FIS SLE API V3/V4

Version 2.0 November 2018



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1. Revision History

Version #	Date	Author/Editor	Version/Revision Comments
1.0	March 2017	Sabria BENHAMIDA	New SLE API document format
2.0	November 2018	Sabria BENHAMIDA	Addition of details for Technical fields (see section Technical fields). Addition of fields from #64 to #136 in the Service Request (2700)

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2. Purpose of the document

This manual is intended for people responsible for programming custom applications connecting to a FIS Valdi TCC order routing server (SLE). The purpose of this document is not to detail all the exchange-specific fields; that information can be retrieved in the Exchange-specific API documentation.

3. Prerequisites

General knowledge of API concepts and client-server communication.

4. How is this document organised?

This document is made up of four sections.

- ✓ The first section examines the types of variables that can fill these fields.
- The second section explores the message format. It describes the cinematic and the format of each requests.
- ✓ The third section describes data used in the message format.
- ✓ The fourth give the path to know the data and values used in the bitmap.

5. Encoding type

In v3 API messages, variables can take one of the following four formats:

√ v3 Format ("GL format")

In the v3 format, the first byte indicates the length of the field.

The length is calculated as following:

Value + 32 in ASCII

E.g.length = 7

First byte = 7 + 32 = 39 =« ' »

The rest is the contents of the field coded in ASCII.

E.g. value = FTE

First byte = 3 + 32 = 35 = " # "

Rest = « FTE »

So the field = « #FTE »

Warning: This format imply that these fields have a variable length.

✓ ACSII : Data field in ASCII format.

E.g. 02007 coded « 02007 »

✓ <u>Filler</u> : Field only contains spaces : ASCII char(32).

✓ **GL C** : Fixed-length coded over one byte.

Value + 32

E.g. value = 7

Field = 7+32=39= « ' »

6. Encoding reference

Internal references generated by the server use an encoded algorithm in base 62.

These references are unique whatever the SLE that generates it

It is important to note that these references are $\underline{\textbf{case-sensitive}}$

7. Message Format

7.1 Message Structure

A v3 API message is an 8-bit ASCII string of variable length which must adhere to the following format:

LG HEADER	DATA	FOOTER
-----------	------	--------

Where:

□ LG : Total message length (including LG, Header, Data, Footer)

□ Header : General message information

Data : Message dataFooter : End of message

7.2 LG

The LG section contains the total length of the message.

It is coded over 2 bytes: LG[0] and LG[1], where :

□ LG[0] : LG%256 (remainder of LG/256)

□ LG[1] : LG/256 (integer part of LG/256)

 \Box LG = LG[0] + 256 * LG[1]

7.3 Header

The header has a standard fixed length of 32 bytes.

Remark : The format of the header is the same for all market data and order routing servers versions, only the API version field changes.

For SLE V4, this field must be filled with « »

Type	Width	Field		
BINARY	1	STX = 2		
ASCII	1	API version « » for SLE V4		
ASCII	5	Request size		
ASCII	5	Called logical identifier		
FILLER	5	Filler		
ASCII	5	Calling Logical identifier		
FILLER	2	Filler		
ASCII	5	Request Number		
FILLER	3	Filler		

7.4 Data

All the requests here encompass two kinds of data.

✓ Data used for the formatting of the request. This data is generic and always present. It forms the skeleton of a request.

This data is described in the section « Data used in a request »

✓ Data used to send orders and in the reply from the exchanges.

To learn more about this data, consult the section: «Data used and domain values ».

7.5 Footer

The footer is of a fixed length of 3 bytes and indicates the end of a message. It only contains fillers and binary fields.

Remark: The format of the header is the same for all market data and order routing servers versions.

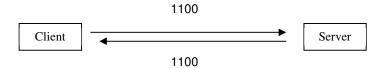
Туре	Width	Field
FILLER	2	Filler
BINARY	1	ETX = 3

8. Logical Connection 1100

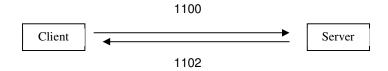
8.1 Usage

Mechanism for logical Connection.

Connection accepted



Connection Refused



8.2 Format

Position	Name	Туре	Coding	Max length	Rep1
		QUE	STION		
0	User Number	NUM	ASCII	3	
1	Password	CHAR	ASCII	16	
7	Filler	FILLER	ASCII	7	
10	Key	CHAR	GL	X	Number of key
11	Value	CHAR	GL	Χ	time
		RI	EPLY		
0	User Number	NUM	ASCII	3	
1	Password	CHAR	ASCII	16	
2	Reason	NUM	GL_C	1	
	Key	CHAR	GL	Х	Number of key
	Value	CHAR	GL		time

8.3 Data used in requests

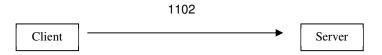
Key	Usage	Notes		
QUESTION				
2	Extended user number of the modifier of the password	Up to 999999.		
	REPL	Υ		
1	Does password change authorized	"0" : NO "1" : Yes		
7	Password validity	Password validity		
22	Server version	Server version		
27	Unique SLE ID	V3#474 Global SLE reply ID This ID is guaranteed to be unique as it is a encoded combination of date, time and sequence number. SLE restarts, compression will not result in the possibility of non-unique IDs		
30	Previous session mode ALL	Indicates that the SLE manages the value 2 and # for the field previous session		

9. Logical disconnection 1102

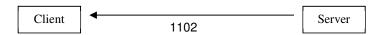
9.1 Usage

Mechanism for logical disconnection.

Voluntary disconnection:



Involuntary disconnection



9.2 Format

Position	Name	Туре	Coding	Max length
		QUESTION		
0	User Number	INT	ASCII	3
1	Password	CHAR	ASCII	16
	Filler	Filler	ASCII	1
		REPLY		
0	User Number	INT	ASCII	3
1	Password	CHAR	ASCII	16
2	Reason	INT	GL_C	1
	Reject description	CHAR	GL	Х
	Key	NUM	GL	According to
	Value	CHAR	GL	the length

0 The couple (Key, Value) is appears twice in the reply of the request 1102.

Tag	Value	
	Description of the couple values	
1 0: that means user configuration changes are not implemented		
7	'YYYYMMDDHHMMSS': Date format for the validity of the password	

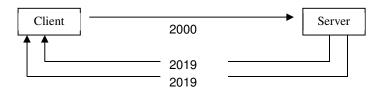
10. Order management 2000

10.1 Description

This request allows sending of basic orders, and to modify or cancel them.

10.2 Usage

Mechanism to send an order management request



SLE sends back 'n' requests 2019 which correspond to the number of orders sent in request 2000.

10.3 Format

Position	Name	Туре	Coding	Max length
	Question			
В	User Number	INT	ASCII	5
С	Request Category	CHAR	ASCII	1
D1	Command	INT	ASCII	1
G	Stockcode	CHAR	GL	X
	Filler	FILLER	FILLER	10
	Data for order	INT/CHAR	GL	X

To know the data of order, see the section: «Data used and domain values ».

The format of request 2000 and 2000 OTC is the same. The difference is inside the bitmap.

11. Real time messages 2017

11.1 Description

Before sending orders to an exchange, it is better to first check that all types of messages can be received. The 2017 request allows the client application to obtain them in asynchronous mode.

This request in from client to server only, and is mandatory to receive SLE unsolicited messages sent in 2019 requests.

11.2 Usage

Mechanism for subscription:



The request allows receiving request 2019.

11.3 Format

Position	Name	Туре	Coding	Max length
	Qu	estion		
E1	Reply acknowledgement	INT	ASCII	1
E2	Reply reject	INT	ASCII	1
E3	Reply exchange reject	INT	ASCII	1
E4	Reply trade execution	INT	ASCII	1
E5	Reply exchange message	INT	ASCII	1
E6	Default reply type	INT	ASCII	1
E7	Reply inflected message	INT	ASCII	1
	Filler	FILLER	FILLER	11

12. Unsubscribe request 2018

12.1 Usage

Mechanism for Unsubscription



This request stops the send of requests 2019.

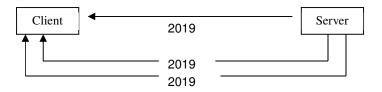
12.2 Format

Position	Name	Type	Coding	Max length		
	Question					
	Filler	FILLER	FILLER	18		

13. Simple order real time message 2019

13.1 Usage

This request is only in reply.



13.2 Format

Position	Name	Туре	Coding	Max length
	F	Reply		
Α	Chaining	INT	ASCII	1
В	User number	INT	ASCII	5
С	Request category	CHAR	ASCII	1
D	Reply type	CHAR	ASCII	1
E	Index	INT	ASCII	6
F	Number of replies	INT	ASCII	5
G	Stockcode	CHAR	GL	X
	Filler	FILLER	FILLER	10
	Data for order	INT/CHAR	GL	X

To know the data of order, see the section: «Data used and domain values ».

<u>Important</u>: Field #62 "index" of the section "Data for order" indicates the real index.



14. Order book consultation 2004

14.1 Description

The 2004 request, when sent from the client to the SLE, asks the SLE for a snapshot of all orders sent on the market and their status.

14.2 Usage

Mechanism for order book consultation.



14.3 Format

Number	Name	Туре	Coding	Max Length
	C	UESTION		
В	User number	INT	ASCII	5
С	Request category	CHAR	ASCII	1
D2	Question	CHAR	ASCII	1
	Filler	FILLER	FILLER	7
G	Stockcode	CHAR	GL	X
E	Index	INT	ASCII	6
F	Number of replies	INT	ASCII	5
	Filler	FILLER	FILLER	20
		REPLY		
Α	Chaining	INT	ASCII	1
В	User Number	INT	ASCII	5
С	Request category	CHAR	ASCII	1
	Filler	FILLER	FILLER	1
E	Index	INT	ASCII	6
F	Number of replies	INT	ASCII	5
G	Stockcode	CHAR	GL	Х
	Filler	FILLER	FILLER	10
	Data for order	INT/CHAR	GL	X

15. Reply consultation 2008

15.1 Description

The 2008 request, when sent from the client to the SLE, asks the SLE for a snapshot with the corresponding messages sent by the SLE for the client orders.

15.2 Usage

Mechanism for reply consultation.



Format

Number	Name	Туре	Coding	Max length
	QUES	TION		
В	User number	INT	ASCII	5
С	Request category	CHAR	ASCII	1
D2	Question	CHAR	ASCII	1
E1	Reply acknowledgement	INT	ASCII	1
E2	Reply reject	INT	ASCII	1
E3	Reply exchange reject	INT	ASCII	1
E4	Reply trade execution	INT	ASCII	1
E5	Reply exchange message	INT	ASCII	1
E6	Default reply type	INT	ASCII	1
E7	Reply inflected message	INT	ASCII	1
G	Stockcode	CHAR	GL	Х
E	Index	INT	ASCII	6
F	Number of replies	INT	ASCII	5
	Filler	FILLER	FILLER	20
	Rep	oly		
A	Chaining	INT	ASCII	1
В	User Number	INT	ASCII	5
	Request category	CHAR	ASCII	1
D	Reply type	CHAR	ASCII	1
E	Index	INT	ASCII	6
F	Number of replies	INT	ASCII	5
G	Stockcode	CHAR	GL	Х
	Filler	FILLER	FILLER	10
	Data for order	INT/CHAR	GL	X

To know the data for order, see the section : «Data used and domain values ».

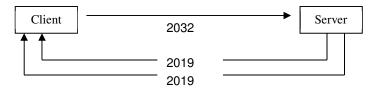
<u>Important</u>: Field #62 "index" of the section "Data for order" indicates the real index. It is currently ONLY available on 'Reply', not on 'Question'. Therefore, in API v3, the message limit index is effectively 999,999



16. Price publicity 2032

16.1 Usage

Mechanism to send an order management



16.2 Format

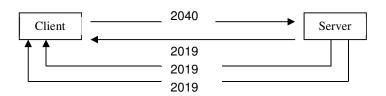
Position	Name	Туре	Coding	Max length
	Ques	tion		
В	User Number	INT	ASCII	5
С	Request Category	CHAR	ASCII	1
D1	Command	INT	ASCII	1
G	Stockcode	CHAR	GL	X
	Filler	FILLER	FILLER	10
	Data for order	INT/CHAR	GL	X

To know the data of order, see the section : «Data used and domain values ».

17. Grouped Orders 2040

17.1 Usage

Mechanism for grouped orders.



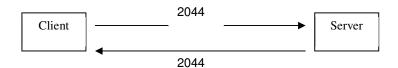
17.2 Format

Position	Name	Туре	Coding	Max length	Repetition
	Q	UESTION			
M	Message type	CHAR	ASCII	1	
G	Default Stockcode	CHAR	GL	Х	
N1	Number of default data fields	INT	ASCII	5	
	Filler	FILLER	FILLER	5	
	Default data for order	INT/CHAR	GL	X	
N2	Number of order	INT	ASCII	3	
		REPLY			
L	Length of order	INT	ASCII	5	
В	User number	INT	ASCII	5	
С	Request category	CHAR	ASCII	1	
D1	Command	INT	ASCII	1	"Number of
G	Stockcode	CHAR	GL	X	order" times
N1	Number of data fields	INT	ASCII	5	
	Filler	FILLER	FILLER	5	
	Data for order	CHAR	GL	X	

To know the data for order, see the section : «Data used and domain values ».

18. Grouped Orders Consultation 2044

18.1 Usage



18.2 Format

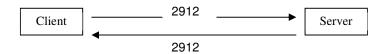
Position	Name	Туре	Coding	Max length	Repetition
		QUESTIC	N		
M	Message type	CHAR	ASCII	1	
D2	Question	CHAR	ASCII	1	
Е	Index	INT	ASCII	6	
F	Number of replies	INT	ASCII	5	
N2	Number of orders	INT	ASCII	5	
В	User number	INT	ASCII	5	
С	Request category	CHAR	ASCII	1	
G	Stockcode	CHAR	GL	X	
	Filler	FILLER	FILLER	10	
		REPLY			
М	Message type	CHAR	ASCII	1	
Α	Chaining	CHAR	ASCII	1	
Е	Index	INT	ASCII	6	
F	Number of replies	INT	ASCII	5	
G	Stockcode	CHAR	GL	X	
N1	Number of data fields	INT	ASCII	5	
	Filler	FILLER	FILLER	5	
	Data for order	CHAR	GL	X	
N2	Number of order	INT	ASCII	5	
В	User number	INT	ASCII	5	
С	Request category	CHAR	ASCII	1	
D1	Command	INT	ASCII	1	
G	Stockcode	CHAR	GL	X	"Number of
N1	Number of data fields	INT	ASCII	5	order" times
	Filler	FILLER	FILLER	5	
	Data for order	CHAR	GL	Х	

To know the data for order, see the section: «Data used and domain values ».



19. Orders Positioning 2912

19.1 Usage



19.2 Format

Name	Туре	Coding		
	Que	stion		
Tag	NUM	GL		
Value	CHAR	GL		
Reply				
Tag	NUM	GL		
Value	CHAR	GL		

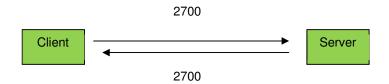
Where tags are defined as:

1	UTI
2	Exchange name
3	Exchange label
4	Buffer length
5	Buffer

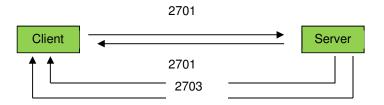
20. Service Request 2700-2703

20.1 Using

Mechanism of reply consultation.



Mechanism of subscription.



20.2 Format

	QUESTION (2700 - 2701 - 2702)				
Name	Туре	Repeating			
Tag	NUM	A constitue the level			
Value	CHAR	According the length			

	REPLY (2700 - 2701 - 2703)				
Name	Туре	Repeating			
Tag	NUM	A coording the Joneth			
Value	CHAR	- According the length			

20.3 Data's used in Service Requests (2700)

Following the key, these fields allow to enter different values		Key / Value Q R					
User number (extended)							
User number (extended)							
User number (extended)	Key						
This field indicates the GL user number which identifie the user User Number into [0-9999] 2 User type This field gives the origin/type of client 1 GL Win 2 Selector 3 API 4 Messenger 3 Client version Reply 1 User number (extended) Mandatory This field indicates the GL user number which identifie the user User Number into [0-9999] 4 AP Identification Mandatory 5 Exchange Label Mandatory 6 Exchange Name Mandatory 7 Flag for other AP Optional This field gives the kind of client 0 if it's the last request if another request on AP has to 1 come 8 AP status Mandatory 9 Number of possible traded Glid Optional 10 Glid Optional 11 UTI rights Optional 11 UTI range Optional 12 UTI range Optional 13 SLE core version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Date Mandatory 19 SLE timezone Mandatory SLE timezone Mandatory							
1 GL Win 2 Selector 3 API 4 Messenger 3 Client version Reply 1 User number (extended)		, ,	This field indicates the GL user number which identifie the user User Number into [0-9999]				
2 Selector 3 API 4 Messenger 3 Client version Reply 1 User number (extended) AP Identification 5 Exchange Label 6 Exchange Name 7 Flag for other AP 8 AP status 9 Number of possible traded Glid 10 Glid 11 UTI rights 12 UTI range 13 SLE core version 14 AP version 15 SLE core GMT Start Date 16 SLE core GMT Start Time 17 AP GMT purge Time 18 AP GMT purge Time 19 SLE timezone 19 Mandatory 10 Glid Mandatory 10 Mandatory 11 AP GMT purge Time 10 Mandatory 11 Mandatory 12 UTI range Mandatory 13 SLE core GMT Start Time 14 AP GMT purge Time 15 Mandatory 16 SLE timezone 17 Mandatory 18 AP GMT purge Time 18 Mandatory 19 SLE timezone 18 Mandatory 19 SLE timezone 19 Mandatory 19 SLE timezone 10 Mandatory 10 Mandatory 10 Mandatory 11 Mandatory 12 Central system timezone 11 Mandatory 12 Mandatory 13 SLE timezone 14 Mandatory 15 SLE timezone 16 Mandatory 17 Mandatory 18 Mandatory 19 SLE timezone Mandatory	2	User type	This field gives the origin/type of client				
3 Client version Reply 1 User number (extended) AP Identification Exchange Label Exchange Name Mandatory Flag for other AP AP status A							
3 Client version Reply 1 User number (extended) AP Identification 5 Exchange Label 6 Exchange Name 7 Flag for other AP Optional 10 Glid 10 Glid 10 ITI rights 10 ITI rights Optional 11 UTI range 12 UTI range 13 SLE core version 14 AP version Mandatory			2 Selector				
Client version Reply			3 API				
Client version Reply			4 Massangar				
Reply	3	Client version	+ Micoodinger				
User number (extended)	J	0.10.11	Reply				
This field indicates the GL user number which identifie the user User Number into [0-9999] 4	1	User number (extended)					
the user User Number into [0-9999] 4 AP Identification Mandatory 5 Exchange Label Mandatory 6 Exchange Name Mandatory 7 Flag for other AP Optional This field gives the kind of client 0 if it's the last request if another request on AP has to 1 come 8 AP status Mandatory 9 Number of possible traded Glid Optional 10 Glid Optional 11 UTI rights Optional 12 UTI range Optional 13 SLE core version Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory 10 Mandatory 10 Mandatory 11 Mandatory 12 Mandatory 13 Mandatory 14 AP GMT purge Date Mandatory 15 SLE timezone Mandatory 16 SLE timezone Mandatory 17 AP GMT purge Time Mandatory 18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory		,					
User Number into [0-9999] 4 AP Identification Mandatory 5 Exchange Label Mandatory 6 Exchange Name Mandatory 7 Flag for other AP Optional This field gives the kind of client 0 if it's the last request if another request on AP has to 1 come 8 AP status Mandatory 9 Number of possible traded Glid Optional 10 Glid Optional 11 UTI rights Optional 12 UTI range Optional 13 SLE core version Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory 19 SLE timezone Mandatory							
4 AP Identification Mandatory 5 Exchange Label Mandatory 6 Exchange Name Mandatory 7 Flag for other AP Optional This field gives the kind of client 0 if it's the last request if another request on AP has to 1 come 8 AP status Mandatory 9 Number of possible traded Glid Optional 10 Glid Optional 11 UTI rights Optional 11 UTI range Optional 12 UTI range Optional 13 SLE core version Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory 19 SLE timezone Mandatory 20 Central system timezone Mandatory							
5 Exchange Label Mandatory 6 Exchange Name Mandatory 7 Flag for other AP Optional This field gives the kind of client 0 if it's the last request if another request on AP has to 1 come 8 AP status Mandatory 9 Number of possible traded Glid Optional 10 Glid Optional 11 UTI rights Optional 11 UTI range Optional 12 UTI range Optional 13 SLE core version Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory 20 Central system timezone Mandatory		10.11					
6 Exchange Name							
7 Flag for other AP Optional This field gives the kind of client 0 if it's the last request if another request on AP has to 1 come 8 AP status 9 Number of possible traded Glid Optional 10 Glid Optional 11 UTI rights Optional Root or not 12 UTI range Optional In case of user root 13 SLE core version Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT purge Date Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory Mandatory 19 SLE timezone Mandatory Mandatory Optional In case of user root Mandatory		Exchange Label					
This field gives the kind of client 0 if it's the last request if another request on AP has to 1 come 8 AP status 9 Number of possible traded Glid Optional 10 Glid Optional 11 UTI rights Optional Root or not 12 UTI range Optional In case of user root Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory Mandatory 19 SLE timezone Mandatory							
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if another request on AP has to 1 come 8 AP status			This field gives the kind of client				
if another request on AP has to 1 come 8 AP status			_				
1 come 8 AP status			·				
8 AP status							
9 Number of possible traded Glid Optional 10 Glid Optional 11 UTI rights Optional 12 UTI range Optional 13 SLE core version Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory 20 Central system timezone Mandatory Mandatory Mandatory Mandatory Mandatory	8	AP status					
10 Glid Optional 11 UTI rights Optional Root or not 12 UTI range Optional In case of user root 13 SLE core version Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory 20 Central system timezone Mandatory							
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13 SLE core version Mandatory 14 AP version Mandatory 15 SLE core GMT Start Date Mandatory 16 SLE core GMT Start Time Mandatory 17 AP GMT purge Date Mandatory 18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory 20 Central system timezone Mandatory	12	UTI range	· ·				
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18 AP GMT purge Time Mandatory 19 SLE timezone Mandatory 20 Central system timezone Mandatory							
19 SLE timezone Mandatory 20 Central system timezone Mandatory							
20 Central system timezone Mandatory							
	21	Maximum byte number managed by SLE	Mandatory				
Bitmap length		land a first managed by GLL					
22 SELECTOR Version Optional	22	SELECTOR Version					
23 SLE core and AP OS Optional							

24	Negociation Key	Mandatory
26	AP Trigger type	Kind of trigger orders managed by Exchange
27	GLTS Version	Optional
28	GLTS trigger type	Optional
29	Last Nia	Mandatory
30	AP Trigger exchange message	Optional
31	GLTS work type	Mandatory
32	AP work type	Mandatory
33	GLTS trigger available for client	i wandatory
34	GLTS work available for client	
35	GLTS work available for client	
36	AP supported validities	Mandatory
37	GLTS supported validities	Mandatory
38	CCM version	Mandatory if a SOM is connected
39	GLTS user ID	IMATIDATORY II A SOM IS CONTIECTED
40	Purge in progress	Indicates if a purge is in progress
40	Furge in progress	
		0 Other
		1 Purge in progress
41	Selector status	Mandatory
	Colotto statas	Indicates the Selector status
		maisates the colottol states
		O. Colostor not connected to CLEVE
		0 Selector not connected to SLEV5
		 Selector connected to SLEV5
42	GLTS status	Mandatory
		,
		0 GLTS not connected to SLEV5
		1 GLTS connected to SLEV5
43	User connect from relay ack type	
44	User connect from relay action	
45	GTC validity max days	
46	CO Tactis	Only for OMS
47	Quote management	1 : No order ID management
		2 : Order ID management
48	Used quote queuing	1: Yes
		Else : No
49	Quote replace activation	
50	Connection to market	Indicates if the exchange connection is available
51	Client classification	
52	Execution criteria	
53	Split	
54	Overnight	
55	Used quote fast	Mandatory
56	Number of settlement authorize	Mandatory if 57 is present
57	Settlement authorize	Indicates the settlement type authorize on RTS
58	Internal modification	Indicates if the SLE manages the new methode for the
		internal modification
59	Hidden rebbok supported	Indicates if the SLE manages the hidden rebook (0 not
		supported - 1 supported)
60	Local order	Indicates if the SLE manages the local order.
		Mandatory
61	Number of sessions ID	Indicates the number of sessions defined into the tag 62;
		Mandatory if tag 62 is present



62	Session ID	Indicates the sessions ID which compose the Group
02	Cossion is	session. In the case where a group is defined, this one is
		into the tag 4.
63	Allocation	Indicates that the SLE manages allocation
		Mandatory
64	Match / Unmatch	Indicates that the SLE manages the match / unmatch.
		1: Supported
		0: Not supported.
65	Number of connected sessions in group	Indicates the number of sessions in the connected group
66	Connected sessions in group	Indicates the sessions connected
67	Number of purged sessions in group	Indicates the number of sessions in the purged group
68	Purged sessions in group	Indicates the sessions purged
69	Manual trade	Indicates if the SLE manages the manual trade
		1: Supported
		0: Not supported.
70	Order reparenting	Indicates it is possible to change the parent order id of
		an order
		1: Supported
		0: Not supported.
71	Number of Allocation GLID	Indicates the number of GLID in the repeating group
' '	Trained of Allocation GEID	Allocation GLID
72	Allocation GLID	Indicates the GLID where the allocation is authorized
73	Execution reassign	Indicates that the executions can be reassign
		1: Supported
		0: Not supported.
74	Previous session mode ALL	Indicates that the SLE manages the value 2 and # for the
		field previous session
75	ID of the SLE	Unique ID for a SLE
76	Validity trigger available	Indicates that the exchange manage the "validity trigger"
		0: Not supported.
		1: Supported
		2: The Exchange manage the Stop, MIT and Trading
		phase trigger validity
77	New purge management	Indicates that the server manage the new workflow for
		the purge
78	Number of 24 hours horodatage	
79	24 hours horodatage	
80	LSE - Hidden specification	ONLY FOR LSE: Indicates that the Hidden order limit is
		managed by the AP only for
		Day, Preopen, auction, onclose, gtc AND Pegged mid price
81	Manual command authorize	by the AP and not GLTS Indiactes that the manual commands are authorize
01	wanuai commanu aumonze	moractes that the manual commands are authorize
		1: Supported
		0: Not supported
82	Native global cancellation	A new tag is to be added to the service request to
		indicate whether the market natively supports
		globalcanellation or not. This information will be used by
		the GLWIN to present the user with an option to send a
		global cancelaltion directly to the market.



		1: Supported
		0: Not supported
83	Serialized Command	Indicates that the SLE manages the linked commands
		4. O was a dad
		1: Supported
0.4	Number of client to se	0: Not supported
84 85	Number of client tags	Indicates the number of fields managed for this client Field to send for this client
86	Client tags Force GLTS	Indiactest that the field #889 is managed by the server
87	Supported Peg type	Indicates that the held #009 is managed by the server
88	Permissioning and supervision	Indicates the peg type supported Indicates if the permissioning is allowed
00	Termissioning and supervision	1: Enable
		2: Disable
89	Cancel the remaining child orders	Cancel the remaining child orders on the market and the
		Approve and Adjust to the best Reduced Quantity
90	Connected Server ID	used to identify subNode of all connected SLE
91	Manage order to be confirm	Manage order to be confirm
92	Cancel child orders	possibility to cancel orders on natives SLE
93	Combine dealing reporting	Ability to combine client orders in dealing/reporting
		status.
		0: Not available
0.4	STP DMA	1: Available to combine
94	STP DMA	Allowing user to specify STPDMA flag during order
95	Cross Creation Type	combining operation. New Cross Management
95	Cross Creation Type	New Cross Management
		1: One side only
		2: Double side only
		3: Double side and one side supported
		4: Not allowed
96	Cross Update Type	Update Cross Management
		1: One side only
		2: Double side only
		3: Double side and one side supported
07	Conse Consel Torse	4: Not allowed
97	Cross Cancel Type	Cancel Cross Management
		1: One side only
		2: Double side only
		3: Double side and one side supported
		4: Not allowed
98	Audit trail consultation	Audit trail consultation request available
99	Compressed Consultation	Activate the reply mode on the request 2968
100	Allow Undo sales complete function	Need to activate the undo sales complete function
101	Trigger in ms	Trigger in millisecond manages by GLTS
102	Slice available	Indicates the ability to slice orders
		0: Slice is not available
100	Nov. Evention Demonths	1: Slice is available
103	New Execution Report Management	Indicates if the SOM manages the news fields 968 and 969
104	Manage New Index	Used to Manage new index for DB compression
104	I wanage New Huex	Manage New Index Not Available
		Manage New Index Not Available Manage New Index Available



105	Sales Trader Group Indicator	Used for OMS to tell whether or not to treat a group of Sales Trader as sales users.
		0: DO NOT manage Manage Sales Trader Group as Sales Users
		1: Manage Sales Trader Group as Sales Users
106	Changes Managed by SOM	Indicate the changes that are managed by the server
		2B Dealer Release - Breakdown
		4B On demand - Breakdown
		5A Buffered X minutes - Aggregated
		7A Every shares - Aggregated
		1A Real time - Aggregated
		7B Every shares - Breakdown
		2A Dealer Release - Aggregated
		5B Buffered X minutes - Breakdown
		6A Every X percent - Aggregated
		6B Every X percent - Breakdown
		1B Real time - Breakdown
107	Client Generic Field Mgt	Client Generic Field Management (specific OMS)
		2: Generic Field Cconfig Dict 1: Client Information
108	Extended Handling Instructions	Extended Handling Instructions used for Parent Orders
		1: Yes for Ext. Hand. Instr. 0: Not to use seconds for GTT (format HH:MM)
109	GTT Use Seconds Flag	AP to indicate whether the seconds are managed or not for GTTs validity.
		1: Supported
		0: Not supported
110	Personnal Instruction Flag	To turn on this new personal instruction feature
		1: Turn OFF personal instruction feature
111	Auto Combine Order Floa	0: Turn ON personal instruction feature Used to combine all DMA orders with the same stock on
111	Auto Combine Order Flag	the same side from the same client automatically and
		perform SalesComplete automatically
		1: Allow the auto combination of orders
		0: Auto combination of orders not allowed
112	Client order type	Indicates the type of client order (OMS)
		3: Auto Fill and Booking
		5: OBSOLETE Value (Ex Managed by System)
		4: STP (for new system) 2: Auto Fill
		1: STP (OMS order going directly to the Stock
		Exchange)



113	SalesOrderSplitFlag	To indicate VT that the Sales order splitting feature is enabled
		0: Sales Order Splitting disable 1: Sales Order Splitting enable
114	Forward ACK Workflow Flag	This field indicates VT that the Forward Acknowledgment workflow feature is enabled
		0: Forward ACK Workflow disable 1: Forward ACK Workflow enable
115	New Submit Workflow	Indicate VT that the new Submit workflow feature is enabled
		New Submit Workflow Disable New Submit Workflow Enabled
116	Is Visible Flag	Indicates whether a client order should be displayed in the OMSFE and VT or not. (specific EDA order)
		O: Client Order NOT Visible 1: Client Order Visible
117	Dealer Release Sales Complete Mode	Dealer Release Sales Complete Mode (specific BOCOM)
		1: New features enabled 0: New features disabled
118	Dealer Release Sales Complete Allocation Methods	Dealer Release Sales Complete Allocation Methods (specific BOCOM)
		Prebooking Default Booking Account
119	Dealer Release Sales Complete GDO Rollover	Dealer Release Sales Complete GDO Rollover (specific BOCOM)
		2: Roll Over 1: Cut Off
120	Consultation Profile	To indicate Order book consultation mode 0: Order Book Consultation not available
		Order Book consultation not available Croder Book set for trading Order Book set for monitoring
121	Last Database Reply Index	Indicates the last Valdi trading server index stored in the reply database file, sent (ie replied) or not.
122	Match Combo Legs To Client Orders	Flag to indicate to Match Combo Legs To Client Orders
		0: Match not allowed 1: Match enable
123	Order Book Consultation	Flag to indicate ValdiFIX that the Order Book consultation is enabled on Valdi OMS.
		Order Book consultation Disabled on Valdi OMS. Order Book consultation Enabled on Valdi OMS.
124	Server Type Connected	Identify the server type connected to the valdi trader station once
		1: Valdi Trader Server connected



		4: Other server connected
		3: GL OMS (CCM) connected
		2: Valdi OMS (SOM V5) connected
125	OMS Spooling	OMS servers support spooling
123	Ows specing	Olvio servers support spooling
		0: Spooling disabled
		1: Spooling enabled
126	Mandatory Sending Fields	List of mandatory V5 fields to send to OMS Server (filled
120	Wandatory Centuring Fields	with V5 ID separated by coma), for each new order
		command (SCPB automated STP routing)
127	Strategies Valdi OMS Flag	Indicates whether ValdiOMS allows strategy orders or
'-'	Strategies value sine riag	not
		0 Strategies NOT available on Valdi OMS
		1 Strategies available on Valdi OMS
128	Check Account Amendment Rights Flag	To allow GL OMS to tell VT to use checking of Account
	one on the contract of the state of the stat	amendment rights from the existing user bitmap (74).
		amount of the second of the se
		0: Account amendment is always allowed in VT
		1: VT will check user permission bit 74 to enable Account
		amendment
129	Average Price Mode	Field to enable or not the Average Price Mode for bulk
		orders
130	OMS Free Text Available	Indicates that the OMS freetext V5 and 9000 is available
		in this server version
		1: Field unavailable
		0: Field available
131	Permit blue windows	This field is used for Valdi Trader to open Blue Windows
		when it is connected to a GLOMS server
		. 5
		1: Blue Windows enabled
100	D. C. L.	0: Blue windows disabled
132	Date of last database creation	Trading Server has to sent to client database last
400	CMT data villa at tion	creation date/time. Format UTC ISO.
133	servers support GMT date without time	Bit for compatibility to tell clients that the server can
101	(to be deprecated)	receive date/time in GMT without a time
134	Even Bulk Distribution	Bulk order distribution mode
		0: There is no Bulk order distrubution mode
		1: Bulk order distrubution mode is activated.
135	Microseconds Managment	Use Microsecond for GTT format HHMMSSUUUUUU .
133	Wilcioseconds Managinerit	This field concern the Expiry Time (order with GTT
		validity).
		ranaity).
		2: The microseconds are not managed for GTT validity
		orders.
		1: The microseconds are managed for GTT validity
		orders.
136	Cascade Amend	Cascade amend is amend of client order, including child.
		J
		0: Cascade Amend is supported
		1: Cascade Amend not supported

21. Data Used in Several Requests

0/B User Number

This field indicates the GL user number which identifie the user
User Number into [0-9999]
For the request connection/disconnection, User Number is into
[0-999]

1	Password
	This field is used to authenticate access

2	Reason		
_	This field indicates the reason for the refusal and respects		
	following modulo rules.		
	V		
0	Incorrect password		
1	No more space in logical connection database		
2	Incorrect format of logical connection request		
3	Forbidden user number		
4	Unknown user number		
5	Forbidden brooker number		
6	Unknown brooker number		
7	User already connected		
8	Connection trouble		
9	Unknown receiver		
Reaso	n can be equal to		
<10	Message from P3		
>=			
10	Message from SLE		
and			
<20 >=20			
>=20 and	Massaga from SLC		
<30	Message from SLC		
>=30			
and	Message from GL Net		
<40	Wessage nom at Net		
>=40			
and	Message from Selector		
<50			
For the	For the SLE V5, other reasons exist. These reasons are between		
	[100-110]		
100	Password expired		
101	New password rejected : used to recently		
102	New password rejected : too short		
103	New password rejected: identical to the user		

104	New password rejected : should contain at least one digit and one letter
105	New password rejected : more than 3 successive identical characters
106	Sender is not allowed to modify this password
107	Max number of attempts reached
111	No API licence

С	Request category
	This field indicates the order type
Α	Trade Out The counter
С	Combined order
D	Price request
F	Market maker
0	Single order
S	Care Order

D1	Command
	This field gives the type of the command
0	New order
1	Cancel order
2	Update order
4	Cancel execution
5	Overall cancel
6	Release order
8	M.I.T
Α	Overall cancel order

G	Stockcode
	This field identifies the instrument

E1	Reply acknowledgement
	Subscription of acknowledgement
0	No
1	Yes

E2	Reply reject	
		Subscription of reject
0	No	
1	Yes	

E3	Reply exchange reject
	Subscription of exchange reject



0	No
1	Yes

E4	Reply trade execution
	Subscription of trade execution
0	No
1	Yes

E5	Reply exchange message
	Subscription of exchange message
0	No
1	Yes

E 6	Default reply type
Always filled with "0"	

E7	Reply inflected messages
	Subscription of inflected message
0	No
1	Yes

Α	Chaining
	This field indicates if the response is the last one
0	Last one
1	Otherwise

D	Reply type
	This field indicates the reply type
Α	Exchange acknowledgement
С	Exchange rejection
G	FIS Valdi TCC rejection
R	Trade execution
J	Exchange message number
L	Inflected message

E	Index
	This field indicates the index of the response in the SLE
	Database

F	Number of replies
	This field indicates the number of replies

D2	Question		
	This field descibes the type of consultation		
1	N responses starting from index (index included)		
2	N responses starting from the beginning		
3	N responses before the index		
4	N responses after the index		
6	Last response		

M	Message type		
	This field indicates the type of order created		
Q	Quote		
0	Simple order		
L	Linked order		
С	Combined order		
Χ	Cross order		

N1	Number of default data fields
	This field indicates the number of the last field coded

N2	Number of order		
This field indicates the number of order			

L	Length of order	
This field indicates the length of the order		

21.1 Technical Fields:

All the following fields are technical fields and they are not part of the SLE bitmap. It is only present to allow FIS / FIX mapping.

Technical field Number (FID)	Technical field Label	DESCRIPTION	
20005	Index Server	The index of the record in the database	
20006	relatedOrder	The index of the related order in the order database	
20014	commandIdSeed	An incremental counter of cmd Seed. It is assigned to each command when it's created.	
20015	orderldSeed	An incremental counter of order Seed. It is assigned to each order when it's created.	
20016	prvCommand	The previous command if exists (default -1)	
20019	cmdStatus	Indicates if the command is closed or not (SLE consider a command closed when it receives an ACK or reject)	
20021	Mnemo	mnemo	
20022	GLID	GLID	
20023	Type Message	Message Type	
20024	Class Order	Class Order	
20025	Uti Number	User number	
20058	eventIdSeed	An incremental counter common to cmd/reply databases. It is assigned to each record when it is created and it allows an absolute audit of the activity.	
20059	recordTimeStamp	Recording time	

Data used and domain values

The SLE v3 API uses various data and domain values that will vary depending on the exchange that your API application connects to. In order to get exchange-specific information about those fields, please download the exchange specific API documents on FIS portal at:

https://portal.sungardglobaltrading.com/intranet/valdi/displayGIApi

