



Nasdaq Calypso

Setting up Storage Based Commodities

Version 18

Revision 1.0

March 2024

Approved

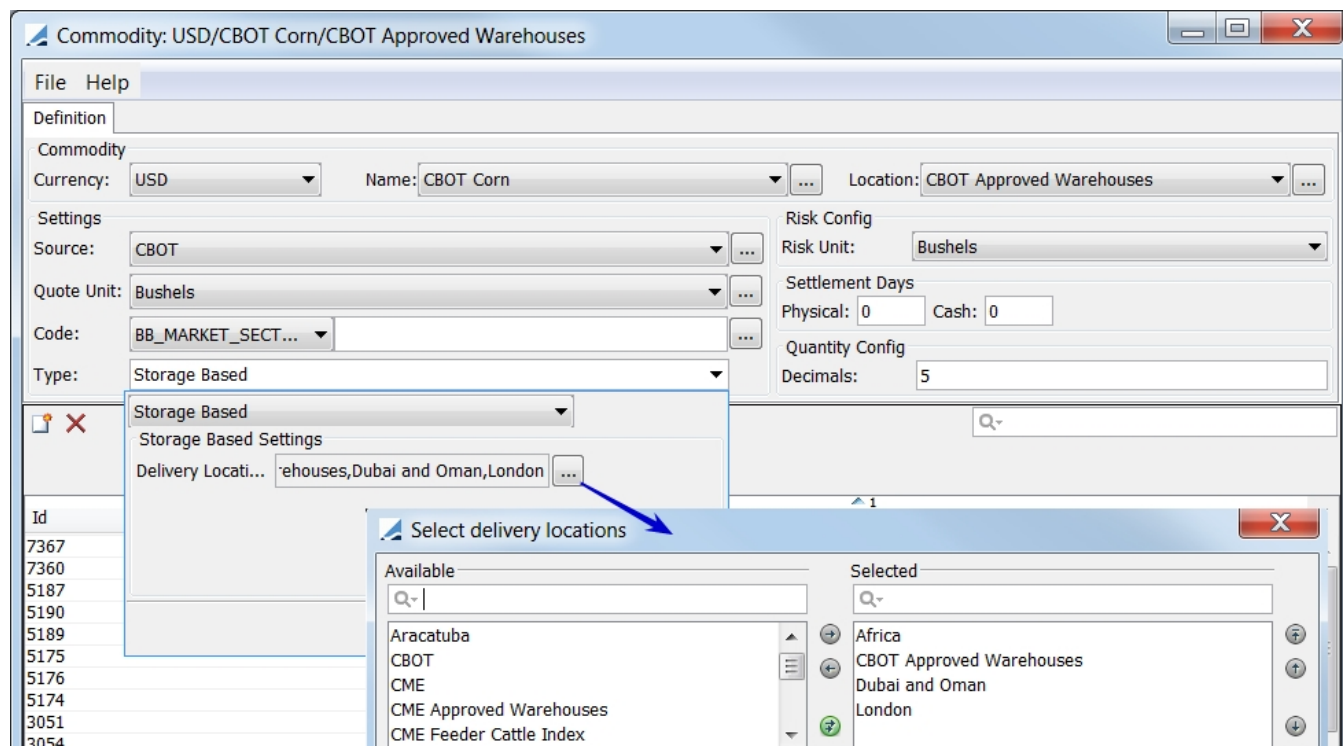
1. Setting up Storage Based Commodities

The Storage Based Commodity product is for commodities that are physically stored in a warehouse or silo. This physical delivery type is associated with the *PricerCommodityCertificate*, which determines the attributes used in the pricing. You can enter values for the attributes when completing the certificate details in the Commodity Forward trade, and calculate any discount to the price of the certificate.

[NOTE: When configuring SDIs for Physical Agricultural Commodities, the use of the attribute Commodity Location in the SD Filter is recommended to route certificates to different locations if desired. That way, based on the counterparty and the location of the certificate traded, we can automatically deliver certificates to the appropriate accounts]

1.1 Storage Based Commodity Configuration

Storage Based commodities are designated by the Type field on the Commodity Configuration. When the Type of Storage Based is chosen, an additional window displays to allow the user to choose Delivery Locations. The Delivery Locations available for selection are populated by the *CommodityLocation* domain.



The screenshot shows the 'Commodity: USD/CBOT Corn/CBOT Approved Warehouses' window. The 'Definition' tab is active, showing the following fields:

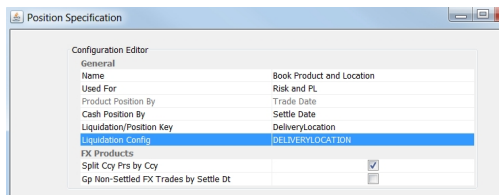
- Commodity:** USD (Currency), CBOT Corn (Name), CBOT Approved Warehouses (Location)
- Settings:** Source: CBOT, Quote Unit: Bushels, Code: BB_MARKET_SECT...
- Risk Config:** Risk Unit: Bushels, Settlement Days: Physical: 0, Cash: 0
- Quantity Config:** Decimals: 5
- Type:** Storage Based

The 'Storage Based' dropdown is expanded, showing 'Storage Based Settings' and 'Delivery Locati...'. A blue arrow points from the 'Delivery Locati...' field to the 'Select delivery locations' dialog box.

The 'Select delivery locations' dialog box has two panes:

- Available:** Aracatuba, CBOT, CME, CME Approved Warehouses, CME Feeder Cattle Index
- Selected:** Africa, CBOT Approved Warehouses, Dubai and Oman, London

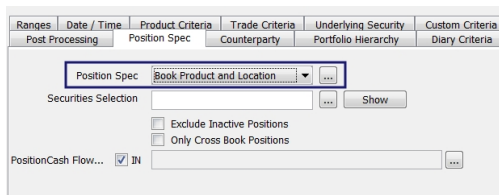
(Configuration > Filters > Position Specification)



Configuration Editor

General	Book Product and Location
Name	
Used For	Risk and PL
Product Position By	Trade Date
Cash Position By	Settle Date
Liquidation/Position Key	Delivery Location
Positioning Group	DELIVERY LOCATION
FX Products	<input checked="" type="checkbox"/>
Split Coy Pts by Coy	
Gp Non-Settled FX Trades by Settle Dt	<input type="checkbox"/>

- » Create a Trade Filter to use the Position Configuration created above and the designated book in the Liquidation Configuration. (Configuration > Filters > Trade Filter)



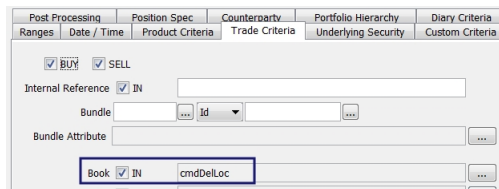
Position Spec: Book Product and Location

Securities Selection: Show

Exclude Inactive Positions: ☐

Only Cross Book Positions: ☐

PositionCash Flow... ☒ IN



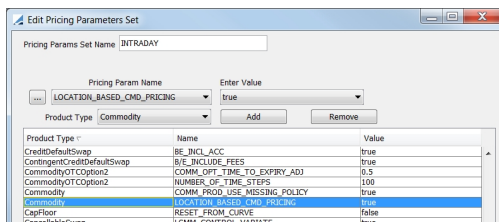
Internal Reference: ☒ IN

Bundle: Id

Bundle Attribute:

Book ☒ IN cmdDelLoc

- » The Pricing Parameter LOCATION_BASED_CMD_PRICING should be set to true. When set to true, the commodity spot price is adjusted by location differential.



Pricing Params Set Name: INTRADAY


Pricing Param Name: LOCATION_BASED_CMD_PRICING Enter Value: true

Product Type: Commodity Add Remove

Product Type	Name	Value
CreditDefaultSwap	BE_INCL_ACC	true
ContingentCreditDefaultSwap	BE_INCLUDE_FEES	true
CommodityOTCOption2	COMM_OPT_TIME_TO_EXPIRY_ADJ	0.5
CommodityOTCOption2	NUMBER_OF_TIME_STEPS	100
Commodity	COMM_PROD_USE_MISSING_POLICY	true
Commodity	LOCATION_BASED_CMD_PRICING	true
CapFloor	RESET_FROM_CURVE	false
CancellableSwap	LCMPL_CONTROL_VARIATE	true

NOTE: This configuration is only to be used to implement commodity pricing for different delivery locations and to compute positions by delivery location.

1.3 Commodity Reset



Name:	CBOT_Soybeans_Reset	Id:	80729
Reset Type:	Commodity		
Commodity:	USD/CBOT Soybean/CBOT Approved Warehouses		
Currency:	USD	Time:	12 H 30 M
Quote Unit:	Bushels	Time Zone:	Asia/Calcutta
Quote Type:	Price		
Future Contract:			
Forward Price:	InterpolatedPrice: Price on curve date equal to the FixDate, using the Interpolator defined in t...		
Fixing Holiday:	FCBT-CBA		
Fwd Price Holiday:			
Code:	REFERENCE_PRICE		
Details:			

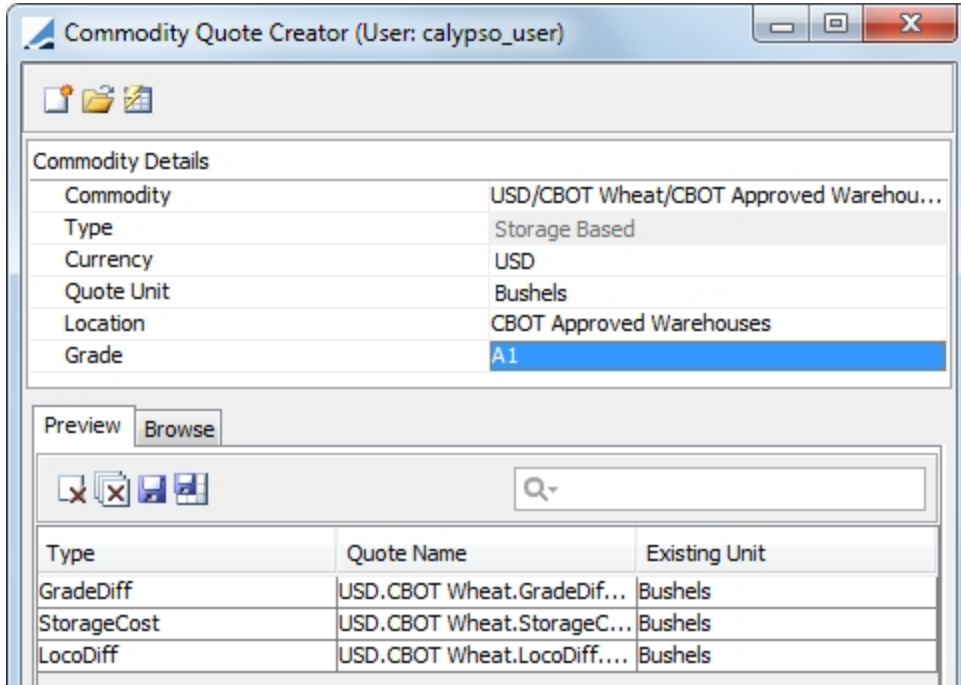
New Refresh Delete Save

- » Existing commodity reset definitions are loaded by default. Select a reset to view the details. You can modify the details and click **Save** as needed.

► For information regarding Commodity Reset, refer to Commodity Reset Definition.

1.4 Commodity Quote Creator

To open the Commodity Quote Creator window, select **Configuration > Commodities > Commodity Quote Creator** (menu action `marketdata.CommodityQuoteNameCreationWindow`).



Commodity Quote Creator (User: calypso_user)

Commodity Details

Commodity	USD/CBOT Wheat/CBOT Approved Warehou...
Type	Storage Based
Currency	USD
Quote Unit	Bushels
Location	CBOT Approved Warehouses
Grade	A1

Preview Browse

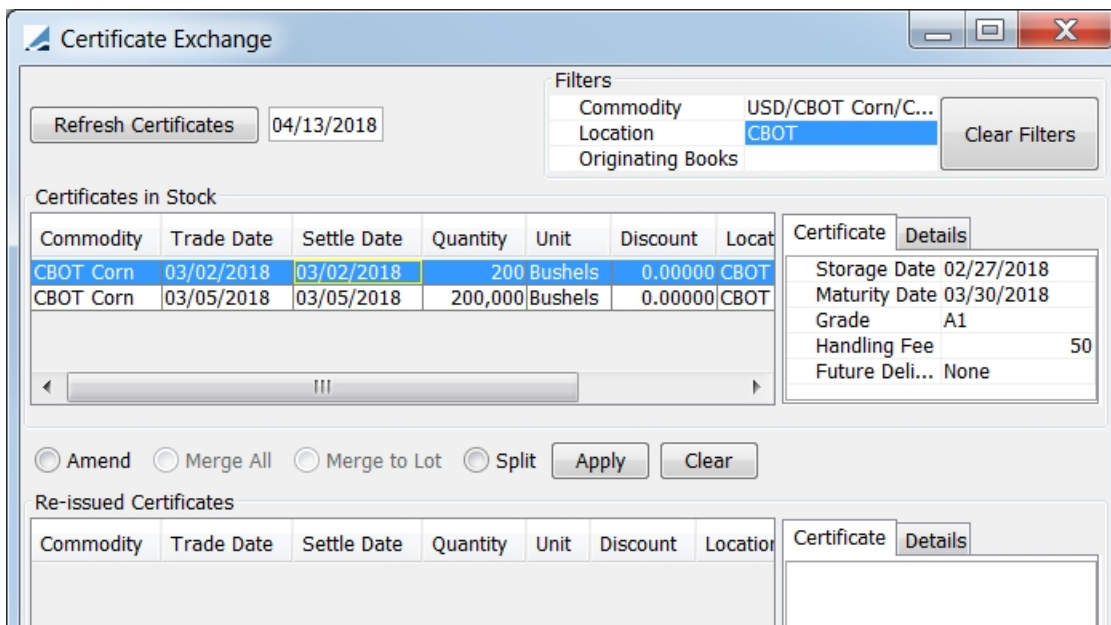
Q-

Type	Quote Name	Existing Unit
GradeDiff	USD.CBOT Wheat.GradeDif...	Bushels
StorageCost	USD.CBOT Wheat.StorageC...	Bushels
LocoDiff	USD.CBOT Wheat.LocoDiff....	Bushels

► For information regarding Commodity Quote Creator, refer to [Commodity Quote Creator](#).

1.5 Certificate Management

The Certificate Management window is used to split, merge and amend certificates. To display this window, from Calypso Navigator, select **Configuration > Commodities > Commodity Certificate Management**.



Certificate Exchange

Refresh Certificates 04/13/2018

Filters

Commodity	USD/CBOT Corn/C...
Location	CBOT
Originating Books	

Clear Filters

Certificates in Stock

Commodity	Trade Date	Settle Date	Quantity	Unit	Discount	Location
CBOT Corn	03/02/2018	03/02/2018	200	Bushels	0.00000	CBOT
CBOT Corn	03/05/2018	03/05/2018	200,000	Bushels	0.00000	CBOT

Certificate Details

Storage Date	02/27/2018
Maturity Date	03/30/2018
Grade	A1
Handling Fee	50
Future Deli...	None

Amend Merge All Merge to Lot Split Apply Clear

Re-issued Certificates

Commodity	Trade Date	Settle Date	Quantity	Unit	Discount	Location
-----------	------------	-------------	----------	------	----------	----------


Certificate Details

► For information regarding Commodity Certificates, refer to Commodity Certificate Management.

1.6 Forward Curve

A Commodity Forward Curve can be generated using an underlying instrument. ([Market Data > Commodity Curves > Forward Curve](#))

Quotes

 Curve (42131) CBOT Soybean Fwd Curve USD CLOSE CBOT Soybean 1...

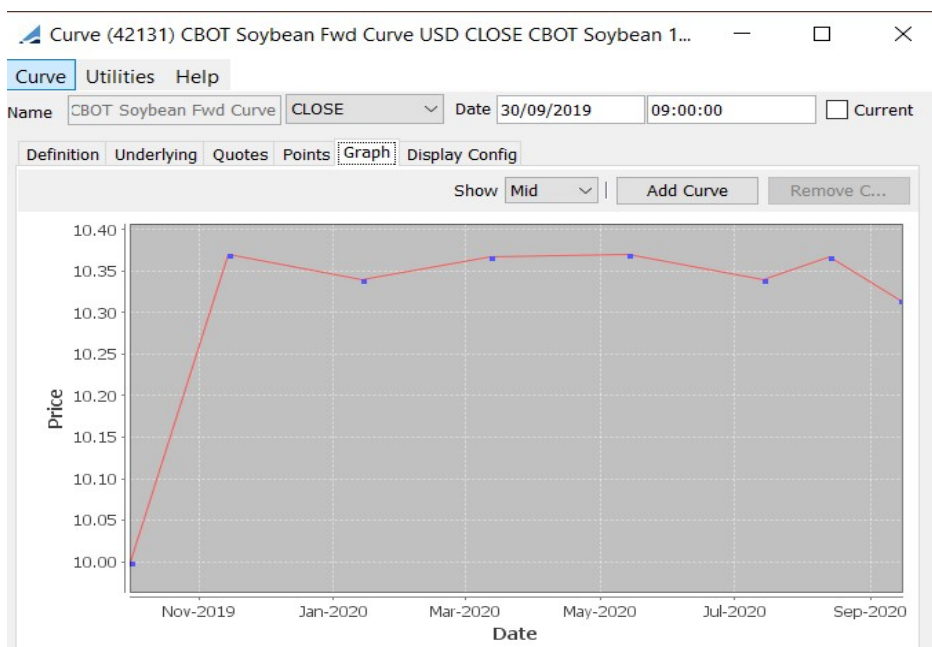
Curve Utilities Help

Name 30/09/2019

Definition Underlying Quotes Points Graph Display Config

Quote Name	Type	CLOSE
CommoditySpot.USD.Soy_Spot	Price	10.00000
Future.USD.CBOT.CBOT Soybean Futures.NOV.19	PriceC	1037.00000
Future.USD.CBOT.CBOT Soybean Futures.JAN.20	PriceC	1034.00000
Future.USD.CBOT.CBOT Soybean Futures.MAR.20	PriceC	1036.75000
Future.USD.CBOT.CBOT Soybean Futures.MAY.20	PriceC	1037.00000
Future.USD.CBOT.CBOT Soybean Futures.JUL.20	PriceC	1034.00000
Future.USD.CBOT.CBOT Soybean Futures.AUG.20	PriceC	1036.75000
Future.USD.CBOT.CBOT Soybean Futures.SEP.20	PriceC	1031.50000

Graph



► For detailed information on setting up a forward curve, refer to Commodity Curves.

1.7 Sample Forward Trade

In the following figure, we have an example of Storage-based forward trade-

CommodityForward 14/09/2022 USD/CBOT Soybean/CBOT Approved Warehouses 50...

Trade Back Office CommodityForward Cashflows Analytics Pricing Env Market Data View Utilities Help

Trade Details Fees Cashflows CSA Inv Attributes

Cpty: [Dropdown] CounterParty: [Dropdown] ID: 192930
 Book: [Dropdown] Status: VERIFIED
 Broker: [Dropdown] Template: NONE

Trade Date: 08/08/2022 11:52:16 [Current] Settle Date: 14/09/2022
 Comm. Res...: CBOT_Soybeans_Reset Delivery Location: CBOT Approved Warehouses

Deal
 Buy 5,000.00000 Bushels
 Forward Price: InterpolatedPrice
 Fixing Holidays: FCBT-CBA

Price
 Price Ty...: Fixed USD Bushels
 Unadjus...: 17 Discount: 0
 Final Pri...: 17

Payment
 NO_CHANGE Holiday: NYC
 Lag: 0 Bus [Payment Day]

Physical
 NO_CHANGE Holiday: NYC
 Lag: 0 Bus [Payment Day]

Certificates & Delivery

Trade Date	Settle Date	Quantity	Unit	Price	Location
14/09/2022	14/09/2022	5,000	Bus...	17.00000	CBOT Approved Warehou..

Certificate Details

MarketData Pricer Params Results

Net (USD)	PRICE	NPV	DELTA
	15.56	-7,192.51	5,000.00000

Val Date: [Orange Box] Pricing Env: OFFICIAL-CMD [Price] [Close]

» Click on **Price** to price the trade on the set Valuation Date.

► For more information on booking Commodity Forwards, refer to Capturing Commodity Forward Trades.