

SEMOpX Info – 10 May 2023

New M7 6.15 Release – including 2 Factor Authentication

Important information – Action required

- **M7 6.15** Go-Live planned for **June 2023**, subject to successful testing (ASIM mid-April)
- **2 Factor Authentication (2FA) for ComTrader, API and report users**
 - Check our [2FA User Guide](#)
- **API impacts:**
 - **Mandatory in 6.15: API Broadcast queue creation**
 - **2FA** (optional in 6.15, mandatory as of M7 6.16)

Dear SEMOpX Member,

We are pleased to inform you about the upcoming M7 6.15 release, which introduces the 2 Factor Authentication (2FA), better visibility of order validation breaches, adding a Notification Pop up in case of Trade Recall Request. The target go-live date is 13 June 2023.

The new M7 6.15 will be available in Advanced Simulation Environment mid-April, subject to successful testing.

M7 6.15 Feature	ComTrader (new mandatory v6.15)	M7 API
2 Factor Authentication	Yes (Optional in 6.15, mandatory in 6.16)	
Performance Boosts	Yes	
Broadcast Q creation (perf boost)	Yes - Implemented in ComTrader 6.15	Yes (mandatory in 6.15)
Better visibility of ComTrader order validation breaches	Yes	No
New ComTrader Pop-up upon Trade Recall Request failure	Yes	No
Documentation update	Yes	Yes

All SEMOpX members must download the mandatory version of Comtrader – 6.15 available here:

<https://portal.m7.energy/semo/extra>

API users must check their application readiness and required changes ahead of release in ASIM. List of changes described below as of 05/05:

<https://portal-simulation.m7.epexspot.com/>

1.	Two-Factor Authentication (2FA)	2
2.	Performance enhancements to accompany the market growth	3
2.1.	API mandatory change: Broadcast queue creation to enhance messages distribution performances	4
3.	Better visibility of ComTrader order validation breaches	4
4.	New ComTrader notification popup upon Trade Recall Request failure	5
5.	Documentation update	6

1. Two-Factor Authentication (2FA)

In compliance with the industry security standards, the *Two-Factor Authentication (2FA)*, will be introduced to **add one layer of security to your user account**:


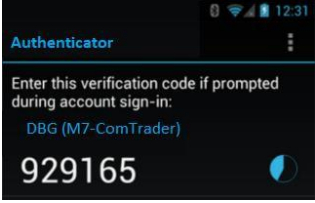
- **Optional with M7 6.15,**
- **Mandatory as of M7 6.16 (planned for Q4/2023)**

This **Time-based One-Time Password (TOTP) 2FA** will consist in:

- **users to provide when logging in a new 6-digits “authentication code”,** on top of their usual user/password,
- Time-based meaning that **this code will change every 30 seconds**, as described below.

Please use this **“2FA User Guide”** link to know more about this 2FA.

User Type	New Login Interface	How to get this new code?
<p>ComTrader users</p>		<p>How to get this new code?</p> <ol style="list-style-type: none"> 1. Download a TOTP Authentication app on your smartphone (e.g. Google Authenticator, Microsoft Auth) <ol style="list-style-type: none"> 2. Enable TOTP in ComTrader 6.15 3. Scan the ComTrader QR Code with your app

<p>Report users</p> <p>(XML reports: TC540, TC810, etc.)</p>	 <p>Please check the 2FA User Guide “Change password” webGUI procedure.</p>	<p>→ 4. The app will generate a TOTP Verification Code, changing every 30 seconds.</p> 
<p>API users</p>	<p>Login Request with a new authVerificationCode attribute. AMQP connections are not affected.</p> <p>Example for an API user for which TOTP has been enabled in ComTrader 6.15: <code><LoginReq xmlns="http://www.deutsche-boerse.com/m7/v6" user="CXSIM111" force="true" disconnectAction="NO" authVerificationCode="84498"></code></p> <p>Manual API apps with a GUI showing a Login panel can mimic the ComTrader login panel (users can then follow the ComTrader process above, while the app sends the enriched Login Request with the new code).</p>	<p>Automated API apps will have to implement the public TOTP algorithm (or use public libraries).</p> <p>ComTrader will give you a TOTP Key, required as an input of the TOTP algo to generate this new 6-digit verification code in real time.</p> <p>Optional with 6.15, mandatory with 6.16 in Q4 2023.</p>

2. Performance enhancements to accompany the market growth

M7 6.15 will:

- **implement different performance related optimizations** to keep on accompanying the orders and trades market activity growth,
- **increase its capacity to broadcast Public trades and Order books messages** to API servers:
 - *Public Trades Confirmation Reports* messages
 - *Public Order Books Delta Reports*

On top of increasing its broadcasting capacity, M7 will as well enable client API apps to subscribe to an **optional more economic order book updates distribution mechanism, the “periodic order book batching”**.

This option will be used by ComTrader 6.15, in a way that will enhance performances for both ComTrader and API users:

- DFS180 6.15 indeed introduces a new **optional orderbookBatching** attribute in **API Login Request**:

LoginReq	SE	m	1	Structure	
orderbookBatching	A	o		Char(5)	The type of order book batching that will be executed for the user. Valid values: <ul style="list-style-type: none"> • SHORT: Current default batching driven by internal queuing. • LONG: Regular batching based on time interval.

- This attribute will be sent with a LONG value by ComTrader 6.15 when logging in, so that M7 broadcasts Order Book Updates in a batched manner (the interval should be ~100 milliseconds).
 - All order book updates taking place during this interval will be gathered in one single delta report message: while still not noticeable by ComTrader user (this is already the order book panel refresh rate : no visual degradation at all), this will enhance both ComTrader and M7 performances.
- **No change in API apps is required, but all API users will benefit from this change in terms of order book update latency reduction:**

- No need to change the Login Request: by default, API apps will keep on receiving order books update like today (default = SHORT parameter).
- Please note that some batching can take place when M7 is under stress, but this is an existing independent mechanism: this is what is meant above by “current default batching driven by internal queueing”).
- **Any customer API app that would benefit from a technical or business perspective from this LONG batching option can also use it.**

Another performance feature requires an action on API application side: the explicit creation of the API user broadcast queue, as explained below.

2.1. API mandatory change: Broadcast queue creation to enhance messages distribution performances

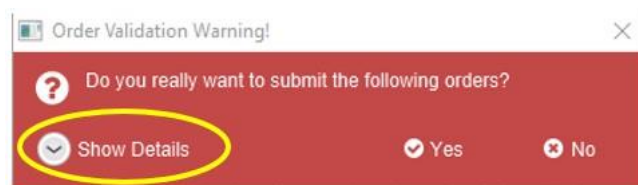
Until M7 6.14 included API users did not have to create their broadcast queue because automatically created by the system when successfully logging in.

In order to keep on enhancing API messages distribution performances this will change as of M7 6.15: **API users will have to explicitly create their broadcast queue before submitting the Login Request**, using with the same AMQP connection which will be also used for consuming messages.

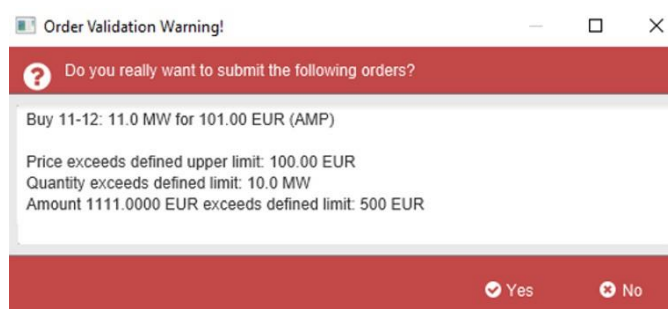
The exact technical steps will be documented in M7 6.15 DFS180 and provided in a later communication before M7 6.15 gets delivered to ASIM.

3. Better visibility of ComTrader order validation breaches

Current Situation: In case order validation parameters are set, a warning popup will appear each time one of the defined parameters is exceeded.



Improvement with M7 6.15: the trader will see directly which restriction(s) are breached as the popup will be extended by default.



4. New ComTrader notification popup upon Trade Recall Request failure

Reminder: To recall a trade, the two following rules must apply:

- Trade recall request for a trade must be requested before the last 20 minutes before trading end.
- Trade recall request for a trade must be requested maximum 5 minutes after trade was generated.

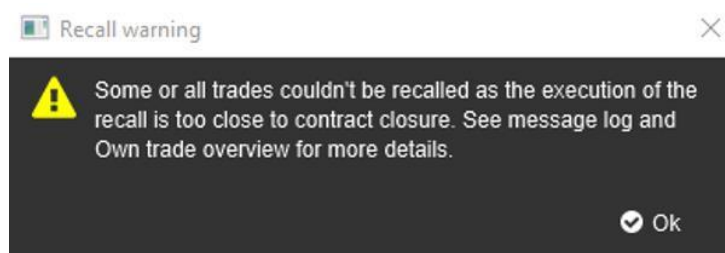
Current Situation: When a trade recall was not effective because the technical criteria were not met, ComTrader only displays a message on the bottom left corner of the screen.



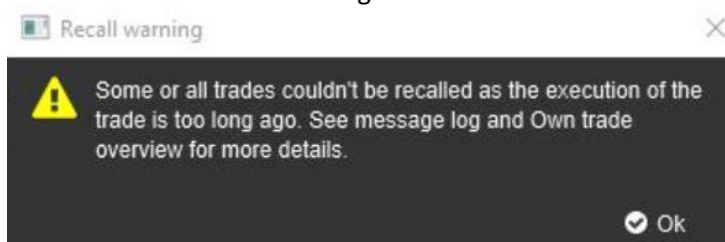
Improvement with M7 6.15: an additional pop-up message appears to inform the trader if a trade recall or part of a trade recall (in case of multiple trades recalled at once) is rejected.

4 possible trade recall failure cases:

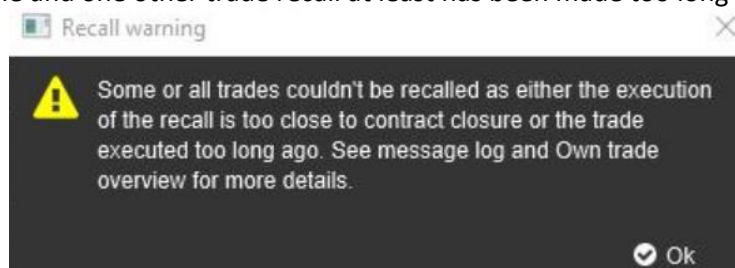
- **Case 1:** Single trade recall or multiple trade recall where, trade delivery/contract closure is too close to contact closure for one or more trades:



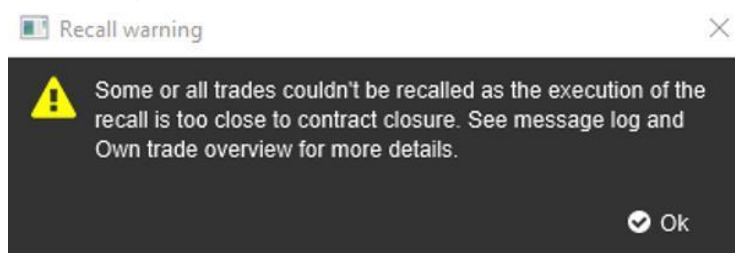
- **Case 2:** Single trade recall or multiple trade recall where, the recall request for one or more trades was sent later than 5 minutes after the trade was generated:



- **Case 3:** Multiple trade recall request where, for the erroneous recall(s), **both technical criteria are failed** for one or multiple trades (it means that one trade recall at least has been made too close to contract closure time and one other trade recall at least has been made too long ago):



- **Case 4:** Multiple trade recall request where, for the erroneous recall(s), **both technical criteria are failed for the same trades** (it's the same pop-up than the first case because M7 check in first the contract closure failure criteria):



5. Documentation update

The following documents will be provided when M7 6.15 is **deployed to ASIM mid-April**:

- **MFG110 - M7 - Trader Manual ComTrader 6.15:**
 - the ASIM ComTrader portal will be updated when the release is deployed to ASIM.
- **M7 API :**
 - a new version of the **M7 API package** containing first 6.15 documents is **already available** online:
 - **DFS180** – M7 - Public Message Interface: first version already available (2FA impacts). **Another version is expected to describe the creation of the broadcast queued.**
 - **A new 6.15 XSD file**, to build the Login Req with the new 2FA authentication code.
 - Note: the **Java sample app** in the API package is already updated:
 - to illustrate the 2 FA authentication code generation and Login Request illustration of the 2FA.
 - Its configuration file enables to precise if TOTP is enabled and what is the TOTP Key: the app then adjusts the Login Request sent to M7 top include or not the new 2FA authentication code.

Reminder:

Please note that **the full API package is always available for download for all customers:**

- For members on our Website (in your [member download area](#))
- or for ISVs and Data Vendors using the link:
<https://www.marketdata.epexspot.com/index.php/s/KrcXu3Hx4HSF3Je>

The password to access it has already been sent in a separate email.

Should you need it again please do not hesitate to contact us at marketdata.technical@epexspot.com.

Please do not hesitate to contact us should you require any further information.

Yours faithfully,
SEMOPx