

CQG Middle Office Data Service Specifications

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About this Document

This document details the Middle Office Data Service (MODES), including upload and download, transmission, data mapping, and data file format.

Recent Publication History

The latest changes are indicated in **red, bold** font.

Date	Version	Changes
August 11, 2014	2014-03	Added PassengerAccountNumber to fills message layout.
March 10, 2014	2014-02	Added ClientRegulatoryAlgorithmID and EffectiveRegulatoryAlgorithmID to order message layout.
February 11, 2014	2014-01	Added ExternalManualOrder field to order, transactions, and fills message layouts for version 1.10 and above.
November 27, 2013	2013-04	Added note to time fields that indicates time is either UTC or local depending on configuration.
October 22, 2013	2013-03	Added Always Provided and Type/Format columns to message layouts.

Customer Support

Please contact FCM Support at 1-800-525-1872 if you have questions.

Middle Office Data Service

The Middle Office Data Service (MODES) offers FCMs a way to access fill, fill cancel, and fill corrections; order; and transaction data via SFTP.

The file that contains this data is transmitted to you via an SFTP. The service is available either as a direct upload from CQG to the subscriber SFTP site or as a download from the CQG SFTP site.

Data Service via Upload

To subscribe to the data upload service, you will need to provide an SFTP site and the following information:

- **SFTP Server:** Name of the server by which files will be sent.
- **Login Name:** A login name for the upload service to use.
- **Password:** The password required for the login name.
- **Directory:** A directory on the server where the files should be delivered.

Data Service via Download

To use the download service, CQG will assign a login and password for access to sftp.cqgtrader.com. You will be assigned a directory on that server where files will be stored. Files are removed from the directory at the [end of the service day](#).

Transmission

Frequency

Files may be transmitted in intervals (in minutes), or files may be delivered at specific times during the day or week.

You may change your transmission interval at any time by contacting [CQG FCM Support](#).

Account Groups

A MODES instance is configured to collect and transmit data for account groups that are composed of individual or multiple FCMs or specific accounts present in the Gateway. To specify FCMs or accounts to include in an account group, please contact [CQG FCM Support](#).

Retransmission

At periodic intervals data files are created and added to the transmission queue. CQG attempts to transmit all files in the queue each time a transmission is triggered. If a network or server problem prevents transmission of a file at its scheduled time, it will remain in the queue and be transmitted at the next opportunity. Once a file is successfully transmitted it is removed from the queue.

If you require files to be re-transmitted during the day, contact CQG support. Files are available to re-transmit only during the service day. If you require archived files, they can be e-mailed.

Start of Day

A Start of Day time is used to determine when files roll over. When rollover occurs, any unsent files are deleted from the SFTP upload queue or from the download directory. You must specify the desired start of day. Presumably this would occur during light trading, around the time back office data is generated. Be sure to include the time zone.

End of Day

If desired, an End of Day time can be specified. End of Day must be specified using the same time zone as Start of Day. If an End of Day time is not provided, the service will run continuously throughout a 24-hour period.

Weekends

CQG Operations specifies a weekend period during which time the transmission service is suspended. It runs from Friday afternoon to Sunday afternoon.

Patch Files

If technical issues prevent the delivery of one or more files, patch files can be created upon request. Patch files will contain all records for the dates in question and will use the following naming convention:

- Fills: p_fills_<FromDate>_<ToDate>_<AccountGroupAbbreviation>.txt
- Orders: p_ordr_<FromDate>_<ToDate>_<AccountGroupAbbreviation>.txt
- Transactions: p_fills_<FromDate>_<ToDate>_<AccountGroupAbbreviation>.txt

End-of-Day Files

In addition to periodic daily files, it is also possible to receive end-of-day files that contain all records for that day. The files are only delivered Monday-Friday. Any data generated after the end-of-day on Friday is included in Monday's end-of-day file. The files use the following naming convention:

- Fills - fill_<YYYYMMDD_hhmm>_<EndOfDayFileAbbreviation>.txt
- Orders – ordr_<YYYYMMDD_hhmm>_<EndOfDayFileAbbreviation>.txt
- Transactions – tran_<YYYYMMDD_hhmm>_<EndOfDayFileAbbreviation>.txt

The file names differ from the intraday files via "EndOfDayFileAbbreviation".

Synthetic Spreads

For synthetic spread orders, we currently send fill data as usual. We do not send orders and transactions information on synthetic spread leg orders.

Data Mapping

At least once per day, CQG transmits map files that contain CQG Symbols, Exchange Names, Order Types, and Execution Instructions as shown below.

The contract symbol is presented in two forms: the CQG symbol and the FCM symbol. Presentation of the FCM symbol is predicated on the presence of FCM Back Office symbol mapping information. When your company signed up with CQG, it should have provided symbol information that we use to map your symbols to ours, allowing CQG to interpret your back office data files. We use that same information to translate our symbols back into your symbols for Middle Office data. The CQG symbol is provided in case the back office data map is incomplete.

The same is true for price information. Fill, order, and strike prices are presented in both the CQG and FCM format. The FCM format can be provided only if the price translation information has been mapped in our back office data.

To report symbol or price map information, please call [CQG Customer Support](#).

Exchange Name Map File

These files contain definitions of CQG-specific codes used in data records.

File Name: Exchanges.txt

Field Name	Length	Description
ExchangeNumber	10	Number of the exchange reported in the fill data.
ExchangeName	16	Short name of the exchange.

Order Type File

File Name: OrderTypes.txt

Field Name	Length	Description
OrderType	1	Order type code.
ShortName	8	Short name of the order type.
Description	64	Description of the order type.

Commodity Map File

File Name: Symbols.txt

Field Name	Length	Description
ExchangeID	4	Commodity exchange.
CommodityCode	6	Commodity code used in the fill data.
Description	50	Commodity description.
FCM Exchange Code	12	FCM Back Office Exchange Code
FCM Future Code	24	FCM Back Office Future Code
FCM Options Code	24	FCM Back Office Option Code

Execution Instruction File

File Name: ExecInstructions.txt

Field Name	Length	Description
ExecutionInstructionID	4	Execution instruction ID.
Name	50	Short name of execution instruction.
Description	64	Execution instruction description.

Data Files

Files are named according to the information they contain and the time they are created. The name of the files are in the form:

- Fills: fill_<YYYYMMDD_hhmm>_<AccountGroupAbbreviation>.txt
- Orders: odr_<YYYYMMDD_hhmm>_<AccountGroupAbbreviation>.txt
- Transactions: tran_<YYYYMMDD_hhmm>_<AccountGroupAbbreviation>.txt

Files are in an ASCII format with delimited fields. Record separator is a CR-LF pair.

An **empty file** indicates that no fill activity has occurred during the time interval. An empty file contains a single CR-LF pair.

A **multi-valued field** is one that contains two or more values relating to a fill record. By default the separator for the values is “/”, but can be changed if necessary. This field format for ExecutionInstructions was added in conjunction with the new support for order type modifiers.

All times are separated into two fields, date and time. The date fields are in the form YYYYMMDD and the time fields are in the form HHMMSS. By default, all times are reported in UTC. Upon request, times can be reported in a specified local time zone instead.

The tables in the following sections detail fill, order, and transaction data message layouts.

Note about excluded data: MODES files exclude external orders, including transactions and fills on those orders. External orders are created on the New External Order page in CAST.

Fills Message Layout

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
1	RecordType	F = fill record C = corrected fill X = cancelled fill	0+	Y	String(1)
2	CQGFilRecordNumber	Fill record number at CQG. For a cancel or correction, this is the number of the original record being cancelled or corrected. For both cancels and corrections, the original record should be deleted. If the record is a correction, then a new Fill record contains corrected fill information and the correction record indicates which fill is being replaced.	0+	Y	Integer
3	CQGOrderNumber	CQG identifier for the related order.	0+	Y	Integer
4	ExchRecordNumber	Fill, correction, or cancel record number assigned by the originator.	0+	N	String(128)
5	CQGExchangeNumber	CQG Exchange number. It can be referenced in the CQGXCH.TXT data.	0+	N	Integer
6	FullCQGContractName	Full CQG contract name. For futures, this looks like "F.US.EP.M08". For options, "C.US.EP.M08.1100". For LME futures, "F.US.LDKZ".	0+	Y	String(32)
7	BuySell	b = buy s = sell	0+	Y	String(1)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
8	FillQuantity	Fill quantity.	0+	Y	Integer
9	TimeInForce	Time-in-force identifier for the order.	0+	Y	String(5)
10	CQG Order Type	CQG order type. This may be a CQG synthetic order type and can differ from the native order type (i.e. the exchange order type).	0+	Y	String(8)
11	Native Order Type	Native order type, as recognized by the exchange.	0+	N	String(8)
12	ExecutionInstructions	This is a multi-valued field that stores execution instruction IDs. e.g. "1/2/3" indicates: 1 = all or nothing 2 = quantity-triggered stop 3 = iceberg	0+	N	String(32)
13	TriggerQuantity	This is the quantity associated with certain types of execution instructions (e.g. QTS orders).	0+	N	Integer
14	Currency Code	Three-letter currency code associated with the contract.	0+	N	String(3)
15	Limit Price	Order limit price in CQG format.	0+	N	Float
16	Stop Price	Order stop price in CQG format.	0+	N	Float
17	Fill Price	Fill price in CQG format.	0+	Y	Float
18	AccountRep	Sales rep for the account, if provided.	0+	Y	String(16)
19	AccountNumber	FCM account number.	0+	Y	String(12)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
20	CQGTraderName	CQG user name of the trader that placed the order.	0+	N	String(32)
21	OrderName	Front-end name assigned to the order. This is not required to be unique. It may be useful in confirming the original order placement.	0+	N	String(24)
22	FillDate	Date of fill.	0+	Y	Date (YYYYMMDD)
23	FillTime	Time of fill.	0+	Y	Time (HHMMSS)
24	CancelCorrectDate	If this is a cancel or correction, indicates date cancel or correction was made. If this is a fill, field is empty.	0+	N	Date (YYYYMMDD)
25	CancelCorrectTime	If this is a cancel or correction, indicates time cancel or correction was made. If this is a fill, field is empty.	0+	N	Time (HHMMSS)
26	ContractDate	Contract prompt date in YYYYMMDD format.	0+	Y	Date (YYYYMMDD)
27	RecordCreatedDate	Date fill record was created in Gateway. UTC or local depending on configuration. (See Data Files)	0+	Y	Date (YYYYMMDD)
28	RecordCreatedTime	Time fill record was created in Gateway. UTC or local depending on configuration. (See Data Files)	0+	Y	Time (HHMMSS)
29	OrderComments	Comments associated with the order contained in double quotes. If no order comments were specified, then "" populates the field.	1+	N	String(64)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
30	ContractType	f = future c = call p = put d = daily future	1+	Y	String(1)
31	CQGSymbol	Commodity symbol in CQG form. It can be referenced in the Symbols.txt file.	1+	Y	String(6)
32	CQGStrikePrice	Strike price in the CQG format.	1+	N	Integer
33	ExchOrderNumber	Ticket number for the related order. Format is CQG-specific and can vary by exchange, but the value is based on exchange-reported identifier for the order.	1+	N	String(32)
34	CQGOriginalSSOrderNumber	If the order associated with this fill was placed by CQG Spreader as a leg order to execute a synthetic spread, then this field contains CQGOriginalOrderNumber of that synthetic spread order. (See Orders report file.) Note: the value is present even if the order was later released for manual control, e.g. due to synthetic spread order cancellation. If the order was not placed by CQG Spreader, then this field is empty.	2+	N	Integer
35	CQGFillOrderRecordNumber	Order fill record number at CQG to which this leg fill is related. note that multiple leg fills can refer to the same order fill.	3+	Y	Integer
36	CQGOriginalOrderNumber	CQG identifier for the first order in the order chain.	3+	Y	Integer
37	CQGAccountID	CQG identifier for the account.	4+	Y	Integer

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
38	OrderAckDate	Date the related order was originally acknowledged by the exchange.	4+	Y	Date (YYYYMMDD)
39	OrderAckTime	Time the related order was originally acknowledged by the exchange.	4+	Y	Time (HHMMSS)
40	TradeDate	Exchange trade date for this fill, as reported by exchange or calculated by CQG.	4+	Y	Date (YYYYMMDD)
41	CQGTraderID	The CQG identifier for the trader.	5+	N	Integer
42	CQGOrderFill TransactionRecordNumber	The transaction record number at CQG for the last Order Fill transaction referencing this Leg Fill. Warning! In the case of multi-leg orders, a single Order Fill transaction will usually reference multiple Leg Fills, so this value is not guaranteed to be unique.	5+	Y	Integer
43	CQGRouteName	CQG's name for route the order was placed to.	6+	Y	String(128)
44	PrivateLabel	Private label associated with the order. Value corresponds to Vendor Name field in FIX billing reports.	7+	N	String(32)
45	SecondaryCLOrderID	Order identifier assigned by CQG when sending the order to the execution system, if reporting of the identifier is supported by the order's route. Otherwise, this field is empty.	8+	N	String(64)
46	NativeStrategy	y = fill record corresponds to a leg fill on a strategy order native to the execution system n = fill record does not correspond to a leg fill on a strategy order native to the execution system	9+	Y	String(1)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
47	ExternalManualOrder	y = manual external CAST orders n = order placed by trader in Gateway	10+	Y	String(1)
48	PassengerAccountNumber	Only set when (1) the fill is reported for an omnibus account, i.e. AccountNumber is an omnibus account, (2) passenger account reporting is enabled for this MODES instance, and (3) passenger account disclosure is enabled for the firm using the omnibus account. Otherwise, this field is empty.	11+	N	String(12)

Order Message Layout

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
1	CQGOrderNumber	CQG identifier for the related order.	0+	Y	Integer
2	CQGOriginalOrderNumber	CQG identifier for the first order in the chain.	0+	Y	Integer
3	CQGParentOrderNumber	CQG identifier for the previous order in the chain.	0+	N	Integer
4	CQGExchangeNumber	CQG Exchange number. It can be referenced in the CQGXCH.TXT data.	0+	Y	Integer
5	FullCQGContractName	Full CQG contract name. For futures, this looks like "F.US.EP.M08". For options, "C.US.EP.M08.1100". For LME futures, "F.US.LDKZ".	0+	Y	String(32)
6	BuySell	b = buy s = sell	0+	Y	String(1)
7	OrderQuantity	Order quantity.	0+	Y	Integer
8	TimeInForce	Time-in-force identifier for the order.	0+	Y	String(5)
9	CQG Order Type	CQG order type. This may be a CQG synthetic order type and can differ from the native order type (i.e. the exchange order type).	0+	Y	String(8)
10	Native Order Type	The native order type, as recognized by the exchange.	0+	N	String(8)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
11	ExecutionInstructions	This is a multi-valued field that stores execution instruction IDs. e.g. "1/2/3" indicates: 1 = all or nothing 2 = quantity-triggered stop 3 = iceberg	0+	N	String(32)
12	TriggerQuantity	This is the quantity associated with certain types of execution instructions (e.g. QTS orders).	0+	N	Integer
13	Currency Code	Three-letter currency code associated with the contract.	0+	N	String(3)
14	Limit Price	Order limit price in CQG format.	0+	N	Float
15	Stop Price	Order stop price in CQG format.	0+	N	Float
16	AccountRep	Sales rep for the account, if provided.	0+	Y	String(16)
17	AccountNumber	FCM account number.	0+	Y	String(12)
18	CQGTraderName	CQG user name of the trader that placed the order.	0+	N	String(32)
19	OrderName	Front-end name assigned to the order. This is not required to be unique. It may be useful in confirming the original order placement.	0+	N	String(24)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
20	ExpirationDate	<p>Expiration date of the order. This field represents the calculated expiration date, and can change with time based on the type of order in question. Examples include:</p> <ul style="list-style-type: none"> • 2nd in OPO pair is stored initially with a GTC expiration and when activated is recalculated with a Day expiration. • For filled GTD orders, the order is expired that day regardless of expiration. 	0+	Y	Date (YYYYMMDD)
21	ExpirationTime	Expiration time of the order. This field represents the calculated expiration time, and can change with time based on the type of order in question. See ExpirationDate for details.	0+	Y	Time (HHMMSS)
22	ContractDate	<p>Contract prompt date in YYYYMMDD format.</p> <p>Note: In the case of relative daily futures, the prompt date for a future can change from one day to the next. This field reflects the prompt date associated with the future at the time the file is generated.</p>	0+	Y	Date (YYYYMMDD)
23	RecordCreatedDate	Date fill record was created in Gateway. UTC or local depending on configuration. (See Data Files)	0+	Y	Date (YYYYMMDD)
24	RecordCreatedTime	Time fill record was created in Gateway. UTC or local depending on configuration. (See Data Files)	0+	Y	Time (HHMMSS)
25	OrderComments	Comments associated with the order contained in double quotes. If no order comments were specified, then "" populates the field.	1+	N	String(64)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
26	ContractType	f = future c = call p = put d = daily future	1+	Y	String(1)
27	CQGSymbol	Commodity symbol in CQG form. It can be referenced in the Symbols.txt file.	1+	Y	String(6)
28	CQGStrikePrice	Strike price in the CQG format.	1+	N	Integer
29	ExchOrderNumber	Ticket number for the related order. Format is CQG-specific and can vary by exchange, but the value is based on exchange-reported identifier for the order.	1+	N	String(32)
30	CQGAccountID	CQG identifier for the account.	2+	Y	Integer
31	CQGTraderID	The CQG identifier for the trader.	2+	N	Integer
32	RejectionReason	Reason order was rejected. This field is populated only for rejected order requests.	3+	N	String(1024)
33	ExternalManualOrder	y = manual external CAST orders n = order placed by trader in Gateway	4+	Y	String(1)
34	ClientRegulatoryAlgorithmID	Client-supplied algorithm ID, i.e. incoming value received with the order.	5+	N	Big Integer
35	EffectiveRegulatoryAlgorithmID	Algorithm ID sent to exchange with the order, if any. Reflects ClientRegulatoryAlgorithmID plus any subsequent CQG algorithmic trading functionality.	5+	N	Big Integer

Transactions Message Layout

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
1	CQGTransactionRecordNumber	Transaction record number at CQG	0+	Y	Integer
2	CQGOOrderNumber	CQG identifier for the related order.	0+	Y	Integer
3	ExchOrderNumber	Exchange order number, sometimes called ticket number. Format is CQG-specific and can vary by exchange, but the value is based on exchange-reported identifier for the order. This field is empty for unacknowledged orders.	0+	N	String(32)
4	CQGFillOrderRecordNumber	Order Fill record number at CQG to which this transaction is related. (This field is empty if the transaction is not related to a fill). Note that multiple transactions can refer to the same Order Fill.	0+	N	Integer
5	OrderState	State of the order at the time of the transaction.	0+	Y	String(32)
6	CQGExchangeNumber	CQG Exchange number. It can be referenced in the CQGXCH.TXT data.	0+	Y	Integer
7	FullCQGContractName	Full CQG contract name. For futures, this looks like "F.US.EP.M08". For options, "C.US.EP.M08.1100". For LME futures, "F.US.LDKZ".	0+	Y	String(32)
8	BuySell	b = buy s = sell	0+	Y	String(1)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
9	OrderQuantity	Quantity associated with the order.	0+	Y	Integer
10	FillSize	Fill quantity. This field is empty if the transaction is not associated with a fill.	0+	N	Integer
11	TimeInForce	Time-in-force identifier for the order.	0+	Y	String(5)
12	CQG Order Type	CQG order-type. This may be a CQG synthetic order type and can differ from the native order type (i.e. the exchange order type).	0+	Y	String(8)
13	Native Order Type	Native order type, as recognized by the exchange.	0+	N	String(8)
14	ExecutionInstructions	This is a multi-valued field that stores execution instruction IDs. e.g. "1/2/3" indicates: 1 = all or nothing 2 = quantity-triggered stop 3 = iceberg	0+	N	String(32)
15	TriggerQuantity	This is the quantity associated with certain types of execution instructions (e.g. QTS orders).	0+	N	Integer
16	Currency Code	Three-letter currency code associated with the contract.	0+	N	String(3)
17	Limit Price	Order limit price in CQG format.	0+	N	Float
18	Stop Price	Order stop price in CQG format.	0+	N	Float

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
19	Fill Price	Fill price in CQG format (the field is empty if the transaction is not associated with a fill).	0+	N	Float
20	AccountRep	Sales rep for the account, if provided.	0+	Y	String(16)
21	AccountNumber	FCM account number.	0+	Y	String(12)
22	CQGTraderName	CQG user name of the trader that placed the order.	0+	N	String(32)
23	OrderName	Front-end name assigned to the order. This is not required to be unique. It may be useful in confirming the original order placement.	0+	N	String(24)
24	TransactionDate	Date of the transaction.	0+	Y	Date (YYYYMMDD)
25	TransactionTime	Time of the transaction.	0+	Y	Time (HHMMSS)
26	ContractDate	Contract prompt date in YYYYMMDD format. Note: In the case of relative daily futures, the prompt date for a future can change from one day to the next. This field reflects the prompt date associated with the future at the time the file is generated.	0+	Y	Date (YYYYMMDD)
27	RecordCreatedDate	Date fill record was created in Gateway. UTC or local depending on configuration. (See Data Files)	0+	Y	Date (YYYYMMDD)
28	RecordCreatedTime	Time fill record was created in Gateway. UTC or local depending on configuration. (See Data Files)	0+	Y	Time (HHMMSS)

Number	Name	Description	Included in Subversions	Always Provided	Type/Format
29	OrderComments	Comments associated with the order contained in double quotes. If no order comments were specified, then "" populates the field.	1+	N	String(64)
30	ContractType	f = future c = call p = put d = daily future	1+	Y	String(1)
31	CQGSymbol	Commodity symbol in CQG form. It can be referenced in the Symbols.txt file.	1+	Y	String(6)
32	CQGStrikePrice	Strike price in the CQG format.	1+	N	Integer
33	CQGOriginalOrderNumber	CQG identifier for the first order in the order chain.	1+	Y	Integer
34	CQGAccountID	CQG identifier for the account.	2+	Y	Integer
35	CQGTraderID	The CQG identifier for the trader.	2+	N	Integer
36	RejectionReason	Reason order was rejected. This field is populated only for transactions of rejected orders.	3+	N	String(1024)
37	ExternalManualOrder	y = manual external CAST orders n = order placed by trader in Gateway	4+	Y	String(1)