

Summary Member Impact - OMnet Genium INET 5.0.0220 (March 2019)

Contents

1. Purpose of the Document	2
2. MMT flags in Trade Changes message	3
2.1 Description	3
2.2 Messages	3
2.3 Structures	3
3. Minimum Acceptable Quantity (MAQ)	4
3.1 Description	4
3.2 Messages	4
3.3 Structures	6
4. Revision History	7

DRAFT

1. Purpose of the Document

This document presents an overview of the technical impact of the Genium INET 5.0.0220 release (March 2019) on the OMnet API compared to the version 5.0.0215 (November 2018).

To ensure that the full impact of the 5.0.0220 release is considered, the “Summary of Changes” section in the OMnet Message Reference Manual should be used.

DRAFT

2. MMT flags in Trade Changes message

2.1 Description

The following changes shall be implemented in Dedicated Trade Change Information Broadcast and corresponding Query Transaction:

This is a mandatory change.

2.2 Messages

- BD39 Dedicated Trade Change Information Broadcast
- CQ39 Trade Change Query

2.3 Structures

The BD39 shall be changed to a Variable Information Broadcast (VIB) with new structures and fields:

- **VIB Dedicated Trade Change Information**

```
struct broadcast_hdr
  Sequence {
    struct sub_item_hdr
      Choice {
        struct cl_trade_id_to_change // Named struct no: XXXX1
        struct cl_trade_changes // Named struct no: XXXX2
        struct cl_trade_mmt_flag_change // Named struct no: XXXX3
      }
  }
}
struct cl_trade_id_to_change {
  struct series // Named struct no: 50000
  INT32_T trade_number_i // Trade Number
  INT32_T sequence_number_i //Sequence Number
}
struct cl_trade_changes {
  UINT8_T trade_state_c // Trade, State
  UINT8_T le_state_c // Type, Legal Event
  UINT8_T give_up_state_c // Give Up, State
  UINT8_T instance_c // Instance, Number
  INT64_T rem_quantity_i // Quantity, Remaining
  char[8] modified_date_s // Date, Modified
  char[6] modified_time_s // Time, Modified
  char[2] filler_2_s // Filler
  UINT32_T big_attention_u // Big Attention
}
struct cl_trade_mmt_flag_change {
  CHAR[14] market_model_typology_s // Market Model Typology flags
  UINT16_T deferred_time_n // Deferred Publication time
}
```

- **Trade Change Query**

```
struct query_missing_trade_change { /**
  struct transaction_type
  struct series // Named struct no: 50000
  INT32_T sequence_first_i // Number, First Sequential
  INT32_T sequence_last_i // Number, Last Sequential
```

```
char[8] date_s // Date
}
```

Note: Field instance_c is removed

- Variable Trade Change Answer Structure:

```
struct answer_missing_trade_chg_hdr {
    struct transaction_type
    char[2] filler_2_s // Filler
    UINT16_T items_n // Items
}
Sequence {
    struct item_hdr
    Sequence {
        struct sub_item_hdr
        Choice {
            struct cl_trade_id_to_change // Named struct no: XXXX1
            struct cl_trade_changes // Named struct no: XXXX2
            struct cl_trade_mmt_flag_change // Named struct no: XXXX3
        }
    }
}
```

3. Minimum Acceptable Quantity (MAQ)

3.1 Description

The following changes shall be implemented in messages where internally overlaid structure om_exchange_info is included.

This change is only required for API users where MAQ functionality shall be enabled:

3.2 Messages

The above structure is used in the following messages:

Queries	External	Proxy	Name
Total orders	MQ8/MA43	MQ392/MA43	Total Order
	MQ9/MA44	MQ393/MA44	Total Inactive Order
	MQ32/MA32	MQ416/MA32	Total Session State Type Order
	MQ48/MA48	MQ432/MA48	Query Own Stop Orders
		MQ434/MA50	MQ50 With Trader ID QUERY
	MQ90/MA100	MQ396/MA100 + MQ474/MA100	Own Linked Order
	MQ100/MA100	MQ397/MA100	Own Inactive Linked Order
Proxy orders	MQ5/MA8		Proxy Order
	MQ34/MA34		Proxy Session State Type Order
	MQ47/MA47		Proxy Query Stop Order
	MQ49/MA49	MQ433/MA49	Query Inactive Stop Orders

BO5 recovery	MQ151/MA151		Order Broadcast
	MQ154/MA154		Order Broadcast Proxy
Trade recovery	CQ10/CA10		Query missing trade
	CQ11/CA11		Query missing trade historical
Trade reports	MQ78/MA78	MQ398/MA334	Trade Reports, Unmatched
	MQ80/MA80		Trade Reports Counterpart, Unmatched
	MQ121/MA121		External query own unmatched trade reports
	MQ122/MA122		Query Multi Leg Trade Reports Counterpart, Unmatched
Transactions	External	Proxy	
Order entry	MO31	MO415	Order Entry
	MO41	MO425	Stop Order
	MO2		Multi Leg Order Entry
	MO90	MO474	Linked Order
	MO37	MO421	Two-Sided Price Quotation
Order update	MO33	MO417	Alteration
	MO43	MO427	Alter Stop Order
	MO100	MO484	Alter Linked Order
Order delete	MO4	MO388	Order Deletion
	MO40	MO424	Inactive Deletion
	MO44	MO428	Delete Stop Order
Trade reports	MO74		Trade Report Deletion, Unmatched
	MO75	MO459	Trade Report
	MO76		Trade Report, Two-Sided
	MO119		Multi Leg Trade Report Deletion
	MO120		Multi Leg Trade Report
	MO121		One-Sided Multi Leg Trade Report
Broadcasts	Message	Name	
	BO5	Firm Order Book	
	BO55	Trade Report Notification	
	BO121	Multi Leg Trade Report Notification	
	BD6	Dedicated Trade Information	

3.2.1.1 Remarks

The MAQ field is only relevant to Order Entry transaction (MO31) and corresponding proxy. It is not possible to change MAQ field using “order update” transaction. Those fields are not relevant on “order cancel” transactions.

3.3 Structures

Existing reserved field [filler_9_s] in structure om_exchange_info shall be replaced by Minimum Acceptable Quantity field and filler field:

```
struct om_exchange_info {
  INT32_T clean_price_i // Clean price
  UINT8_T order_capacity_c // Order Capacity
  UINT8_T match_prevention_id_c // Match Prevention Id
  CHAR[4] clearing_firm_s // Clearing Firm
  CHAR[12] clearing_account_s // Clearing Account
  char[10] order_reference_s // Order Reference
  UINT32_T client_id_code_i // Client Identification Code
  UINT32_T investment_decision_within_firm_i // Investment Decision
  Within Firm
  UINT32_T execution_within_firm_i // Execution Within Firm
  CHAR[6] trader_id_s // Trader ID
  UINT8_T dea_c // Direct Electronic Access
  UINT8_T risk_reducing_ind_c // Risk Reducing Ind
  UINT8_T client_id_code_qual_c // Client Id Code Qualifier
  UINT8_T investment_decision_within_firm_qual_c // Investment
  Decision Within Firm Qualifier
  UINT8_T execution_within_firm_qual_c // Execution Within Firm Qualifier
  char[1] filler_1_s // Filler
  INT64_T min_acceptable_quantity_i // MAQ
```

4. Revision History

Date	Revision	Change Description
2018-09-19	1	Document created.
	2	

DRAFT