

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 1 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------



IT-Concept for MM/FX MCC

Jens Richelsen (DUS - 9352)

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 1	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	-----------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 2 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------

Revision log

Date	Name	Description
10.06.2009	J. Richelsen	Initial
29.04.2010	J. Richelsen	Additional rules
30.12.2010	J. Richelsen	Review
11.03.2011	J. Richelsen	Review
11.04.2011	J. Richelsen	New York client
26.10.2011	J. Richelsen	Move CBB books
01.07.2012	J. Richelsen	Portigon
12.10.2012	J. Richelsen	Client selection criteria
23.08.2013	R. Steger	Removed EAA and Hong Kong clients
07.04.2014	J. Richelsen	Removed initial config values, than can be changed in DB
18.06.2014	R. Steger	Added condition is_near_leg_out_of_reuters_price
31.10.2014	J. Richelsen	New York client selection
03.12.2014	R. Steger	Added PAG client

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 3 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------

Table of contents

1	Overview	4
1.1	ABOUT THIS DOCUMENT	4
1.2	LEGAL OBLIGATION	4
1.3	GLOSSARY	4
2	Architecture	4
2.1	DATA IMPORT	4
2.1.1	General	4
2.1.2	Summit	4
2.1.3	Client selection criteria	5
2.1.4	Field reference	6
3	MCC logic	9
3.1	GENERAL CLASSIFICATION MECHANISM	9
3.1.1	MM commodity name	9
3.1.2	FX commodity name	10
3.1.3	Tolerances	10
3.2	TRADE STATUS CHECKS	10
3.2.1	General	10
3.2.2	Summit Money Market	11
3.2.3	Summit Foreign Exchange	13

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 4 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------

1 Overview

1.1 About this document

This document gives an overview about the architecture of the new Money Market MCC, especially about the source system Summit.

1.2 Legal Obligation

The German Banking Supervision requires that a Market Conformity Check is executed for each trade (not necessarily immediately after the trade has been done).

1.3 Glossary

Abbreviation	Explanation
MCC	Market Conformity Check
MM	Money market
FX	Foreign Exchange

2 Architecture

2.1 Data import

2.1.1 General

Source-systems that deliver files should invoke the import, if possible (e.g. sqlloader).

Data of source-systems with Database interfaces need to be collected in a batch job (e.g. java-import-tool).

The common data is stored in a general trade-table and the source-system dependent data is stored each in a different source-system table.

The tables are linked with a trade_id that is unique for the whole database.

The data is stored with a job_id that is different for each trade_date, source-system and import-run. This enables the rerun of processing a source-system for the same trade-date.

Small mappings might be done during the import, like date conversions.

The main checks/conversions, which are needed for further analysis (e.g. storno, etc.) should be included into the trade-status-checks.

2.1.2 Summit

The data is delivered by Connect:Direct file transfer.

All date and time information is assumed to be Düsseldorf local time (MEZ/MESZ). There will be two files, one with FX-trades and one with MM-trades.

The FX-file is extracted by using the filter DUTC_MCC_FX.

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 4	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	-----------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 5 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------

The MM-file is extracted by using the filter DUTC_MCC_MM.

2.1.3 Client selection criteria

The further processing of the trade depends on the trader location. Using the trader location of book of the trade is looked up in PARIS. The follow table is valid for FX and MM.

Client	PARIS trader location	Location name
Summit London (TML/TFL)	731	EAA London
	743	EAA Istanbul
	VBB_LON	Verbundbank London preparation
	VBB_807	Verbundbank Istanbul preparation
Summit Hong Kong (TMH/TFH) (no longer active)		
Summit EAA (TME/TFE) (no longer active)		
Summit NewYork	025	New York
	032	New York
	732	EAA New York
	VBB_NYC	VBB New York
Summit PAG (TMG/TFG)	21	London
	38	Shanghai
	26	Hong Kong
	56	Singapore
	48	Madrid
	021	London
	026	Hong Kong
	038	Shanghai
	048	Madrid
	056	Singapore
	001	Duesseldorf
	022	New York
	023	Tokyo
	024	Tokyo
	027	Tokyo
	041	Sydney
	081	Luxemburg
	082	Singapore
	084	London
	087	Singapore
	406	London
	454	Johannesburg

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 5	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	-----------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 6 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------

	617	Luxemburg
	804	Dublin (WLB Ireland)
	806	Budapest
	807	Istanbul
	812	Madrid
	817	Moscow
	818	Warsaw
	828	Milan
	831	Milan
	833	Paris
	842	London
	861	New York
	862	Tokyo
	866	London
	869	Toronto
	871	London
	874	New York
	876	Sao Paulo
	878	New York
	888	London
	898	Singapore
	899	Singapore
	999	
	VBB	Verbundbank preparation
	xxx	
	Tokyo	Tokyo
	[n/a]	
	Sydney	Sydney
	Hongkong	Hong Kong
	Hong Kong	Hong Kong
	Singapore	Singapore
	EAA2	EAA Düsseldorf refill preparation
	EAA2_NYC	New York
	EAA2_HKG	EAA Hong Kong refill preparation
	EAA2_LON	EAA London refill preparation
	EAA2_807	EAA Istanbul refill preparation
Summit Düsseldorf (TMD/TFD)	Any other	

2.1.4 Field reference

The data is extracted from Summit about 06:00 into a semicolon separated ascii file. It contains a header records with the column headers.

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 6	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	-----------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 7 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------

The last line (indicated by a #) contains as checksum the number of business records, the start and the stop time of the business interval extracted and finally the extraction timestamp. Example:

```
#;435;25.03.2004 08:08;25.03.2004 20:16;25.03.2004 22:44
```

A single record consists of the fields described in the following tables. For float filed the scientific notation is used.

2.1.4.1 MM file

Nr	field name	data type	definition	example
1	Trade ID	char	Trade ID from Summit	2476576D
2	TradeVersion	int	Current version number of the trade	3
3	Status	char	Trade status code	DONE, VER
4	Ccy	Char	currency of cash trade SunGard ISO Code	AUD
5	Type	Char	Instrument type	MM,FXSPOT
6	SubType	char	Instrument Subtype	LOAN,DEPOSIT
7	Index	Char	identifier for EONIA deposit	EONIA, FIXED
8	StartDate	Date	start date/time in dd.mm.yy format when the cash trade is due to begin	22/10/2008
9	MaturityDate	Date	end date/time in dd.mm.yy format when the cash trade is due to end	29/10/2008
10	Trade Date	Date	DUS time when the trade was entered; lookup time for market rate feed (editabel by trader)	22/10/2008 11:06
11	Trade entry Date	Date	System time when trade has been captured	22/10/2008 11:06
12	Amend Date	Date	System time when original trade has been amended	23/10/2008 12:06
13	Internal Rate	Float	Net rate of trade (=Dealt Rate +/- Margin Points)	4.7325
14	Spread	Float	Points of Margin	10
15	DealtRate	Float	Internal Rate + Spread	4.8325
16	MarketRate	Float	Reuters real time feed interest rate at the time the trade was entered into the system	4.6255
17	MarketRate (from FX SWAPS)	Float	Reuters real time feed interest rate calculated from FX-Swaps at the time the trade was entered into the system	4.6255
18	Notional	Float	the amount of money that was traded (currency of MM deal)	5,000,000.00
19	Trader Login ID	Char	Login ID of the trader	D012345
20	Trader Name	Char	name of the trader	Claus Sieg

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 7	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	-----------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 8 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------

21	Cpty	Char	Counterparty for which the trade has been done	WESTLB
22	Book	Char	Book traded on, used for LU mapping	DMM-DMC
23	Comments Front Office	Char	additional information inserted by the trader	
24	Structure ID	char	ID of the trade group (to identify storno-chains)	2471610.S
25	EODRate	Float	End of day fx rate	1.641755684
26	EODRateDate	Date	Date of the end of day fx rate	30.10.2008
27	AutoRateReset	Boolean	Flag, if trade amendmend is caused by fixing (floating deposits)	1
28	EODRateMM	Float	Fallback for the market rate of field "MarketRate"	4.6255
29	InternalId	Char		22 90189DS
30	ExternalSystem	Char		ETRADER
31	AmendmentReason	Char		BVSRESAVE

2.1.4.2 FX file

Nr	field name	data type	definition	example
1	Trade ID	char	Trade ID from Summit	2476576D
2	TradeVersion	int	Current version number of the trade	3
3	Status	char	Trade status code	DONE, VER
4	Ccy pair	Char	ccy-pair of trade	EUR-USD
5	Type	Char	Instrument type	FXSWAP,FXSPOT
6	SubType	char	Instrument Subtype	EVEN,UNEVEN
7	Near Date	Date	value date, the date on which the near leg of the trade is to be accounted	22/10/2008
8	Far Date	Date	value date, the date on which the far leg of the trade is to be accounted	29/10/2008
9	Trade Date	Date	DUS time when the trade was entered; lookup time for market rate feed (editable by trader)	22/10/2008 11:06
10	Trade entry Date	Date	System time when trade has been captured	22/10/2008 11:06
11	Amend Date	Date	System time when original trade has been amended	23/10/2008 12:06
12	Spot Rate	Float	Spot Rate or fwd-rate of the near leg in case of FX-Swaps	1.3250
13	FwdPoints near leg	Float	Forward Points near leg (zero for FXFWD)	10

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 8	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	-----------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 9 of 17	Version Date 2014-12-03
---------	---	---	--------------	-----------------	----------------------------

14	FwdPoints far leg	Float	Forward Points far leg	10
15	MarginPoints	Float	Points of Margin	50
16	MarginRate	Float	Spotrate + Fwd Points (excluding Margin Points)	1.3310
17	NearAmount Ccy1	Float	Near Amount in first Currency	15,000,000.00
18	FarAmount Ccy1	Float	Far Amount in first Currency	15,000,000.00
19	MarketRateSpot	Float	Spot Rate at the time of the trade or fwd-rate of the near leg in case of FX-Swaps	1.3220
20	Market Points near leg	Float	Forward Points near leg (zero for FXFWD)	2
21	Market Points far leg	Float	Forward Points far leg	7
22	MarketRate Fwd	Float	MarketRateSpot + Market Points far leg	1.3327
23	Trader Login ID	Char	Login ID of the trader	D012345
24	Trader	Char	name of the trader	Wilhelm Johnen
25	Counterparty	Char	counterparty for which the trade has been done	Siegburg, KSK
26	Book	Char	Book traded on, used for LU mapping	DFS-SPOTMAIN
27	Comments Front Office	Char	additional information inserted by the trader	Swap alte Basis
28	EODRate	Float	End of day fx rate	1.3450
29	EODRateDate	Date	Date of the end of day fx rate	30/10/2008
30	EODRateFX	Float	Fallback market rate for the field "MarketRate Fwd"	1.3327
31	InternalId	Char		22 90189DS
32	ExternalSystem	Char		ETRADER
33	AmendmentReason	Char		BVSRESAVE

3 MCC logic

3.1 General classification mechanism

3.1.1 MM commodity name

The commodity name for MM-products is generally the currency name. For those currencies that are configured in a list with the name "MATURITY_DEPENDENT_COMODITY" in the database table T42_MGB_CONFIGURATION, a maturity-code is added to create the commodity name.

The following table shows the time intervals:

Maturity	Interval of „maturityDate –
----------	-----------------------------

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 9	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	-----------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 10 of 17	Version Date 2014-12-03
---------	---	---	--------------	------------------	----------------------------

Name	startDate“
ON	T < 4 Days
1W	4 <= T < 10 Days
2W	10 <= T < 18 Days
3W	18 <= T < 26 Days
1M	26 <= T < 45 Days
2M	45 <= T < 77 Days
3M	77 <= T < 138 Days
6M	138 <= T < 230 Days
9M	230 <= T < 320 Days
1Y	320 <= T < 550 Days
2Y	T >=550 Days

3.1.2 FX commodity name

The commodity name for FX-products is simply the currency pair.

3.1.3 Tolerances

The tolerances are mapped to the commodity name and are shown in the tool. They can also be extracted from the database for a given client (replace '???' with the client name from above):

```
SELECT      t05_instrument AS comodity, t11_tolerance_time_minutes,
            DECODE(t11_tolerance_absolute,
                    0, t11_tolerance_percent) AS rel_tolerance,
            TO_NUMBER(DECODE(t11_tolerance_absolute,
                               0, NULL,
                               t11_tolerance_absolute)) AS abs_tolerance
FROM t05_instrument, t11_price_check_category
WHERE t05_instrument_type = 'pricecheck'
      AND fk_t05_t11_price_check = t11_id
      AND fk_t05_t09_mandant = '???'
ORDER BY t05_id;
```

If the tolerance for a commodity is unknown, the tool generates a default tolerance that is build as the sum of tolerances from both currencies against USD. This initial entry gets the postfix "generated cross currency". It can be edited like any other entry.

3.2 Trade status checks

3.2.1 General

To calculate the status of a trade a set of expressions is evaluated. If the expression returns true or if the expression is empty, the evaluation is stopped and the related state is taken as the resulting state.

An expression consists of expressions combined with the logical and-operator (&&) or the or-operator (||). An expression can also be negated with the not-operator (!) and finally braces can be used to group expressions. A nuclear expression (a condition) is then evaluated by executing a java-function of the trade.

An example:

status_name	expression
no_check	product_not_mcc_relevant is_storno

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 10	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	------------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 11 of 17	Version Date 2014-12-03
---------	---	---	--------------	------------------	----------------------------

internal_deal	is_internal
high_low_check	is_net_trade
historical_check	

In the example the first expression "product_not_mcc_relevant" is extracted and the corresponding java-method is looked up in a special configuration table and executed on the trade-object. Then the next condition "is_storno" is checked against the trade-object. The result is logically combined with the or-operator. Assuming the result is true, the final state would be "no_check". Again assuming the first three expression return false, the forth state "historical_check" would become the final result.

3.2.2 Summit Money Market

3.2.2.1 Definition of trade status rules

The following rules are used to calculate the status of the trade, and indicate if a manual check is required.

status_name	check	expression
Rebooked trades	N	is_rebooking_book
New location	Y	!is_expected_location
Internal tech trades	N	is_internal_technical_trade
Generated Funding	N	is_generated_funding
Automatic rate reset	N	is_auto_rate_reset
Generated by LoanIQ	N	is_loaniq_trade
Generated repo cash coll	N	is_collateral_management
Floating deposit	N	is_floating
No Reuters price (BLB check)	Y	has_no_reuters_price && has_no_eod_price
Call A: Out of turnover limit (Reuters)	Y	is_call_account && !has_no_reuters_price && is_out_of_turnover_limit && !is_out_of_reuters_price
Call Account: Out of range (Reuters)	Y	is_call_account && !has_no_reuters_price && is_out_of_reuters_price && !is_bagatelle
Call Account: Bagatelle (Reuters)	N	is_call_account && !has_no_reuters_price && is_out_of_reuters_price && is_bagatelle
Call Account: O.K. (Reuters)	N	is_call_account && !has_no_reuters_price
Call A: Out of turnover limit (EOD)	Y	is_call_account && is_out_of_turnover_limit && !is_out_of_eod_price
Call Account: Out of range (EOD)	Y	is_call_account && is_out_of_eod_price && !is_bagatelle
Call Account: Bagatelle (EOD)	N	is_call_account && is_out_of_eod_price && is_bagatelle
O.K. (EOD)	N	is_call_account
MM: Out of turnover limit (Reuters)	Y	!has_no_reuters_price && is_out_of_turnover_limit && !is_out_of_reuters_price
MM: Out of range (Reuters)	Y	!has_no_reuters_price && is_out_of_reuters_price && !is_bagatelle
MM: Bagatelle (Reuters)	N	!has_no_reuters_price && is_out_of_reuters_price && is_bagatelle
MM: O.K. (Reuters)	N	!has_no_reuters_price

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 11	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	------------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 12 of 17	Version Date 2014-12-03
---------	---	---	--------------	------------------	----------------------------

MM: Out of turn over limit (EOD)	Y	is_out_of_turnover_limit && !is_out_of_eod_price
MM: Out of range (EOD)	Y	is_out_of_eod_price && !is_bagatelle
MM: Bagatelle (EOD)	N	is_out_of_eod_price && is_bagatelle
MM: O.K. (EOD)	N	

The following conditions refer to values from fields, which can be found in the MM-file delivered from Summit.

3.2.2.2 Condition: is_expected_location

It checks if the trader location, that is mapped to the book is hold in a list which is configured in the database in the table T42_MGB_CONFIGURATION and the key EXPECTED_LOCATIONS.

The current values are documented in section 'Client selection criteria'.

If the value is in the list, the condition returns true. (The condition is exclusively used for the Düsseldorf client.)

New locations should be checked regarding their client mapping and their report location:

1. If they should be mapped to a different client, a new MGB release is needed that implements the change in the converter stage.
2. If they should be mapped to a report location, they need to be added to the T120_REPORT_CONFIGURATION table.

Both changes involve the IT support team.

3.2.2.3 Condition: is_rebooking_book

Returns true if the field "BookId" has a value that is configured in the table T42_MGB_CONFIGURATION with the key "REBOOKING_BOOKS".

3.2.2.4 Condition: is_internal_technical_trade

Returns true if the field "Trader" has a value that is configured in the table T42_MGB_CONFIGURATION with the key "PSEUDO_TRADER".

3.2.2.5 Condition: is_gereraded_funding

Returns true if the field "Trader" has a value that is configured in the table T42_MGB_CONFIGURATION with the key "FUNDING_TRADER".

3.2.2.6 Condition: is_auto_rate_reset

Returns true if the field "AutoRateReset" has a value "1".

3.2.2.7 Condition: is_loaniq_trade

Returns true if the field "Trader" has a value that is configured in the table T42_MGB_CONFIGURATION with the key "LOANIQ_TRADER".

3.2.2.8 Condition: is_collateral_management

Returns true if the field "Trader" has a value that is configured in the table T42_MGB_CONFIGURATION with the key "COLLATERAL_MANAGEMENT_TRADER".

3.2.2.9 Condition: is_floating

Returns true if the field "Index" has a value different from "FIXED".

3.2.2.10 Condition: is_call_account

Returns true if the field "SubType" has either the value "CLOAN" or "CDEPO".

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 12	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	------------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 13 of 17	Version Date 2014-12-03
---------	---	---	--------------	------------------	----------------------------

3.2.2.11 Condition: has_no_reuters_price

Summit delivers market prices. If the field "MarketRate" is equal to zero, no market price was available.

3.2.2.12 Condition: has_no_eod_price

Summit delivers an additional EndOfDay market price. If the field "EODRateMM" is equal to zero, no EOD price was available.

3.2.2.13 Condition: is_out_of_turnover_limit

The basis of this condition is the turnover. It is calculated as follows:

$$\frac{(\text{marketRate} - \text{dealtRate}) * \text{amount} * (\text{maturityDate} - \text{startDate})}{\text{EODRate} * 100 * 360}$$

If the field "marketRate" is zero, the field "EODRateMM" is used in the equation instead.

If the turnover is greater than a defined limit, the condition is true.

The value "SUNGARD_TURNOUT_LIMIT" can be configured in the database in the table T42_MGB_CONFIGURATION. It is supposed to be in EUR.

3.2.2.14 Condition: is_out_of_reuters_price

An interval is created around the "MarketRate" using the tolerance values from the priceCheckCategory that is linked to the commodity of the trade (e.g. EUR, EUR-AED). If the "MarketRate" is inside of the interval, the condition is false, otherwise true.

See also section "Price/time thresholds".

3.2.2.15 Condition: is_out_of_eod_price

An interval is created around the "EODRateMM" using the tolerance values from the priceCheckCategory that is linked to the commodity of the trade (e.g. EUR, EUR-AED). If the "EODRateMM" is inside of the interval, the condition is false, otherwise true.

See also section "Price/time thresholds".

3.2.2.16 Condition: is_bagatelle

The basis of this condition is the turnover. It is calculated as follows:

$$\frac{(\text{marketRate} - \text{dealtRate}) * \text{amount} * (\text{maturityDate} - \text{startDate})}{\text{EODRate} * 100 * 360}$$

If the turnover is smaller than a defined limit, the condition is true.

The value "SUNGARD_BAGATELLE_LIMIT" can be configured in the database in the table T42_MGB_CONFIGURATION. It is supposed to be in EUR.

If the field "marketRate" is zero, the field "EODRateMM" is used in the equation instead.

3.2.3 Summit Foreign Exchange

3.2.3.1 Definition of trade status rules

The following rules are used to calculate the status of the trade, and indicate if a manual check is required.

status_name	check	expression
Rebooked trades	N	is_rebooking_book
New location	Y	!is_expected_location
Generated FX Cover	N	is_generated_fx_cover_trade
Internal tech trades	N	is_internal_technical_trade
Suspicious MITTE-BOOK	Y	is_mitte_book && !is_euro_commodity
MITTE-BOOK	Y	is_mitte_book
No Reuters price (BLB check)	Y	has_no_reuters_price && has_no_eod_price

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 13	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	------------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 14 of 17	Version Date 2014-12-03
---------	---	---	--------------	------------------	----------------------------

T_OPT: Out of turnover limit (Reuters)	Y	is_fx_forward_with_time_option && !has_no_reuters_price && is_out_of_turnover_limit && !is_out_of_reuters_price
T_OPT: Out of range (Reuters)	Y	is_fx_forward_with_time_option && !has_no_reuters_price && is_out_of_reuters_price && !is_bagatelle
T_OPT: Bagatelle (Reuters)	N	is_fx_forward_with_time_option && !has_no_reuters_price && is_out_of_reuters_price && is_bagatelle
T_OPT: O.K. (Reuters)	N	is_fx_forward_with_time_option && !has_no_reuters_price
T_OPT: Out of turn over limit (EOD)	Y	is_fx_forward_with_time_option && is_out_of_turnover_limit && !is_out_of_eod_price
T_OPT: Out of range (EOD)	Y	is_fx_forward_with_time_option && is_out_of_eod_price && !is_bagatelle
T_OPT: Bagatelle (EOD)	N	is_fx_forward_with_time_option && is_out_of_eod_price && is_bagatelle
T_OPT: O.K. (EOD)	N	is_fx_forward_with_time_option
FXFWD: Out of turnover limit (Reuters)	Y	is_fx_forward && !has_no_reuters_price && is_out_of_turnover_limit && !is_out_of_reuters_price
FXFWD: Out of range (Reuters)	Y	is_fx_forward && !has_no_reuters_price && is_out_of_reuters_price && !is_bagatelle
FXFWD: Bagatelle (Reuters)	N	is_fx_forward && !has_no_reuters_price && is_out_of_reuters_price && is_bagatelle
FXFWD: O.K. (Reuters)	N	is_fx_forward && !has_no_reuters_price
FXFWD: Out of turn over limit (EOD)	Y	is_fx_forward && is_out_of_turnover_limit && !is_out_of_eod_price
FXFWD: Out of range (EOD)	Y	is_fx_forward && is_out_of_eod_price && !is_bagatelle
FXFWD: Bagatelle (EOD)	N	is_fx_forward && is_out_of_eod_price && is_bagatelle
FXFWD: O.K. (EOD)	N	is_fx_forward
FXSPOT: Out of turnover limit (Reuters)	Y	is_fx_spot && !has_no_reuters_price && is_out_of_turnover_limit && !is_out_of_reuters_price
FXSPOT: Out of range (Reuters)	Y	is_fx_spot && !has_no_reuters_price && is_out_of_reuters_price && !is_bagatelle
FXSPOT: Bagatelle (Reuters)	N	is_fx_spot && !has_no_reuters_price && is_out_of_reuters_price && is_bagatelle
FXSPOT: O.K. (Reuters)	N	is_fx_spot && !has_no_reuters_price
FXSPOT: Out of turn over limit (EOD)	Y	is_fx_spot && is_out_of_turnover_limit && !is_out_of_eod_price
FXSPOT: Out of range (EOD)	Y	is_fx_spot && is_out_of_eod_price && !is_bagatelle
FXSPOT: Bagatelle (EOD)	N	is_fx_spot && is_out_of_eod_price &&

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 14	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	------------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 15 of 17	Version Date 2014-12-03
---------	---	---	--------------	------------------	----------------------------

		is_bagatelle
FXSPOT: O.K. (EOD)	N	is_fx_spot
FXSWAP: Out of turnover limit (Reuters)	Y	is_fx_swap && !has_no_reuters_price && is_out_of_turnover_limit && !is_out_of_reuters_price && !is_near_leg_out_of_reuters_price
FXSWAP: Out of range (Reuters)	Y	is_fx_swap && !has_no_reuters_price && (is_out_of_reuters_price is_near_leg_out_of_reuters_price) && !is_bagatelle
FXSWAP: Bagatelle (Reuters)	N	is_fx_swap && !has_no_reuters_price && (is_out_of_reuters_price is_near_leg_out_of_reuters_price) && is_bagatelle
FXSWAP: O.K. (Reuters)	N	is_fx_swap && !has_no_reuters_price
FXSWAP: Out of turn over limit (EOD)	Y	is_fx_swap && is_out_of_turnover_limit && !is_out_of_eod_price
FXSWAP: Out of range (EOD)	Y	is_fx_swap && is_out_of_eod_price && !is_bagatelle
FXSWAP: Bagatelle (EOD)	N	is_fx_swap && is_out_of_eod_price && is_bagatelle
FXSWAP: O.K. (EOD)	N	is_fx_swap

The following conditions refer to values from fields, which can be found in the FX-file delivered from Summit.

3.2.3.2 Turnover calculation

The turnover is calculated as the sum of the near-leg-turnover and the far-leg-turnover. The calculation depends on the product type.

The far-turnover is calculated as
$$\frac{(\text{MarketRate} - \text{MarginRate}) * \text{NearAmount}}{\text{EODRate}}$$
.

The far-turnover for FxSwap is calculated as
$$\frac{(\text{MarketRate} - \text{MarginRate}) * \text{FarAmount}}{\text{EODRate}}$$
.

The far-turnover for FxSpot is zero.

The near-turnover is calculated as
$$\frac{(\text{MarketRate} - \text{MarginRate}) * \text{NearAmount}}{\text{EODRate}}$$
.

The near-turnover for FxSwap is calculated as
$$\frac{(\text{MarketRate} - \text{SpotRate}) * \text{NearAmount}}{\text{EODRate}}$$
. If the

marketNearRate is give it replaces the marketrater in the formula above.

The near-turnover for FxForward is zero.

3.2.3.3 Condition: is_expected_location

It checks if the trader location, that is mapped to the book is hold in a list which is configured in the database in the table T42_MGB_CONFIGURATION and the key EXPECTED_LOCATIONS.

The current values are documented in section 'Client selection criteria'.

If the value is in the list, the condition returns true.

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 15	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	------------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 16 of 17	Version Date 2014-12-03
---------	---	---	--------------	------------------	----------------------------

(It is just used for the Düsseldorf client)

3.2.3.4 Condition: is_rebooking_book

Returns true if the field "BookId" has a value that is configured in the table T42_MGB_CONFIGURATION with the key "REBOOKING_BOOKS".

3.2.3.5 Condition: is_generated_fx_cover_trade

Returns true if the field "Counterparty" has a value that is configured in the table T42_MGB_CONFIGURATION with the key "FXFWDCOVER_COUNTERPARTY".

3.2.3.6 Condition: is_internal_technical_trade

Returns true if the field "Trader" has a value that is configured in the table T42_MGB_CONFIGURATION with the key "PSEUDO_TRADER".

3.2.3.7 Condition: is_mitte_book

If the field "Book" has the value "SGMITTE_BOOK" the condition returns true.

3.2.3.8 Condition: is_euro_commodity

If the field "Commodity" contains the string "EUR" the condition returns true.

3.2.3.9 Condition: is_fx_forward_with_time_option

If the field "SubType" is equal to "TIME_OPT" or "cDRAWDOWN" the condition returns true.

3.2.3.10 Condition: is_fx_forward

If the field "SubType" is equal to "FXFWD" the condition returns true.

3.2.3.11 Condition: is_fx_spot

If the field "SubType" is equal to "FXSPOT" the condition returns true.

3.2.3.12 Condition: is_fx_swap

If the field "SubType" is equal to "FXSWAP" the condition returns true.

3.2.3.13 Condition: has_no_reuters_price

Summit delivers market prices from Reuters. If the field "MarketRate" is equal to zero, no Reuters price was available.

3.2.3.14 Condition: has_no_eod_price

Summit delivers an additional EndOfDay market price. If the field "EODRateFX" is equal to zero, no EOD price was available.

3.2.3.15 Condition: is_out_of_turnover_limit

The basis of this condition is the turnover. The calculation is described above.

If the absolute turnover is greater than a defined limit, the condition is true.

The value "SUNGARD_TURNOUT_LIMIT" can be configured in the database in the table T42_MGB_CONFIGURATION. It is supposed to be in EUR.

3.2.3.16 Condition: is_out_of_reuters_price

An interval is created around the "MarketRate" using the tolerance values from the priceCheckCategory that is linked to the commodity of the trade (e.g. EUR, EUR-AED). If the "MarketRate" is inside of the interval, the condition is false, otherwise true.

(For FXSWAP trades, this acts on the far leg of the trade.)

See also section "Price/time thresholds".

Published by RMS&C	This substitutes	Project-No.	Author J. Richelsen	Section	Page 16	Date 03.12.14
-----------------------	------------------	-------------	------------------------	---------	------------	------------------

Portigon Documentation

Project	Document Title Concept for MCC MoneyMarket	Filename It_Concept_MoneyMarket_Mcc_V 2.7.doc	Section 1	Page 17 of 17	Version Date 2014-12-03
---------	---	---	--------------	------------------	----------------------------

3.2.3.17 Condition: is_out_of_eod_price

An interval is created around the "EODRateFX" using the tolerance values from the priceCheckCategory that is linked to the commodity of the trade (e.g. EUR, EUR-AED). If the "EODRateFX" is inside of the interval, the condition is false, otherwise true.

See also section "Price/time thresholds".

3.2.3.18 Condition: is_near_leg_out_of_reuters_price

An interval is created around the "MarketRate" of the near leg using the tolerance values from the priceCheckCategory that is linked to the commodity of the trade (e.g. EUR, EUR-AED). If the "MarketRate" is inside of the interval, the condition is false, otherwise true.

See also section "Price/time thresholds".

3.2.3.19 Condition: is_bagatelle

The basis of this condition is the turnover. If the absolute turnover is smaller than a defined limit, the condition is true.

The value "SUNGARD_BAGATELLE_LIMIT" can be configured in the database in the table T42_MGB_CONFIGURATION. It is supposed to be in EUR.