# OVERVIEW

The following specification defines the comma separated value (csv) protocol for all OATS messages sent by the ROM Engine to the OATS server process. ROM is the order execution engine that provides direct market access for Ronin Professional LLC (Ronin Pro). This OATS data is required to support the compliance/regulatory requirements for FINRA. Any 3rd party trading system that has been granted sponsored access by Ronin Pro is required to follow this data format. By generating an order audit trail using this cvs message format, we will be able to process this data in real time and make it available in our OrderMaster tool for monitoring. You will be required to capture all messages that change the state of an order starting with the original “new” order (E) and ending with a final “fill”, “cancel”, or “expired” (S) status message.

We also ask that you generate a backup OATS files on your end to help recover missing data in the event we experience any problems during the day with the real time OATS feed. By following the same message format and writing each message on a separate line, we have the ability to take your recovery file and process it (if needed) for missing data before we submit our OATS data to FINRA.

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# Logon to Oats Server

***Logon Request to oats server (Command = L)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Number** | **Field** | **Type** | **Required** | **Description** |
| 0 | Command | char | Yes | L |
| 1 | HHMMSS | string | No | Current time stamp in HH:MM:SS format (in GMT) |
| 2 | Login | string | Yes | It is assigned by Ronin Pro |
| 7 | Password | string | Yes | Is is assigned by Ronin Pro |

***Logon confirmation from oats server (Command = L)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Number** | **Field** | **Type** | **Required** | **Description** |
| 0 | Command | char | Yes | L |
| 1 | HHMMSS | string | No | Current time stamp in HH:MM:SS format (in GMT) |
| 2 | Login | string | No | The login from the client |
| 72 | Sequence | integer | No | This is the number of messages received from the client by oats server before this logon + 1. **It is required if this is a relogon**. **Logon message is not counted.** |

# New Single Order Messages sent directly to the Exchange

***Enter Single Order (Command = E)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Number** | **Field** | **Type** | **Required** | **Description** |
| 0 | Command | char | Yes | E |
| 1 | HHMMSS | string | No | Current time stamp in HH:MM:SS format (in GMT) |
| 2 | Trader | string | Yes | Trader acronym that is entering the order. Can be different from the login name however it has to be defined in ROM database. |
| 3 | Tag | String <= 32 characters | Yes | Client defined order tag. MUST be unique for a given day. |
| 4 | Side | integer | Yes | Side of this order:  1=Buy,  2=Sell 5=Short |
| 5 | Symbol | string | Yes | Security symbol.  Futures symbol includes month & year (i.e. ESM8)  Options = ABC APR 10 C (where ABC is the OCC symbol, APR is the 3 char month, 10 is the strike value, and C is either ‘C’all or ‘P’ut. |
| 6 | Shares | integer | Yes | Shares/Contracts – current order quantity |
| 7 | Price | double | No | Price in decimal format. This field is required for Limit and Stop Limit orders |
| 8 | Type | integer | Yes | order type:  1= Market  2=Limit  3=Stop  4=Stop Limit  5=Market On Close  11=Limit On Close  12=Market At Open |
| 9 | TIF | integer | Yes | time in force:  0=Day  1=Good Till Cancel(GTC)  2=submit order at the next day's open(OPG)  3=Immediate or Cancel(IOC)  4=Fill or Kill(FOK)  6=Good Till Date(GTD)  7=Extended Day |
| 10 | Capacity | char | Yes | Order capacity for Stock & Futures: A=Agent  For Options: S = Market Maker or B = B/D clearing firm at OCC |
| 11 | Clearing Id | string | Yes | 4 digit NSCC clearing firm number (Goldman = 0501) |
| 12 | Clearing Account | string | Yes | Clearing account number |

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| --- | --- | --- | --- | --- | --- |
| **Field Number** | **Field** | **Type** | | **Required** | **Description** |
| 13 | Exchange | integer | | Yes | Exchange destination. Please contact Ronin Pro for a list of valid Equity, Options, and Future exchange destinations. |
| 14 | Status | integer | | Yes | Current order status, set to 0 (New) when entering a new order “E”. |
| 15 | Instructions | string | | No | exchange dependent field: |
| 16 | PriceCheck | char | | No | Not Supported |
| 17 | ROM Tag | string | | Yes | Consult Ronin Pro development team for appropriate value |
| 18 | MinQty | integer | | No | Used by some exchanges for the minimum acceptable execution quantity.  0 (Zero) for no min qty |
| 19 | StopPrice | double | | No | For Stop order and Stop Limit order only |
| 20 | Discretionary | char | | No | Y – Discretionary Order  N – Non-Discretionary Order |
| 21 | Program trading flag | char | | No | This field is required when routing orders to the NYSE. Please contact Ronin Pro for a list of valid values. |
| 22 | Local Account | string | | Yes | Local Account identified by Ronin Capital’s portfolio. For non-Ronin Capital activity, please set this value the same as the Trader acronym. |
| 23 | Firm | string | | Yes | Clearing firm Acronym (GSEC, MFG, etc.) |
| 24 | Trade For | string | | Yes | Set to the trader acronym who owns the account (usually same as Trader Field(#2)) |
| 25 | N/A |  | | No | Not Supported. |
| 26 | DB Symbol | string | | No | The symbol for inserting trades to Ronin Capital TPOS database. Required if it is different from Symbol. (usually same as #33 for Futures and Options) |
| 27 | N/A |  | | No | Not Supported. |
| 28 | ROM Execution Tag | string | | Yes | It should be in the format of ROM Tag-Sequence. For example: if ROM Tag=TU70-20100226-10 ROM Execution Tag can be TU70-20100226-10-7. It should be unique cross all messages. |
| 29 | Execution Destination | string | | No | This field is required for stock orders  ‘N’=NYSE, ‘A’=AMEX , ‘O’=OTC, ’Direct+’=Direct Plus |
| 30 | Expiration date | string | | No | Expiration date for Future or Option. For example, 200807 for July, 2008. It is required for Future orders and Option orders and ignored for Stock orders. |
| 31 | Option type | char | | No | It is required for Option orders:  P=Put, C=Call |
| 32 | Strike price | double | | No | It is required for Option orders |
| 33 | Underlying | string | | No | It is required for Option and Future(including single stock future) order only |
| 34 | Max Floor | integer | | No | Max. shares to be displayed. This feature is not supported by all exchanges. Leave it blank if the exchange does not support this. **Note that zero value for this field means hidden order** |
| 35 | Security Type | char | | Yes | E=Equity, F=Future, O=Option, I=Option Index, J=Single stock future, K=Future Index, L=Future Currency, M=Option Future, S=Spread, X=Forex |
| 36 | Market Maker Account | string | | No | Market Maker’s OCC Account. It is required for Market Maker orders. |
| 37 | Market Maker home exchange | integer | | No | Market Maker home exchange. Please consult Ronin Pro for exchange number to use. It is required for Market Maker orders. |
| 38 | Open or Close | string | | No | 1=Open, 0=Close required for option orders.  For spread orders the value can be a string of ‘0’s, ‘1’s and ‘N’s |
| 39 | N/A | char | | No | N/A |
| 40 | Give-up Account | string | | Optional | Consult Ronin Pro for valid values |
| 41 | Order Destination | Integer | | Yes | Please use the same value as field #13 |
| 42 | LastShares | Integer | | No | Set it to 0 |
| 43 | OrigShares | Integer | | Yes | Same as field 6 |
| 44 | ExecPrice | double | | No | N/A |
| 45 | N/A | |  |  | Not Supported |
| 46 | CMTA Account | | string | Optional | Consult Ronin Pro development team for valid values |
| 47 | Order Expiration Date Time | | string | No | Expiration date time for orders with TIF=GTD (Good till date). It is required for GTD orders.  Format: YYYYMMDD-HH:MM:SS (in GMT) |
| 49 | Leave Shares | | Integer | Yes | Same as field 6 |

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| --- | --- | --- | --- | --- |
| **Field Number** | **Field** | **Type** | **Required** | **Description** |
| 52 | ROM Order Time | string | Yes | The time when ROM sends the order to the Exchange/ECN  Format: YYYYMMDD-HH:MM:SS (in GMT) |
| 53 | Client Order Time | char | Yes | The time when the Client sends the order to the ROM system  Format: YYYYMMDD-HH:MM:SS (in GMT) |
| 57 | Execution Instruction | char | No | Exchange specific. |
| 58 | Short Lender | string | Yes | Required only for equity Short Sell orders. NASD Rule 3370 – identify who has loaned the stock to settle. MPID or 4 digit clearing number. Consult with Ronin Pro for valid values. |
| 62 | Maturity Day | integer | No | Required for option order. It is the day of the month. |
| 63 | Display Factor | string | No | This field is per exchange specific. Please consult Ronin Pro for its valid values. |
| 64 | Peg offset | double | No | Required if the peg order is sent with peg offset. |
| 66 | Complex Type | integer | No | Required for complex type and the valid values are:  3:body of user defined complex order  5:body of product type complex order  6:leg of complex order |
| 67 | Client echo | string | No | If it is provided (by client) it will be included in every messages of the order. |
| 78 | Security ID | string | No | Value is exchange specific |
| 79 | Multiplier | integer | No | This field is required for futures |

*Note:* If trade is being done on behalf of another trader, then the ClearingId, ClearingAccount, LocalAccount and Firm fields have to represent the trader whose account the trade will go in (TradeFor field).

# Cancel, Replace, and Status Messages sent/received directly to the Exchange

### Status Message (Command = S)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Number** | **Field** | **Type** | **Required** | **Description** |
| 0 | Command | char | Yes | S |
| 1 | HHMMSS | string | No | Current time stamp in HH:MM:SS format (in GMT) |
| 2 | Trader | string | Yes | Trader acronym that is entering the order. Can be different from the login name however it has to be defined in ROM database. |
| 3 | Tag | String | Yes | Client defined order tag. MUST be unique for a given day and match the original order |
| 4 | Side | integer | Yes | Side of this order:  1=Buy,  2=Sell 5=Short |
| 5 | Symbol | string | Yes | Security symbol.  Futures = Futures symbol including month & year (i.e. ESM8)  Options = ABC APR 10 C (where ABC is the OCC symbol, APR is the 3 char month, 10 is the strike value, and C is either ‘C’all or ‘P’ut. |
| 6 | Shares | integer | Yes | Shares/Contracts – current order quantity |
| 7 | Price | double | No | Current price of the order (in decimal format). This field is required for Limit and Stop Limit orders |
| 8 | Type | integer | Yes | order type:  1= Market  2=Limit  3=Stop  4=Stop Limit |
| 9 | TIF | integer | Yes | time in force:  0=Day  1=Good Till Cancel(GTC)  2=submit order at the next day's open(OPG)  3=Immediate or Cancel(IOC)  4=Fill or Kill(FOK)  6=Good Till Date(GTD)  7=Extended Day |
| 10 | Capacity | char | Yes | Order capacity for Stock & Futures: A=Agent  For Options: S = Market Maker or B = B/D clearing firm at OCC |
| 11 | Clearing Id | string | Yes | 4 digit NSCC clearing firm number (e.g. Goldman = 0501) |
| 12 | Clearing Account | string | Yes | Clearing account number |
| 13 | Exchange | integer | Yes | Exchange destination. Must match the same value as the original order. |
| 14 | Status | integer | Yes | Current Order Status :  0=New (Order has been sent to exchange),  1=Partially Filled  2=Filled  3=Done For Day  4=Canceled  5=Replaced  7=Stopped  8=Rejected  12=Expired,  13=Open (Order has been received by exchange).  14=Cancel Rejected,  15=Corrected,  16=Busted,  20=Replace Rejected,  21=Replace Pending,  26=ROM Cancel Pending(This is generated when cancel is created)  27=ROM Replace Pending (This is generated when replace is created. The replaceable order attributes showing in this message should be the values that you intend to change to) |
| 15 | Order Tag | string | Yes | Current order ID with exchange |
| 16 | Exchange Tag | string |  | Required if the exchange send it to us. Exchange Order ID |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Number** | **Field** | **Type** | **Required** | **Description** |
| 17 | ROM Tag | string | Yes | Consult ROM developers for appropriate value. Must match value in original “Single Order” E message |
| 18 | MinQty | integer | No | Used by some exchanges for the minimum acceptable execution quantity.  0 (Zero) for no min qty |
| 19 | StopPrice | double | No | For Stop order and Stop Limit order only |
| 20 | Discretionary | char | No | Y – Discretionary Order  N – Non-Discretionary Order |
| 21 | Program trading flag | char | No | The value needs to be consistent with what you put in the order |
| 22 | Local Account | string | Yes | Local Account identified by Ronin Capital |
| 23 | Firm | string | Yes | Clearing firm Acronym (GSEC, MFG, etc.) |
| 24 | Trade For | string | Yes | Set to the trader acronym who owns the account (usually same as Trader Field(#2)) |
| 25 | N/A |  | No | Not Supported. |
| 26 | DB Symbol | string | No | The symbol for inserting trades to Ronin TPOS database. Required if it is different from Symbol. (usually same as #33 for Futures and Options) |
| 27 | N/A |  | No | Not Supported. |
| 28 | ROM Execution Tag | string | Yes | See description of the same field for COMMAND=E |
| 29 | Execution Destination | string | No | This field is required for stock orders  ‘N’=NYSE, ‘A’=AMEX , ‘O’=OTC, ’Direct+’=Direct Plus |
| 30 | Expiration date | string | No | Expiration date for Future or Option. For example, 200807 for July, 2008. It is required for Future orders and Option orders and ignored for Stock orders. |
| 31 | Option type | char | No | It is required for Option orders:  P=Put, C=Call |
| 32 | Strike price | double | No | It is required for Option orders |
| 33 | Underlying | string | No | It is required for Option and Future(including single stock future) order only |
| 34 | Max Floor | integer | No | Max. shares to be displayed. This feature is not supported by all exchanges. Set to 0 if the exchange does not support this. |
| 35 | Security Type | char | Yes | E=Equity, F=Future, O=Option, I=Option Index, J=Single stock future, K=Future Index, L=Future Currency, M=Option Future, S=Spread, X=Forex |
| 36 | Market Maker Account | string | No | Market Maker’s OCC Account. It is required for Market Maker orders. |
| 37 | Market Maker home exchange | integer | No | Market Maker home exchange. Please consult Ronin Pro for exchange number to use. It is required for Market Maker orders. |
| 38 | Open or Close | Boolean | Yes | 1=Open, 0=Close designation for option orders. |
| 39 | N/A | char | No |  |
| 40 | Give-up Account | string | Optional | Consult Ronin Pro for valid values |
| 41 | Order Destination | Integer | Yes | Please use the same value as field #13 |
| 42 | LastShares | Integer | Yes | Filled shares in last transaction(when Status is Partially Filled or Filled) |
| 43 | OrigShares | Integer | Yes | Original order quantity, **no matter how many CancelReplace have been done**. |
| 44 | ExecPrice | double | Yes | Execution price of last transaction(when Status is Partially Filled or Filled) |
| 45 | N/A |  |  | N/A |
| 46 | CMTA Account | string | Optional | Consult Ronin Pro for valid values |
| 47 | Order Expiration Date Time | string | No | Expiration date time for orders with TIF=GTD (Good till date). It is required for GTD orders.  Format: YYYYMMDD-HH:MM:SS (in GMT) |
| 48 | Cum Shares | integer | Yes | Total executed shares/contracts |
| 49 | Leave Shares | integer | Yes | The unexecuted shares |
| 50 | Transaction Time | string | N | This field is required when field 14 is equal to 1 or 2. The time the status report was generated by exchange  Format:YYYMMDD-HH:MM:SS.mmm (where mmm is milliseconds) |
| 52 | ROM Time | string | Yes | The time when ROM creates this ‘S’ message  Format: YYYYMMDD-HH:MM:SS (in GMT) |
| 53 | Client Order Time | char | No | Required when tag 14 equals to 26 or 27. The time when the Client sends cancel request or replace request the ROM system  Format: YYYYMMDD-HH:MM:SS (in GMT) |
| 54 | Exchange Execution Tag | string | No | FIX tag 17. Required when CSV tag 14 is 1 or 2 |
| 57 | Execution Instruction | char | No | Exchange specific. |
| 58 | Short Lender | string | Yes | Required only for equity Short Sell orders. NASD Rule 3370 – identify who has loaned the stock to settle. MPID or 4 digit clearing number. Consult Ronin Pro for the valid values |
| 62 | Maturity Day | integer | No | Required for Option Order. It is the day of month |
| 64 | Peg offset | double | No | Required if a peg order is sent with the peg offset |
| 66 | Complex Type | integer | No | Required for complex type and the valid values are:  3:body of user defined complex order  5:body of product type complex order  6:leg of complex order |
| 67 | Client echo | string | No | The value provided by client in ‘E’ message |
| 69 | Billing Code(or liquidity flag) | string | No | Provided by exchange for fill/partial fill. Indicates if the fill provides or takes liquidity. |
| 78 | Security ID | string | No | Value is exchange specific |
| 79 | Multiplier | integer | No | This field is required for futures and option |