# Mandatory Interface Encryption

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21 September 2023



OpenDay 2023

# Topics

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## **High Level Encryption Roadmap**

### **FIX LF**

T7 Release 10.1 *Payload Encryption* 

### ETI LF

T7 Release 11.0 *Payload Encryption* 

### ETI HF

T7 Release 11.1 *Password Encryption* 

## **Password Encryption**

### ETI HF Key Features

- Session and user password encrypted
- No certificate required, password encryption with Deutsche Börse's public RSA key
- Implementation as per ETI manual, OpenSSL helpful for cryptographic part
- Append log-in time before encryption > T7 will validate the time > encrypt password > convert binary output to alphanumeric value > enter password to field 1402
- Example python script "STEP"
- Further details available
  - Network Access Guide & ETI documentation
    - xetra.com > Technology > T7 Trading architecture > System documentation > Release 12.0
    - eurex.com > Support > Initiatives & Releases > T7 Release 12.0
  - Mandatory Interface Encryption support site
    - xetra.com > Technology > T7 trading architecture > System documentation > Mandatory Interface Encryption
    - eurex.com > Support > Initiatives & Releases > Readiness for projects > Mandatory Interface Encryption

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## **Overview Rollout Approach**

Session Source Location	Session type	Encryption type	Mandatory change in Simulation	Mandatory change in Production
In Equinix FR2 co-lo facility	ETI (LF)	Payload or Password	24.11.23	11.12.23
In Equinix FR2 co-lo facility	ETI (HF)	Password	24.11.23	11.12.23
In Equinix FR2 co-lo facility	ETI (HF)	Payload	Not supported	Not supported
Remote*	ETI (LF)	Payload	04.08.23	23.10.23
Remote	ETI (LF)	Password	Not applicable	Not applicable
Remote	ETI (HF)	Not applicable	Not applicable	23.10.23**

Please note that remote refers to outside Equinix FR2.

\*\* The use of HF Sessions in Production outside of Equinix FR2 co-location facility will no longer be available.

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## **Dedicated Support Page Mandatory Interface Encryption**

### Eurex

#### https://www.eurex.com/ex-en/support/initiatives/project-readiness

#### Readiness for projects



As a trading venue operator, Eurex needs to adhere to requirements regarding encryption of data during transfer via networks on public ground and the encryption of credentials during transfer via networks on nonpublic ground (Critical Infrastructure KRITIS) regulation.

Eurex has implemented mandatory changes regarding data transmission via the T7 trading interfaces. These changes have been made to improve the security of information transmitted via communication networks to further reduce the risk of unauthorized interception, manipulation, or misuse.

To support Trading Participants with the implementation of their security requirements, Eurex offers additional connectivity options to implement Transport Layer Security (TLS) for sensitive data in critical business areas.

#### The following steps will be carried out during 2023:

Session Source Location	Session type	Encryption type	Mandatory change in Simulation	Mandatory change in Production
In Equinix FR2 co-lo facility	ETI (LF)	Payload or Password	24.11.23	11.12.23
In Equinix FR2 co-lo facility	ETI (HF)	Password	24.11.23	11.12.23
In Equinix FR2 co-lo facility	ETI (HF)	Payload	Not supported	Not supported
Remote	ETI (LF)	Payload	04.08.23	23.10.23
Remote	ETI (LF)	Password	Not applicable	Not applicable
Remote	ETI (HF)	Not applicable	Not applicable	23.10.23*

Supporting Documents Circulars Migration Status Readiness Videos

Focus Call Encryption Q&A

Encryption - Focus Call Presentation Transport Layer Security (TLS) and Password Encryption - FAGs

### **Cash Market**

https://www.xetra.com/xetra-en/technology/t7/mandatory-interfaceencryption

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## **System Documentation T7 Release 12.0**

### **Eurex**

#### https://www.eurex.com/ex-en/support/initiatives/t7-release-12-0

EUREX Markets Trade Clear Data Support Rules & Regs Find

Eurex + Support + Initiatives & Releases + T7 Release 12.0

#### T7 Release 12.0

With T7 Release 12.0 the following enhancements will be introduced:

- MiFID II MiFIR enhancements
- Introduction of a new Crossing Procedure and Pre-Arranged Trade Entry Possibility
- Introduction of Total Return Futures Delta Neutral Strategies
- Enhancements of the Transaction Size Limits regime
- Usage of the Legal Entity Identification for the identification of the Buy-Side Disclosure Clients

#### Simulation start: 11 September 2023 Production start: 20 November 2023



#### System Documentation Circulars

- Overview and Functionality
- Trading Interfaces
- Market & Reference Data Interfaces
- GUI Solutions
- Network Access
- Reports

### **Cash Market**

https://www.xetra.com/xetra-en/technology/t7/systemdocumentation/release12-0

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<ul> <li>T7 trading architecture</li> </ul>	
> Access	Release 12.0
> Interfaces	
> Publications	This section provides an overview of the available system documentation.
> Videos	
<ul> <li>System documentation</li> </ul>	■ Overview of content
> Release 12.0	Overview and Functionality
> Release 11.1	Enhanced Trading Interface
> Release 11.0	- FIX LF
> Release 10 1	<ul> <li>Market and Reference Data Interfaces</li> </ul>
	- GUI Solutions
> Archive	Network Access
> Cloud Simulation	<ul> <li>Reports</li> <li>Simulation</li> </ul>
<ul> <li>Mandatory Interface Encryption</li> </ul>	<ul> <li>Production</li> </ul>



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- 1. What certificate is required?
- 2. Is there any latency impact?
- 3. Are new sessions needed?
- 4. Can ETI LF sessions also be password encrypted?
- 5. How often are you going to update the public RSA key?

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## **More questions?**

# Please meet Deutsche Börse's specialists at the Exchange lab

# Thank you!

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