercadoria: []

Operador: []

Canal: []

Tipo Estratégia: [UDS, Casado de Dolar]

Com.: [] Merc.: [] Série: []

Cliente: []

Cód. Neg.: []

Preço Neg.: []

Hora Neg.: [] Até: []

Número Negócio: []

- SINACOR will be compliant with the treatment of fields in capture and allocation pass-through messages for strategy identification, as well as with the fee charging rules disclosed by B3 from version 23.2.0, with no operational changes mapped