part of eex group

epexspot

ETS API Messages – light documentation

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1. Introduction

1.1 Audience

This document is addressed to companies having an interest in the ETS API but who are not EPEX members or Market Data customers.
This is an introduction to the ETS API light package.

1.2 Purpose

The purpose of this document is to describe the principles of the ETS API, giving enough elements to roughly assess the required workload to implement an ETS API application.

2. Short ETS API presentation

Basically the ETS API is web service based using SOAP over HTTPS.

- Requests and responses format is XML.
- Security wise it uses the TLSv1.2 protocol.
- It's a synchronous API, using requests/responses. There is no push/broadcast functionality.

Non-Market Participants and Market Participants (including ISVs in test) can access the following methods (for read-only and read-write applications):

Purpose	Method	Description
Login	EstablishConnection	Login / Logout via an ETS API server which creates a connection to the ETS trading back end like any ETS client connection. The login (“*EstablishConnection”)* sends back a session Id that the API client must re-use for each called method/request, and so during the whole trading day until invalid *Please consult the Login/Logout policy in the Terms of Reference document*
Logout	Logout	Optional, for GUIs or if your company security policy requires it.
Change your API user password	SetNewPassword	You have 7 days to change the initial password provided by Market ops. Changing a password automatically extends its validity to 90 days. Though market ops can reset or extend a password this option should be kept only for emergencies: regular changes should be handled by the API application itself.
Know Auctions characteristics	RetrieveAuctionInformation	Retrieve the Auction theoretical publication time, to know when to start retrieving market results.
Retrieve market results	RetrieveMarketResultsFor	For one or several areas. *Please consult the Market results Retrieval policy in the Terms of Reference document*
Be aware of auction specific events	RetrieveMessagesUnreadOnly SetMessagesAsRead	In case of maintenance info, decoupling, delay in market results publication etc.
Know your areas assignments	RetrieveViewableAreas	If you want to collect dynamically the list of areas your API user is assigned to.
To ensure the API server can be reached	Keep Alive	For testing purposes only (useful during initial connectivity tests). Does not require to be logged in.

Read-Write applications (Market Participants and ISVs in test) can access the following main methods:

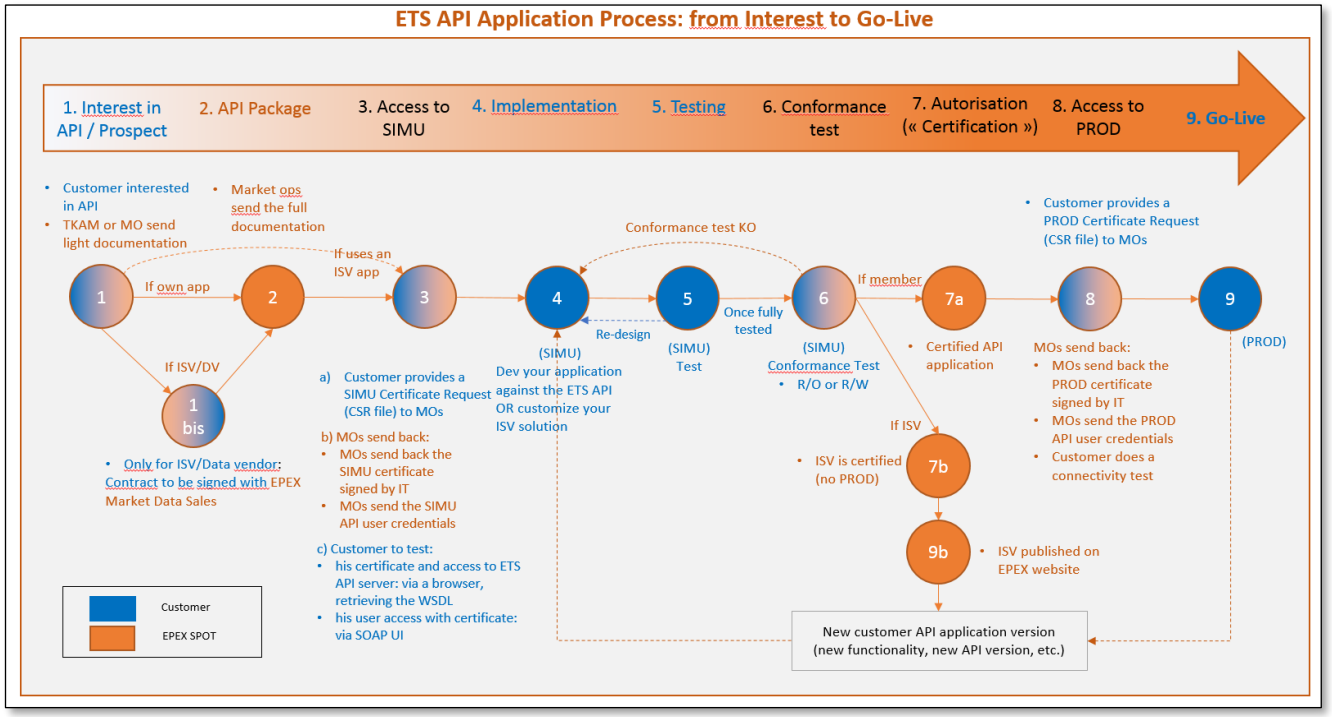
Purpose	Method	Description
Manage orders	EnterOrder, EnterBlockOrder, EnterBlockOrderBatch, EnterComplexOrder. Cancel related methods	Manage orders (enter, modify, cancel) – only for market participants - methods are specialized by order type (linear, blocks) - several blocks can be entered at once Pleases note that order modification is done via the same “EnterOrder” methods.
Retrieve Orders	RetrieveOrders, RetrieveBlockOrders, RetrieveComplexOrders,	This enables to retrieve all orders of your portfolios: - to check the latest version - when the server is busy (see Terms of Reference) to ensure of whether or not your request was processed Since there is no push functionality, this enables you in particular to retrieve all orders, potentially submitted by the ETS client and other API application (for instance if you are trading on top/instead of the ETS client through an ISV application).

3. API light Package presentation

In the API light package you will find the following content:

Document		Description
1. ETS API Process for customers		This Excel sheet contains 2 tabs: - A diagram showing all the steps from the initial interest in the ETS API until go live - The details of each of these steps
2. The API Software Design Guide		Describes high level design of the Open Access API: • Synchronous communication • Architecture • Sessions • Security • Smalltalk Client Example
3. ETS API Certificates		• Technical information about certificates needed to connect to the ETS API • Certificate management process • Process to obtain a certificate.
4. ETS API Terms of Reference		Describes the expected behavior of the application using the API Public message interface of ETS, mainly: • Login/Logout policy • Market results retrieval policy
5. ETS API FAQ		• Functional questions • Technical questions • Procedural questions: user credentials, access to doc, etc.
6. Sample Requests		A list of sample requests and responses to the most common requests for: • normal days • DST23 (Summer) and DST25 (Winter) days.

4. ETS API life cycle: from interest to go live



5. ETS API Methods list

Only the full ETS Package will contain the WSDL and its documentation.
This document only list all available message so that you can assess the granularity of API messages.

Please find below the list of available messages/methods:

1. **CancelBlockOrder** Cancel a specified range of Block Orders.
2. **CancelComplexOrder** Cancel already submitted Daily Orders.
3. **CancelExclusiveGroupWithId** Cancel all Block Orders for this Exclusive Group ID.
4. **CancelGroupForBlockId** Cancel all Block Orders belonging to the same Exclusive Group or Family as the identified Block Order.
5. **CancelOrder** Cancel already submitted Daily Orders.
6. **EnterBlockOrder** Enter a Block Order for a specific date. Block types:
    1. C01 - Standard Block Order.
    2. C02 - Linked Block Order.
    3. C04 - Exclusive Block Order.
    4. C88 - Loop Block Order (only available in services with version >= 3.2).

    Additional Rules:
    1. Modification of a Block Order is accomplished the same as Daily Order entry. A new block order is sent and the old one is overwritten.
    2. Only C01 Block Orders can be Entered/Modified
7. **EnterBlockOrderBatch** Submit a Batch of Block Orders for the same Portfolio, Area and Applying Date. Additional Rules: Modification of a Block Order is accomplished the same as EnterBlockOrder.
8. **EnterComplexOrder** Enter Complex Orders for specific Auction identification(s).
9. **EnterOrder** Enter Daily Orders for a specified date. Daily Orders are modified only by replacement. By sending in a new order, the old order is overwritten with the new values
10. **EstablishConnection** Login to the Open Access Server and start a User Session. The response provides a session key which is required for any further request.
11. **KeepAlive** Tests connectivity to the Open Access Server and Keeps the HTTP Connection active.
12. **Logout** Logout the User Session from the Open Access Server
13. **RetrieveAreaInformation** Retrieve Area information for a specified Area
14. **RetrieveAreaPortfolioInformation** Retrieve Area/Portfolio Informations for specified Area(s) and/or Portfolio(s).
15. **RetrieveAuctionInformation** Retrieve next <NumberOfAuctions> Informations for specified <Area>(s).
16. **RetrieveBlockOrders** Retrieve all Block Orders matching the search parameter in the Block Order Identifier Object.
17. **RetrieveComplexOrders** Retrieve all Hourly/Stepwise Orders matching the search parameter in the Order Identifier Object. Only the active versions of each Order are returned.
18. **RetrieveExclusiveGroupWithId** Answers all Block Orders for this Exclusive Group ID. Due to required support of previous versions (lower than 1.9) of the WSDL, this call must use deprecated output until such support is no longer required.
19. **RetrieveGroupForBlockId** Answers all Block Orders belonging to the same Exclusive Group or Family. The Exclusive Group or Family will be identified by looking for a Group that has a member with this ID. Due to required support of previous versions (lower than 1.9) of the WSDL, this call must use deprecated output until such support is no longer required.

20. **RetrieveMarketResultsFor** Retrieve the Market Results for specified Areas. A tag contains market results in CSV format (same format as provided by the ETS Client)
21. **RetrieveMessagesUnreadOnly** Retrieve the Messages the user has permission to read. If the parameter is true it only returns the messages still unread and if the parameter is false it returns all the messages.
22. **RetrieveOrders** Retrieve all Hourly/Stepwise Orders matching the search parameter in the Order Identifier Object. Only the active versions of each order are returned.
23. **RetrieveSmartBlockOrders** Retrieve all Block Orders matching the search parameter in the Block Order Identifier
24. **RetrieveTradableAreaPortfolioInformations** Retrieve Area/Portfolio Informations for specified Area(s) and/or Portfolio(s).
25. **RetrieveTradableAreaSets** Retrieve Area Set names that are both active and that the User Session is permitted to trade on.
26. **RetrieveTradableAreas** Retrieve all Area names which are opened for trade.
27. **RetrieveTradablePortfolios** Retrieve Portfolio names that a User Session is allowed to trade on and are open in the Auction.
28. **RetrieveViewableAreaPortfolioInformations** Retrieve Area/Portfolio Informations for specified Area(s) and/or Portfolio(s).
29. **RetrieveViewableAreas** Retrieve all Area names the User Session has permissions to view.
30. **RetrieveViewablePortfolios** Retrieve all Portfolio names the User Sessions has permissions to view.
31. **SetMessagesAsRead** Set already existing messages as read.
32. **SetNewPassword** Change the User Password.