

**T7 14.0**

**T7 Web App**

**Connectivity Guide**

Version 3

#### Disclaimer

© Deutsche Börse Group 2025

This content is for informational purposes only. None of the information constitutes investment advice or an offer to sell or the solicitation of an offer to buy any contract, share or other financial instrument. This content is only for use as general information and all descriptions, examples and calculations contained are for illustrative purposes only.

Deutsche Börse AG, Frankfurter Wertpapierbörse (FWB®, the Frankfurt Stock Exchange), Eurex Frankfurt AG, Eurex Deutschland and Eurex Clearing AG do not represent that the information in this publication is comprehensive, complete or accurate and exclude liability for any consequence resulting from acting upon the contents of this or another publication, in so far as no willful violation of obligations took place or, as the case may be, no injury to life, health or body arises or claims resulting from the Product Liability Act are affected.

Securities traded on the Frankfurt Stock Exchange and Eurex derivatives (other than EURO STOXX 50® Index Futures contracts, EURO STOXX® Select Dividend 30 Index Futures contracts, STOXX® Europe 50 Index Futures contracts, STOXX® Europe 600 Index Futures contracts, STOXX® Europe Large/Mid/Small 200 Index Futures contracts, EURO STOXX® Banks Sector Futures contracts, STOXX® Europe 600 Banks/Industrial Goods & Services/Insurance/Media/Personal & Household Goods/Travel & Leisure/Utilities Futures contracts, Dow Jones Global Titans 50 IndexSM Futures contracts, DAX® Futures contracts, MDAX® Futures contracts, TecDAX® Futures contracts, SMIM® Futures contracts, SLI Swiss Leader Index® Futures contracts, RDXxt® USD - RDX Extended Index Futures contracts, Eurex inflation/commodity/weather/property and interest rate derivatives) are currently not available for offer, sale or trading in the United States nor may they be offered, sold or traded by persons to whom US tax laws apply.

The fund shares listed in XTF Exchange Traded Funds® are admitted for trading on the Frankfurt Stock Exchange. Users of this information service who legally reside outside Germany are herewith advised that sale of the fund shares listed in XTF Exchange Traded Funds may not be permitted in their country of residence. The user makes use of the information at their own risk.

#### Legal validity of this disclaimer

In the event that individual parts of or formulations contained in this text are not, or are no longer, legally valid (either in whole or in part), the content and validity of the remaining parts of the document are not affected.

#### Trademarks

The names and designations listed under [www.deutsche-boerse.com/disclaimer](http://www.deutsche-boerse.com/disclaimer) are registered trademarks of Deutsche Börse AG or an affiliate of Deutsche Börse Group.

The names and trademarks listed there do not represent a complete list and, as well as all other trademarks and protected rights mentioned in this publication, are subject unreservedly to the applicable trademark law in each case and are not permitted to be used without the express permission of the registered owner. The simple fact that this publication mentions them does not imply that trademarks are not protected by the rights of third parties.

Information on trademarks of Stoxx Ltd. and ISS STOXX Index GmbH are available under Trademarks STOXX - STOXX

EEX® is a registered trademark of European Energy Exchange AG.

TRADEGATE® is a registered trademark of Tradegate AG Wertpapierhandelsbank.

Flexible is better.® is a registered trademark of Axioma, Inc.

EEX® is a registered trademark of European Energy Exchange AG.

Flexible is better.® is a registered trademark of Axioma, Inc.

---

## List of Abbreviations

CA	Certificate Authority, an entity that issues digital certificates. Part of a PKI.
FQDN	Fully Qualified Domain Name
GUI	Graphical User Interface
PKCS#12	Cryptographic archive file format. Can be imported into a web browser or stored into a keystore.
PKI	Public Key Infrastructure
SSL	Secure Socket Layer, cryptographic protocol designed to provide communications security
URI	Uniform Resource Identifier
URL	Uniform Resource Locator

## Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>4</b>
<b>2</b>	<b>T7 Web App Connectivity</b> .....	<b>5</b>
2.1	Supported Web Browsers .....	5
2.2	Browser Settings.....	6
2.3	URLs and IP Addresses.....	8
2.4	Client Certificates.....	8
2.5	Server Certificates .....	9
<b>3</b>	<b>T7 Web App GUIs</b> .....	<b>10</b>
3.1	T7 Web Clearer .....	10
3.1.1	IP Addresses and URLs.....	10
3.2	T7 Web Admin .....	17
3.2.1	IP Addresses and URLs.....	17
3.3	Online Help .....	24
<b>4</b>	<b>Client Certificate Workflow</b> .....	<b>25</b>
4.1	Creating a New T7 Web App Technical Account.....	25
4.2	Generating a New Certificate.....	28
4.3	Revoking and Deleting a Certificate.....	32
4.4	Certificate Usage.....	33
4.5	Certificate Activation, Expiry and Renewal.....	34
<b>5</b>	<b>Change Log</b> .....	<b>35</b>

---

## 1 Introduction

In 2025 Deutsche Börse is unveiling a new generation of graphical user interfaces for the T7 system that will enhance the user experience and greatly simplify the maintenance. Over time this new generation of graphical user interfaces will be replacing the original T7 GUIs introduced at the T7 trading system's launch.

Unlike the original T7 Trader, Admin, and Clearer GUIs, which require Java runtime installations, periodic updates, and a launching mechanism, the new T7 Web Apps dramatically reduce maintenance, while providing a modern, state-of-the-art, lightweight UI that retains all the functionality of the Java-based version.

Users simply need a modern web browser and a matching client certificate to access the updated GUIs, making operations smoother and more convenient.

Key benefits include:

- No installation required
- Simple access via bookmarks or links
- Modern interface
- Familiar, intuitive look and feel
- Improved online help (context-sensitive or overall)
- Automatic layout saving upon logout
- Multiple color themes available
- Pinable columns in all tables
- More convenient client certificate workflow
- Built on modern technologies
  - WebSocket with LongPoll (fallback)
  - React and Material UI library

The new T7 Web Apps offer a highly simplified process for handling client certificates replacing the T7 GUI keys of the java-based GUIs. Client certificates signed by the Deutsche Börse PKI can be effortlessly downloaded from the DBAG Member Section at any time and are immediately usable for the T7 Web Apps without any delay. Additionally, the revocation of potentially compromised client certificates can be performed in real-time, ensuring enhanced security and efficiency.

This document describes the connectivity options and setup process to access GUIs from the T7 Web App family.


---

## 2 T7 Web App Connectivity

The T7 Web App family is generally available for the T7 Production, Simulation and Disaster Recovery environments and will be accessible via Internet and via Leased Line, while certain instances may only be available for specific environments and access paths.

### 2.1 Supported Web Browsers

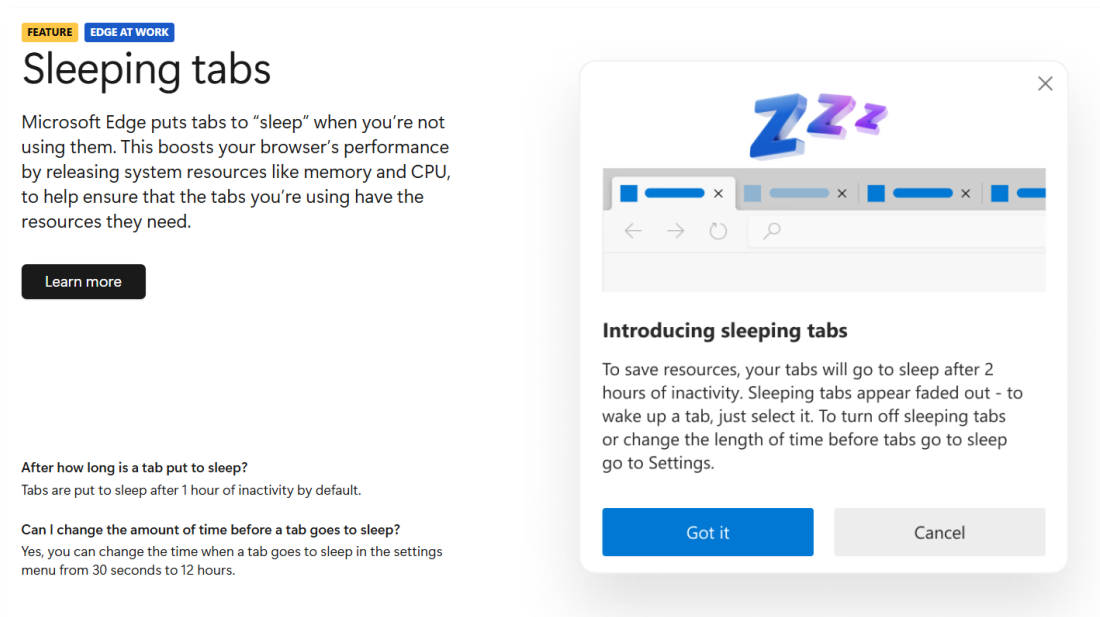
Common internet browsers such as Google Chrome, Mozilla Firefox or Microsoft Edge can be used to connect to the T7 Web Apps. The Microsoft Internet Explorer is not supported.

	<p style="text-align: center;"><b>Supported browsers</b></p> <ul style="list-style-type: none"><li>• Mozilla Firefox, version 128, or newer</li><li>• Mozilla Firefox ESR, version 128.0, or newer</li><li>• Google Chrome, version 128.0, or newer</li><li>• Microsoft Edge, version 126.0, or newer</li></ul>
---	---

It is recommended to keep the browser version up-to-date. It is always recommended to monitor publications of known vulnerabilities of the browsers (for example <https://learn.microsoft.com/en-us/deployedge/microsoft-edge-relnotes-security>, or <https://www.mozilla.org/en-US/security/known-vulnerabilities/firefox/>).

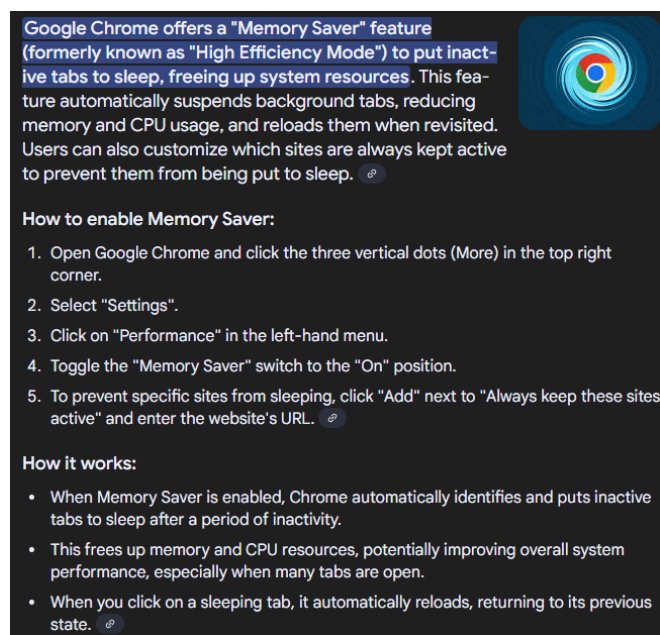
## 2.2 Browser Settings

In case the browser used by the client offers a feature like “Sleeping tabs” or “Memory Saver” it is highly recommended to disable this feature to prevent loss of connection during times of inactivity.



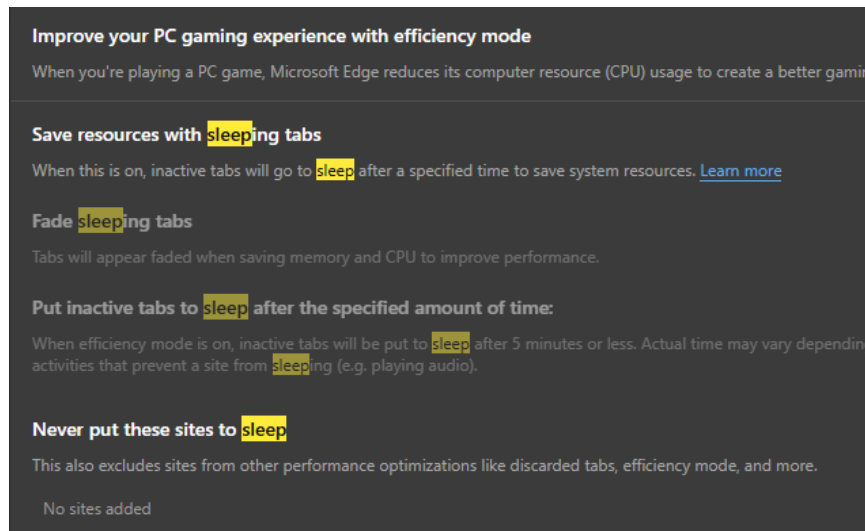
The screenshot shows a Microsoft Edge notification titled "Sleeping tabs" with a "FEATURE" and "EDGE AT WORK" badge. The text explains that Microsoft Edge puts tabs to "sleep" when not in use to boost performance by releasing system resources. A "Learn more" button is present. Below, two questions are answered: "After how long is a tab put to sleep?" (1 hour by default) and "Can I change the amount of time before a tab goes to sleep?" (Yes, in settings from 30 seconds to 12 hours). On the right, a dialog box titled "Introducing sleeping tabs" shows a browser window with a "ZZZ" icon and explains that tabs go to sleep after 2 hours of inactivity. It includes "Got it" and "Cancel" buttons.

Sleeping tabs in Microsoft Edge



The screenshot shows a dark-themed text box with the Chrome logo. It describes the "Memory Saver" feature (formerly "High Efficiency Mode") which suspends background tabs to free up system resources. It includes a list of steps to enable the feature: 1. Open Chrome and click the three vertical dots (More) in the top right corner. 2. Select "Settings". 3. Click on "Performance" in the left-hand menu. 4. Toggle the "Memory Saver" switch to the "On" position. 5. To prevent specific sites from sleeping, click "Add" next to "Always keep these sites active" and enter the website's URL. It also includes a "How it works" section: When Memory Saver is enabled, Chrome automatically identifies and puts inactive tabs to sleep after a period of inactivity. This frees up memory and CPU resources, potentially improving overall system performance, especially when many tabs are open. When you click on a sleeping tab, it automatically reloads, returning to its previous state.

Memory Saver feature in Google Chrome



Sleeping tabs in Mozilla Firefox

## 2.3 FQDNs vs IP Addresses

The T7 Web Apps are accessed by pointing the browser at specific URLs. These URLs differ based on the type of connection (Leased Line vs. Internet), on the environment (Production vs. Simulation vs Disaster Recovery) and on the GUI type. Any of these URLs can be placed in the bookmarks of the user's browser or placed as links on the desktop.

Please note for security and compatibility reasons, all users are required to connect only using the FQDN URLs. IP addresses are listed for completeness and for potential firewall configuration on the client side, only.

All URLs are formed using the following naming convention:

[https://t7web<MIC>.<ENV>.<BASE\\_FQDN>/<GUI\\_Type>/](https://t7web<MIC>.<ENV>.<BASE_FQDN>/<GUI_Type>/)

<MIC>	xeur, xetr, xfra, xeee, xbul, xmal, xvie, xbud, xlju, xpra, xzag, xdus, xham, xhan
<ENV>	simulation, production, emergency
<BASE_FQDN>	eurex.com for derivatives, deutsche-boerse.com for cash markets can include .vpn. for N7 LeasedLine access Port number for N7 LeasedLine access
<GUI_TYPE>	clearer (Future: admin, trader)

Chapter 3 contains a full list of all currently available URLs.

## 2.4 Client Certificates

For all connectivity options (Internet as well as for N7 leased line), the creation and usage of client certificates signed by Deutsche Börse's Certificate Authority (CA) is mandatory to establish and ensure an encrypted connection between the participant and the exchange back end. The certificate standard is X.509v3 using the sha256RSA signature algorithm. Client certificates signed by Deutsche Börse can be created easily in the DBAG Member Section (see chapter 4) with a validity of one, or two years.

Client certificates are immediately usable without any delay.

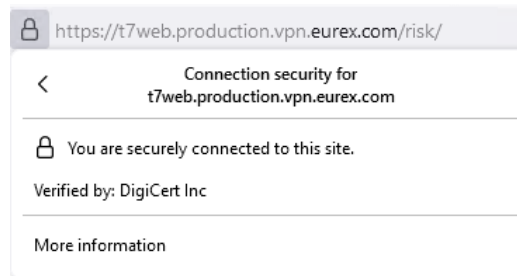
At the same time client certificates can be revoked in the DBAG Member Section which immediately makes them unusable in case a client certificate becomes compromised.

The procedures to create and download or revoke and delete signed client certificates are described in detail in chapter 4.

---

## 2.5 Server Certificates

The webserver for the T7 Web Apps is secured by a server-side certificate issued by a commercial CA (currently DigiCert). Server certificates are regularly replaced as their expiry date approaches.



Server certificates are usually verified by the client browser by verifying if the server's certificate has been signed by a known and trusted certificate authority (CA) as it is done for every other https encrypted webpage.

The refresh of the server certificates is transparent to the GUI user as long as the client browser includes a recent list of known and trusted certificate authority (CA).

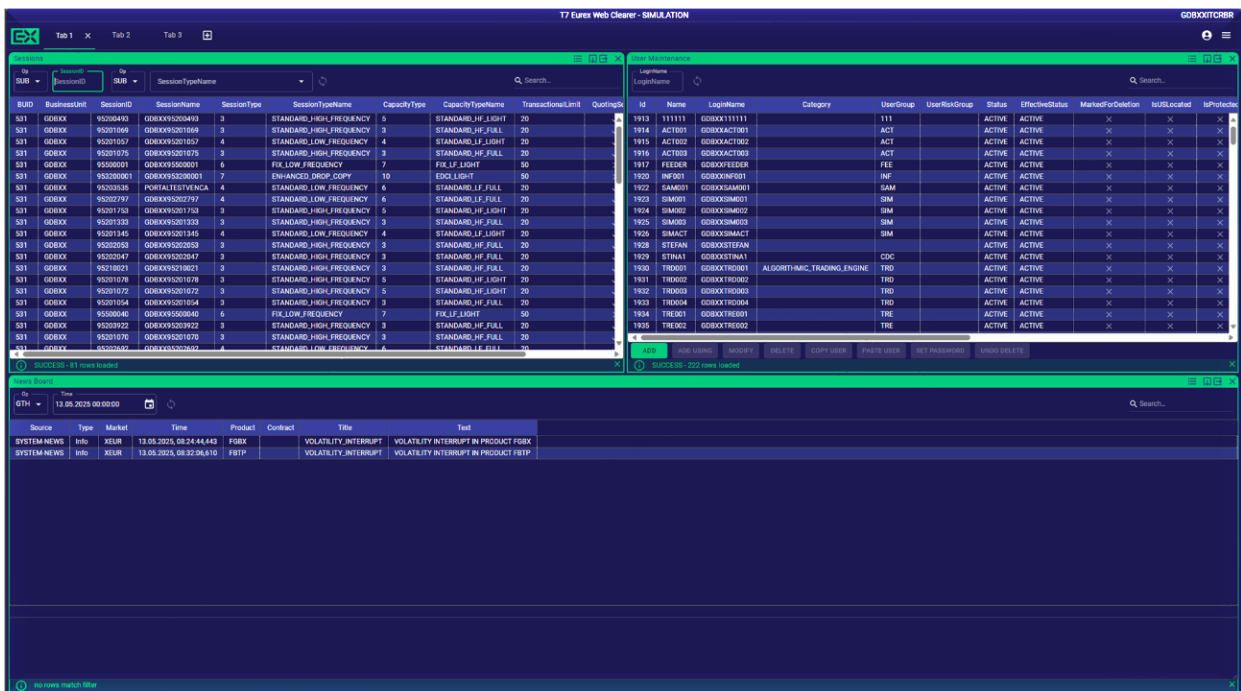
### 3 T7 Web App GUIs

#### 3.1 T7 Web Clearer

The T7 Web Clearer is a T7 graphical user interface (GUI) running in a regular web browser and part of the T7 Web App family of GUIs.

The T7 Web Clearer offers the full functionality of the original java-based T7 Clearer GUI in a modern setup without the maintenance hurdles of the java-based GUI.

Please note: the T7 Web Clearer is available in T7 14.0 Simulation and will become available in T7 Production with release 14.0 on November 10<sup>th</sup>, 2025.



##### 3.1.1 IP Addresses and URLs

The following tables list the addresses to reach the T7 Web Clearer for all markets in all environments via both access paths (Internet and N7 Leased Line).

## 3.1.1.1 Simulation, Internet

Market	Environment	Type	URL / IP
Eurex	Simulation	Internet	<a href="https://t7webxeur.simulation.eurex.com/clearer/">https://t7webxeur.simulation.eurex.com/clearer/</a> IP: 193.29.90.252, Port: 443
EEX, Energy Exchange	Simulation	Internet	<a href="https://t7webxeeee.simulation.eurex.com/clearer/">https://t7webxeeee.simulation.eurex.com/clearer/</a> IP: 193.29.90.252, Port: 443
Xetra	Simulation	Internet	<a href="https://t7webxetr.simulation.deutsche-boerse.com/clearer/">https://t7webxetr.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Bulgaria SE	Simulation	Internet	<a href="https://t7webxbul.simulation.deutsche-boerse.com/clearer/">https://t7webxbul.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Malta SE	Simulation	Internet	<a href="https://t7webxmal.simulation.deutsche-boerse.com/clearer/">https://t7webxmal.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Vienna SE	Simulation	Internet	<a href="https://t7webxvie.simulation.deutsche-boerse.com/clearer/">https://t7webxvie.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Budapest SE	Simulation	Internet	<a href="https://t7webxbud.simulation.deutsche-boerse.com/clearer/">https://t7webxbud.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Ljubljana SE	Simulation	Internet	<a href="https://t7webxlju.simulation.deutsche-boerse.com/clearer/">https://t7webxlju.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Prague SE	Simulation	Internet	<a href="https://t7webxpra.simulation.deutsche-boerse.com/clearer/">https://t7webxpra.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Zagreb SE	Simulation	Internet	<a href="https://t7webxzag.simulation.deutsche-boerse.com/clearer/">https://t7webxzag.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Börse Frankfurt	Simulation	Internet	<a href="https://t7webxfra.simulation.deutsche-boerse.com/clearer/">https://t7webxfra.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Börse Düsseldorf	Simulation	Internet	<a href="https://t7webxdus.simulation.deutsche-boerse.com/clearer/">https://t7webxdus.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Börse Hamburg	Simulation	Internet	<a href="https://t7webxham.simulation.deutsche-boerse.com/clearer/">https://t7webxham.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443
Börse Hannover	Simulation	Internet	<a href="https://t7webxhan.simulation.deutsche-boerse.com/clearer/">https://t7webxhan.simulation.deutsche-boerse.com/clearer/</a> IP: 193.29.90.252, Port: 443

## 3.1.1.2 Simulation, Leased Line

Market	Environment	Type	URL / IP
Eurex	Simulation	Leased Line	<a href="https://t7webxeur.simulation.vpn.eurex.com:8089/clearer/">https://t7webxeur.simulation.vpn.eurex.com:8089/clearer/</a> IP: 193.29.90.57, Port: 8089, network 193.29.90.56/29
EEX, Energy Exchange	Simulation	Leased Line	<a href="https://t7webxeeee.simulation.vpn.eurex.com:8089/clearer/">https://t7webxeeee.simulation.vpn.eurex.com:8089/clearer/</a> IP: 193.29.90.57, Port: 8089, network 193.29.90.56/29
Xetra	Simulation	Leased Line	<a href="https://t7webxetr.simulation.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxetr.simulation.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Bulgaria SE	Simulation	Leased Line	<a href="https://t7webxbul.simulation.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxbul.simulation.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Malta SE	Simulation	Leased Line	<a href="https://t7webxmal.simulation.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxmal.simulation.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Vienna SE	Simulation	Leased Line	<a href="https://t7webxvie.simulation.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxvie.simulation.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Budapest SE	Simulation	Leased Line	<a href="https://t7webxbud.simulation.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxbud.simulation.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Ljubljana SE	Simulation	Leased Line	<a href="https://t7webxlju.simulation.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxlju.simulation.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Prague SE	Simulation	Leased Line	<a href="https://t7webxpra.simulation.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxpra.simulation.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Zagreb SE	Simulation	Leased Line	<a href="https://t7webxzag.simulation.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxzag.simulation.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Börse Frankfurt	Simulation	Leased Line	<a href="https://t7webxfra.simulation.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxfra.simulation.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.50, Port: 8091, network 193.29.90.48/29
Börse Düsseldorf	Simulation	Leased Line	<a href="https://t7webxdus.simulation.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxdus.simulation.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.50, Port: 8091, network 193.29.90.48/29
Börse Hamburg	Simulation	Leased Line	<a href="https://t7webxham.simulation.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxham.simulation.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.50, Port: 8091, network 193.29.90.48/29
Börse Hannover	Simulation	Leased Line	<a href="https://t7webxhan.simulation.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxhan.simulation.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.50, Port: 8091, network 193.29.90.48/29

## 3.1.1.3 Production, Internet

Market	Environment	Type	URL / IP
Eurex	Production	Internet	<a href="https://t7webxeur.production.eurex.com/clearer/">https://t7webxeur.production.eurex.com/clearer/</a> IP: 193.29.90.221, Port: 443
EEX, Energy Exchange	Production	Internet	<a href="https://t7webxeeee.production.eurex.com/clearer/">https://t7webxeeee.production.eurex.com/clearer/</a> IP: 193.29.90.221, Port: 443
Xetra	Production	Internet	<a href="https://t7webxetr.production.deutsche-boerse.com/clearer/">https://t7webxetr.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Bulgaria SE	Production	Internet	<a href="https://t7webxbul.production.deutsche-boerse.com/clearer/">https://t7webxbul.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Malta SE	Production	Internet	<a href="https://t7webxmal.production.deutsche-boerse.com/clearer/">https://t7webxmal.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Vienna SE	Production	Internet	<a href="https://t7webxvie.production.deutsche-boerse.com/clearer/">https://t7webxvie.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Budapest SE	Production	Internet	<a href="https://t7webxbud.production.deutsche-boerse.com/clearer/">https://t7webxbud.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Ljubljana SE	Production	Internet	<a href="https://t7webxlju.production.deutsche-boerse.com/clearer/">https://t7webxlju.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Prague SE	Production	Internet	<a href="https://t7webxpra.production.deutsche-boerse.com/clearer/">https://t7webxpra.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Zagreb SE	Production	Internet	<a href="https://t7webxzag.production.deutsche-boerse.com/clearer/">https://t7webxzag.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Börse Frankfurt	Production	Internet	<a href="https://t7webxfra.production.deutsche-boerse.com/clearer/">https://t7webxfra.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Börse Düsseldorf	Production	Internet	<a href="https://t7webxdus.production.deutsche-boerse.com/clearer/">https://t7webxdus.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Börse Hamburg	Production	Internet	<a href="https://t7webxham.production.deutsche-boerse.com/clearer/">https://t7webxham.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443
Börse Hannover	Production	Internet	<a href="https://t7webxhan.production.deutsche-boerse.com/clearer/">https://t7webxhan.production.deutsche-boerse.com/clearer/</a> IP: 193.29.90.221, Port: 443

## 3.1.1.4 Production, Leased Line

Market	Environment	Type	URL / IP
Eurex	Production	Leased Line	<a href="https://t7webxeur.production.vpn.eurex.com:8089/clearer/">https://t7webxeur.production.vpn.eurex.com:8089/clearer/</a> IP: 193.29.90.41, Port: 8089, network 193.29.90.40/29
EEX, Energy Exchange	Production	Leased Line	<a href="https://t7webxeeee.production.vpn.eurex.com:8089/clearer/">https://t7webxeeee.production.vpn.eurex.com:8089/clearer/</a> IP: 193.29.90.41, Port: 8089, network 193.29.90.40/29
Xetra	Production	Leased Line	<a href="https://t7webxetr.production.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxetr.production.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Bulgaria SE	Production	Leased Line	<a href="https://t7webxbul.production.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxbul.production.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Malta SE	Production	Leased Line	<a href="https://t7webxmal.production.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxmal.production.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Vienna SE	Production	Leased Line	<a href="https://t7webxvie.production.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxvie.production.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Budapest SE	Production	Leased Line	<a href="https://t7webxbud.production.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxbud.production.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Ljubljana SE	Production	Leased Line	<a href="https://t7webxlju.production.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxlju.production.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Prague SE	Production	Leased Line	<a href="https://t7webxpra.production.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxpra.production.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Zagreb SE	Production	Leased Line	<a href="https://t7webxzag.production.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxzag.production.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Börse Frankfurt	Production	Leased Line	<a href="https://t7webxfra.production.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxfra.production.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.34, Port: 8091, network 193.29.90.32/29
Börse Düsseldorf	Production	Leased Line	<a href="https://t7webxdus.production.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxdus.production.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.34, Port: 8091, network 193.29.90.32/29
Börse Hamburg	Production	Leased Line	<a href="https://t7webxham.production.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxham.production.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.34, Port: 8091, network 193.29.90.32/29
Börse Hannover	Production	Leased Line	<a href="https://t7webxhan.production.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxhan.production.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.34, Port: 8091, network 193.29.90.32/29

## 3.1.1.5 Disaster Recovery, Internet

Market	Environment	Type	URL / IP
Eurex	Disaster Recovery	Internet	<a href="https://t7webxeur.emergency.eurex.com/clearer/">https://t7webxeur.emergency.eurex.com/clearer/</a> IP: 193.29.90.251, Port: 443
EEX, Energy Exchange	Disaster Recovery	Internet	<a href="https://t7webxeeee.emergency.eurex.com/clearer/">https://t7webxeeee.emergency.eurex.com/clearer/</a> IP: 193.29.90.251, Port: 443
Xetra	Disaster Recovery	Internet	<a href="https://t7webxetr.emergency.deutsche-boerse.com/clearer/">https://t7webxetr.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Bulgaria SE	Disaster Recovery	Internet	<a href="https://t7webxbul.emergency.deutsche-boerse.com/clearer/">https://t7webxbul.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Malta SE	Disaster Recovery	Internet	<a href="https://t7webxmal.emergency.deutsche-boerse.com/clearer/">https://t7webxmal.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Vienna SE	Disaster Recovery	Internet	<a href="https://t7webxvie.emergency.deutsche-boerse.com/clearer/">https://t7webxvie.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Budapest SE	Disaster Recovery	Internet	<a href="https://t7webxbud.emergency.deutsche-boerse.com/clearer/">https://t7webxbud.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Ljubljana SE	Disaster Recovery	Internet	<a href="https://t7webxlju.emergency.deutsche-boerse.com/clearer/">https://t7webxlju.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Prague SE	Disaster Recovery	Internet	<a href="https://t7webxpra.emergency.deutsche-boerse.com/clearer/">https://t7webxpra.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Zagreb SE	Disaster Recovery	Internet	<a href="https://t7webxzag.emergency.deutsche-boerse.com/clearer/">https://t7webxzag.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Börse Frankfurt	Disaster Recovery	Internet	<a href="https://t7webxfra.emergency.deutsche-boerse.com/clearer/">https://t7webxfra.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Börse Düsseldorf	Disaster Recovery	Internet	<a href="https://t7webxdus.emergency.deutsche-boerse.com/clearer/">https://t7webxdus.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Börse Hamburg	Disaster Recovery	Internet	<a href="https://t7webxham.emergency.deutsche-boerse.com/clearer/">https://t7webxham.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443
Börse Hannover	Disaster Recovery	Internet	<a href="https://t7webxhan.emergency.deutsche-boerse.com/clearer/">https://t7webxhan.emergency.deutsche-boerse.com/clearer/</a> IP: 193.29.90.251, Port: 443

## 3.1.1.6 Disaster Recovery, LeasedLine

Market	Environment	Type	URL / IP
Eurex	Disaster Recovery	Leased Line	<a href="https://t7webxeur.emergency.vpn.eurex.com:8089/clearer/">https://t7webxeur.emergency.vpn.eurex.com:8089/clearer/</a> IP: 193.29.90.58, Port: 8089, network 193.29.90.56/29
EEX, Energy Exchange	Disaster Recovery	Leased Line	<a href="https://t7webxeee.emergency.vpn.eurex.com:8089/clearer/">https://t7webxeee.emergency.vpn.eurex.com:8089/clearer/</a> IP: 193.29.90.58, Port: 8089, network 193.29.90.56/29
Xetra	Disaster Recovery	Leased Line	<a href="https://t7webxetr.emergency.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxetr.emergency.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Bulgaria SE	Disaster Recovery	Leased Line	<a href="https://t7webxbul.emergency.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxbul.emergency.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Malta SE	Disaster Recovery	Leased Line	<a href="https://t7webxmal.emergency.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxmal.emergency.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Vienna SE	Disaster Recovery	Leased Line	<a href="https://t7webxvie.emergency.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxvie.emergency.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Budapest SE	Disaster Recovery	Leased Line	<a href="https://t7webxbud.emergency.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxbud.emergency.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Ljubljana SE	Disaster Recovery	Leased Line	<a href="https://t7webxlju.emergency.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxlju.emergency.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Prague SE	Disaster Recovery	Leased Line	<a href="https://t7webxpra.emergency.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxpra.emergency.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Zagreb SE	Disaster Recovery	Leased Line	<a href="https://t7webxzag.emergency.vpn.deutsche-boerse.com:8089/clearer/">https://t7webxzag.emergency.vpn.deutsche-boerse.com:8089/clearer/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Börse Frankfurt	Disaster Recovery	Leased Line	<a href="https://t7webxfra.emergency.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxfra.emergency.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.52, Port: 8091, network 193.29.90.48/29
Börse Düsseldorf	Disaster Recovery	Leased Line	<a href="https://t7webxdus.emergency.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxdus.emergency.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.52, Port: 8091, network 193.29.90.48/29
Börse Hamburg	Disaster Recovery	Leased Line	<a href="https://t7webxham.emergency.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxham.emergency.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.52, Port: 8091, network 193.29.90.48/29
Börse Hannover	Disaster Recovery	Leased Line	<a href="https://t7webxhan.emergency.vpn.deutsche-boerse.com:8091/clearer/">https://t7webxhan.emergency.vpn.deutsche-boerse.com:8091/clearer/</a> IP: 193.29.90.52, Port: 8091, network 193.29.90.48/29

## 3.2 T7 Web Admin

The T7 Web Admin is a T7 graphical user interface (GUI) running in a regular web browser and part of the T7 Web App family of GUIs.

The T7 Web Admin offers the full functionality of the original java-based T7 Admin GUI in a modern setup without the maintenance hurdles of the java-based GUI.

Please note: the T7 Web Admin will be introduced for **Simulation in Q2/ 2026** and for **Production in Q3/2026**.

### 3.2.1 IP Addresses and URLs

The following tables list the addresses to reach the T7 Web Admin for all markets in all environments via both access paths (Internet and N7 Leased Line).

## 3.2.1.1 Simulation, Internet

Market	Environment	Type	URL / IP
Eurex	Simulation	Internet	<a href="https://t7webxeur.simulation.eurex.com/admin">https://t7webxeur.simulation.eurex.com/admin</a> IP: 193.29.90.252, Port: 443
EEX, Energy Exchange	Simulation	Internet	<a href="https://t7webxeeee.simulation.eurex.com/admin/">https://t7webxeeee.simulation.eurex.com/admin/</a> IP: 193.29.90.252, Port: 443
Xetra	Simulation	Internet	<a href="https://t7webxetr.simulation.deutsche-boerse.com/admin/">https://t7webxetr.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Bulgaria SE	Simulation	Internet	<a href="https://t7webxbul.simulation.deutsche-boerse.com/admin/">https://t7webxbul.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Malta SE	Simulation	Internet	<a href="https://t7webxmal.simulation.deutsche-boerse.com/admin/">https://t7webxmal.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Vienna SE	Simulation	Internet	<a href="https://t7webxvie.simulation.deutsche-boerse.com/admin/">https://t7webxvie.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Budapest SE	Simulation	Internet	<a href="https://t7webxbud.simulation.deutsche-boerse.com/admin/">https://t7webxbud.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Ljubljana SE	Simulation	Internet	<a href="https://t7webxlju.simulation.deutsche-boerse.com/admin/">https://t7webxlju.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Prague SE	Simulation	Internet	<a href="https://t7webxpra.simulation.deutsche-boerse.com/admin/">https://t7webxpra.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Zagreb SE	Simulation	Internet	<a href="https://t7webxzag.simulation.deutsche-boerse.com/admin/">https://t7webxzag.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Börse Frankfurt	Simulation	Internet	<a href="https://t7webxfra.simulation.deutsche-boerse.com/admin/">https://t7webxfra.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Börse Düsseldorf	Simulation	Internet	<a href="https://t7webxdus.simulation.deutsche-boerse.com/admin/">https://t7webxdus.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Börse Hamburg	Simulation	Internet	<a href="https://t7webxham.simulation.deutsche-boerse.com/admin/">https://t7webxham.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443
Börse Hannover	Simulation	Internet	<a href="https://t7webxhan.simulation.deutsche-boerse.com/admin/">https://t7webxhan.simulation.deutsche-boerse.com/admin/</a> IP: 193.29.90.252, Port: 443

## 3.2.1.2 Simulation, Leased Line

Market	Environment	Type	URL / IP
Eurex	Simulation	Leased Line	<a href="https://t7webxeur.simulation.vpn.eurex.com:8089/admin/">https://t7webxeur.simulation.vpn.eurex.com:8089/admin/</a> IP: 193.29.90.57, Port: 8089, network 193.29.90.56/29
EEX, Energy Exchange	Simulation	Leased Line	<a href="https://t7webxeeee.simulation.vpn.eurex.com:8089/admin/">https://t7webxeeee.simulation.vpn.eurex.com:8089/admin/</a> IP: 193.29.90.57, Port: 8089, network 193.29.90.56/29
Xetra	Simulation	Leased Line	<a href="https://t7webxetr.simulation.vpn.deutsche-boerse.com:8089/admin/">https://t7webxetr.simulation.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Bulgaria SE	Simulation	Leased Line	<a href="https://t7webxbul.simulation.vpn.deutsche-boerse.com:8089/admin/">https://t7webxbul.simulation.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Malta SE	Simulation	Leased Line	<a href="https://t7webxmal.simulation.vpn.deutsche-boerse.com:8089/admin/">https://t7webxmal.simulation.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Vienna SE	Simulation	Leased Line	<a href="https://t7webxvie.simulation.vpn.deutsche-boerse.com:8089/admin/">https://t7webxvie.simulation.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Budapest SE	Simulation	Leased Line	<a href="https://t7webxbud.simulation.vpn.deutsche-boerse.com:8089/admin/">https://t7webxbud.simulation.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Ljubljana SE	Simulation	Leased Line	<a href="https://t7webxlju.simulation.vpn.deutsche-boerse.com:8089/admin/">https://t7webxlju.simulation.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Prague SE	Simulation	Leased Line	<a href="https://t7webxpra.simulation.vpn.deutsche-boerse.com:8089/admin/">https://t7webxpra.simulation.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Zagreb SE	Simulation	Leased Line	<a href="https://t7webxzag.simulation.vpn.deutsche-boerse.com:8089/admin/">https://t7webxzag.simulation.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.49, Port: 8089, network 193.29.90.48/29
Börse Frankfurt	Simulation	Leased Line	<a href="https://t7webxfra.simulation.vpn.deutsche-boerse.com:8091/admin/">https://t7webxfra.simulation.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.50, Port: 8091, network 193.29.90.48/29
Börse Düsseldorf	Simulation	Leased Line	<a href="https://t7webxdus.simulation.vpn.deutsche-boerse.com:8091/admin/">https://t7webxdus.simulation.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.50, Port: 8091, network 193.29.90.48/29
Börse Hamburg	Simulation	Leased Line	<a href="https://t7webxham.simulation.vpn.deutsche-boerse.com:8091/admin/">https://t7webxham.simulation.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.50, Port: 8091, network 193.29.90.48/29
Börse Hannover	Simulation	Leased Line	<a href="https://t7webxhan.simulation.vpn.deutsche-boerse.com:8091/admin/">https://t7webxhan.simulation.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.50, Port: 8091, network 193.29.90.48/29

## 3.2.1.3 Production, Internet

Market	Environment	Type	URL / IP
Eurex	Production	Internet	<a href="https://t7webxeur.production.eurex.com/admin/">https://t7webxeur.production.eurex.com/admin/</a> IP: 193.29.90.221, Port: 443
EEX, Energy Exchange	Production	Internet	<a href="https://t7webxeeee.production.eurex.com/admin/">https://t7webxeeee.production.eurex.com/admin/</a> IP: 193.29.90.221, Port: 443
Xetra	Production	Internet	<a href="https://t7webxetr.production.deutsche-boerse.com/admin/">https://t7webxetr.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Bulgaria SE	Production	Internet	<a href="https://t7webxbul.production.deutsche-boerse.com/admin/">https://t7webxbul.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Malta SE	Production	Internet	<a href="https://t7webxmal.production.deutsche-boerse.com/admin/">https://t7webxmal.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Vienna SE	Production	Internet	<a href="https://t7webxvie.production.deutsche-boerse.com/admin/">https://t7webxvie.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Budapest SE	Production	Internet	<a href="https://t7webxbud.production.deutsche-boerse.com/admin/">https://t7webxbud.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Ljubljana SE	Production	Internet	<a href="https://t7webxlju.production.deutsche-boerse.com/admin/">https://t7webxlju.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Prague SE	Production	Internet	<a href="https://t7webxpra.production.deutsche-boerse.com/admin/">https://t7webxpra.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Zagreb SE	Production	Internet	<a href="https://t7webxzag.production.deutsche-boerse.com/admin/">https://t7webxzag.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Börse Frankfurt	Production	Internet	<a href="https://t7webxfra.production.deutsche-boerse.com/admin/">https://t7webxfra.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Börse Düsseldorf	Production	Internet	<a href="https://t7webxdus.production.deutsche-boerse.com/admin/">https://t7webxdus.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Börse Hamburg	Production	Internet	<a href="https://t7webxham.production.deutsche-boerse.com/admin/">https://t7webxham.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443
Börse Hannover	Production	Internet	<a href="https://t7webxhan.production.deutsche-boerse.com/admin/">https://t7webxhan.production.deutsche-boerse.com/admin/</a> IP: 193.29.90.221, Port: 443

## 3.2.1.4 Production, Leased Line

Market	Environment	Type	URL / IP
Eurex	Production	Leased Line	<a href="https://t7webxeur.production.vpn.eurex.com:8089/admin/">https://t7webxeur.production.vpn.eurex.com:8089/admin/</a> IP: 193.29.90.41, Port: 8089, network 193.29.90.40/29
EEX, Energy Exchange	Production	Leased Line	<a href="https://t7webxeeee.production.vpn.eurex.com:8089/admin/">https://t7webxeeee.production.vpn.eurex.com:8089/admin/</a> IP: 193.29.90.41, Port: 8089, network 193.29.90.40/29
Xetra	Production	Leased Line	<a href="https://t7webxetr.production.vpn.deutsche-boerse.com:8089/admin/">https://t7webxetr.production.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Bulgaria SE	Production	Leased Line	<a href="https://t7webxbul.production.vpn.deutsche-boerse.com:8089/admin/">https://t7webxbul.production.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Malta SE	Production	Leased Line	<a href="https://t7webxmal.production.vpn.deutsche-boerse.com:8089/admin/">https://t7webxmal.production.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Vienna SE	Production	Leased Line	<a href="https://t7webxvie.production.vpn.deutsche-boerse.com:8089/admin/">https://t7webxvie.production.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Budapest SE	Production	Leased Line	<a href="https://t7webxbud.production.vpn.deutsche-boerse.com:8089/admin/">https://t7webxbud.production.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Ljubljana SE	Production	Leased Line	<a href="https://t7webxlju.production.vpn.deutsche-boerse.com:8089/admin/">https://t7webxlju.production.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Prague SE	Production	Leased Line	<a href="https://t7webxpra.production.vpn.deutsche-boerse.com:8089/admin/">https://t7webxpra.production.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Zagreb SE	Production	Leased Line	<a href="https://t7webxzag.production.vpn.deutsche-boerse.com:8089/admin/">https://t7webxzag.production.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.33, Port: 8089, network 193.29.90.32/29
Börse Frankfurt	Production	Leased Line	<a href="https://t7webxfra.production.vpn.deutsche-boerse.com:8091/admin/">https://t7webxfra.production.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.34, Port: 8091, network 193.29.90.32/29
Börse Düsseldorf	Production	Leased Line	<a href="https://t7webxdus.production.vpn.deutsche-boerse.com:8091/admin/">https://t7webxdus.production.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.34, Port: 8091, network 193.29.90.32/29
Börse Hamburg	Production	Leased Line	<a href="https://t7webxham.production.vpn.deutsche-boerse.com:8091/admin/">https://t7webxham.production.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.34, Port: 8091, network 193.29.90.32/29
Börse Hannover	Production	Leased Line	<a href="https://t7webxhan.production.vpn.deutsche-boerse.com:8091/admin/">https://t7webxhan.production.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.34, Port: 8091, network 193.29.90.32/29

## 3.2.1.5 Disaster Recovery, Internet

Market	Environment	Type	URL / IP
Eurex	Disaster Recovery	Internet	<a href="https://t7webxeur.emergency.eurex.com/admin/">https://t7webxeur.emergency.eurex.com/admin/</a> IP: 193.29.90.251, Port: 443
EEX, Energy Exchange	Disaster Recovery	Internet	<a href="https://t7webxeeee.emergency.eurex.com/admin/">https://t7webxeeee.emergency.eurex.com/admin/</a> IP: 193.29.90.251, Port: 443
Xetra	Disaster Recovery	Internet	<a href="https://t7webxetr.emergency.deutsche-boerse.com/admin/">https://t7webxetr.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Bulgaria SE	Disaster Recovery	Internet	<a href="https://t7webxbul.emergency.deutsche-boerse.com/admin/">https://t7webxbul.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Malta SE	Disaster Recovery	Internet	<a href="https://t7webxmal.emergency.deutsche-boerse.com/admin/">https://t7webxmal.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Vienna SE	Disaster Recovery	Internet	<a href="https://t7webxvie.emergency.deutsche-boerse.com/admin/">https://t7webxvie.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Budapest SE	Disaster Recovery	Internet	<a href="https://t7webxbud.emergency.deutsche-boerse.com/admin/">https://t7webxbud.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Ljubljana SE	Disaster Recovery	Internet	<a href="https://t7webxlju.emergency.deutsche-boerse.com/admin/">https://t7webxlju.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Prague SE	Disaster Recovery	Internet	<a href="https://t7webxpra.emergency.deutsche-boerse.com/admin/">https://t7webxpra.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Zagreb SE	Disaster Recovery	Internet	<a href="https://t7webxzag.emergency.deutsche-boerse.com/admin/">https://t7webxzag.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Börse Frankfurt	Disaster Recovery	Internet	<a href="https://t7webxfra.emergency.deutsche-boerse.com/admin/">https://t7webxfra.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Börse Düsseldorf	Disaster Recovery	Internet	<a href="https://t7webxdus.emergency.deutsche-boerse.com/admin/">https://t7webxdus.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Börse Hamburg	Disaster Recovery	Internet	<a href="https://t7webxham.emergency.deutsche-boerse.com/admin/">https://t7webxham.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443
Börse Hannover	Disaster Recovery	Internet	<a href="https://t7webxhan.emergency.deutsche-boerse.com/admin/">https://t7webxhan.emergency.deutsche-boerse.com/admin/</a> IP: 193.29.90.251, Port: 443

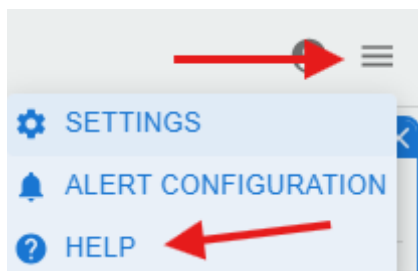
## 3.2.1.6 Disaster Recovery, LeasedLine

Market	Environment	Type	URL / IP
Eurex	Disaster Recovery	Leased Line	<a href="https://t7webxeur.emergency.vpn.eurex.com:8089/admin/">https://t7webxeur.emergency.vpn.eurex.com:8089/admin/</a> IP: 193.29.90.58, Port: 8089, network 193.29.90.56/29
EEX, Energy Exchange	Disaster Recovery	Leased Line	<a href="https://t7webxeee.emergency.vpn.eurex.com:8089/admin/">https://t7webxeee.emergency.vpn.eurex.com:8089/admin/</a> IP: 193.29.90.58, Port: 8089, network 193.29.90.56/29
Xetra	Disaster Recovery	Leased Line	<a href="https://t7webxetr.emergency.vpn.deutsche-boerse.com:8089/admin/">https://t7webxetr.emergency.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Bulgaria SE	Disaster Recovery	Leased Line	<a href="https://t7webxbul.emergency.vpn.deutsche-boerse.com:8089/admin/">https://t7webxbul.emergency.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Malta SE	Disaster Recovery	Leased Line	<a href="https://t7webxmal.emergency.vpn.deutsche-boerse.com:8089/admin/">https://t7webxmal.emergency.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Vienna SE	Disaster Recovery	Leased Line	<a href="https://t7webxvie.emergency.vpn.deutsche-boerse.com:8089/admin/">https://t7webxvie.emergency.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Budapest SE	Disaster Recovery	Leased Line	<a href="https://t7webxbud.emergency.vpn.deutsche-boerse.com:8089/admin/">https://t7webxbud.emergency.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Ljubljana SE	Disaster Recovery	Leased Line	<a href="https://t7webxlju.emergency.vpn.deutsche-boerse.com:8089/admin/">https://t7webxlju.emergency.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Prague SE	Disaster Recovery	Leased Line	<a href="https://t7webxpra.emergency.vpn.deutsche-boerse.com:8089/admin/">https://t7webxpra.emergency.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Zagreb SE	Disaster Recovery	Leased Line	<a href="https://t7webxzag.emergency.vpn.deutsche-boerse.com:8089/admin/">https://t7webxzag.emergency.vpn.deutsche-boerse.com:8089/admin/</a> IP: 193.29.90.51, Port: 8089, network 193.29.90.48/29
Börse Frankfurt	Disaster Recovery	Leased Line	<a href="https://t7webxfra.emergency.vpn.deutsche-boerse.com:8091/admin/">https://t7webxfra.emergency.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.52, Port: 8091, network 193.29.90.48/29
Börse Düsseldorf	Disaster Recovery	Leased Line	<a href="https://t7webxdus.emergency.vpn.deutsche-boerse.com:8091/admin/">https://t7webxdus.emergency.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.52, Port: 8091, network 193.29.90.48/29
Börse Hamburg	Disaster Recovery	Leased Line	<a href="https://t7webxham.emergency.vpn.deutsche-boerse.com:8091/admin/">https://t7webxham.emergency.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.52, Port: 8091, network 193.29.90.48/29
Börse Hannover	Disaster Recovery	Leased Line	<a href="https://t7webxhan.emergency.vpn.deutsche-boerse.com:8091/admin/">https://t7webxhan.emergency.vpn.deutsche-boerse.com:8091/admin/</a> IP: 193.29.90.52, Port: 8091, network 193.29.90.48/29

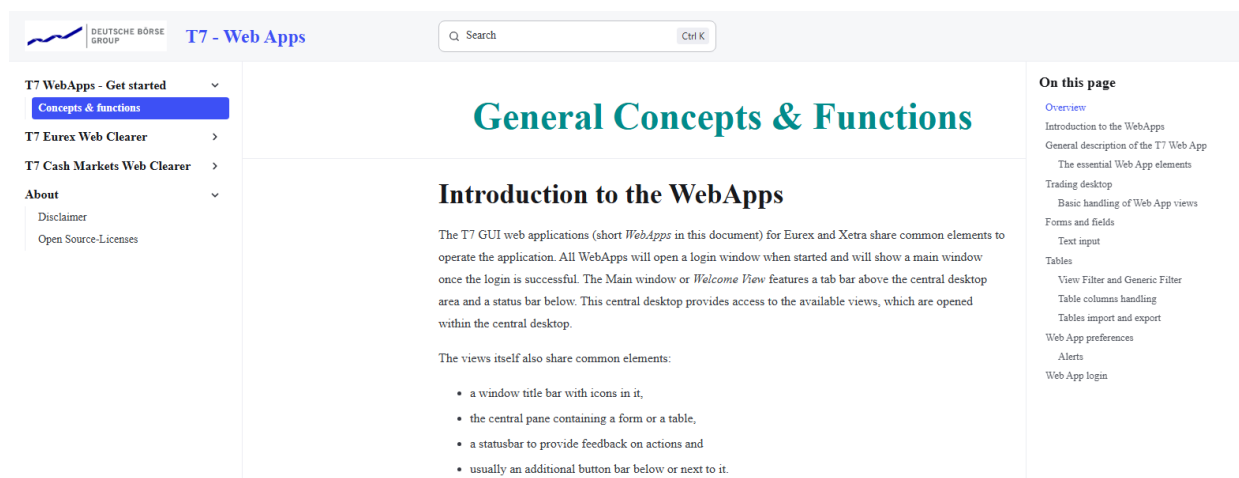
### 3.3 Online Help

All T7 Web Apps come with an extensive online help function, that can be used either context-sensitive or globally.

The online help function is accessed by clicking on the three-line “burger” menu in the top right corner of the T7 Web App window, followed by selecting “Help” from the drop-down menu that appears thereafter.

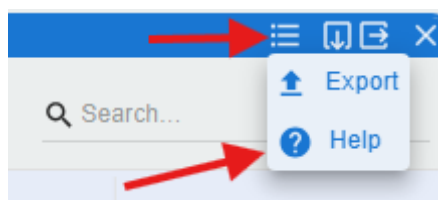


The section “T7 Web Apps – Get Started” and “Concepts & functions” guide a new user through the first usage and setup of the user’s individual layout.



The screenshot shows the T7 Web App interface. The top bar includes the Deutsche Börse Group logo, the text 'T7 - Web Apps', a search bar, and a 'Ctrl K' shortcut. The left sidebar contains a navigation menu with items like 'T7 WebApps - Get started', 'Concepts & functions', 'T7 Eurex Web Clearer', 'T7 Cash Markets Web Clearer', and 'About'. The main content area is titled 'General Concepts & Functions' and 'Introduction to the WebApps'. The right sidebar contains a table of contents for the current page.

Each view offered by the T7 Web App comes with its own three-line “burger” menu which gives access to the context-sensitive help explaining the current view.



## 4 Client Certificate Workflow

To establish and ensure an encrypted connection between the participant and the T7 Web App, the creation and usage of client certificates signed by Deutsche Börse's Certificate Authority (CA) is required for both, Internet and N7 leased line connections. The certificate standard is X.509v3 using the sha256RSA signature algorithm.

To be able to use DBAG signed client certificates the following steps need to be carried out:

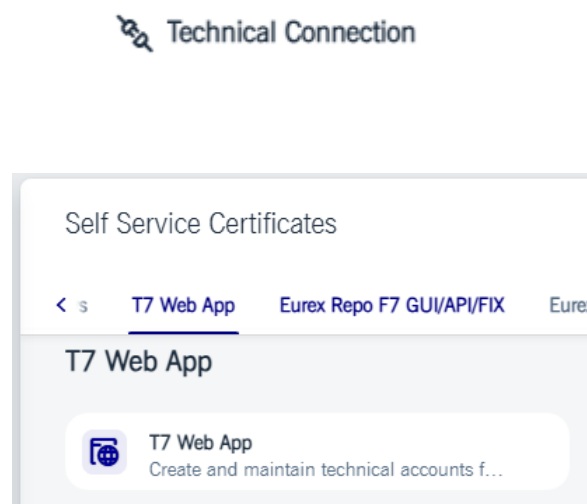
1. Create a T7 Web App technical account in the DBAG Member Section
2. Attach at least one certificate to the respective technical account using Deutsche Börse's Certificate Generator in the DBAG Member Section
3. Download the client certificate (PKCS #12 file) and install it to the client browser

The following section provides guidance on how to manage (create or delete) a T7 Web App technical account and how to manage (create, revoke, or delete) the corresponding client certificate(s) via the DBAG Member Section.

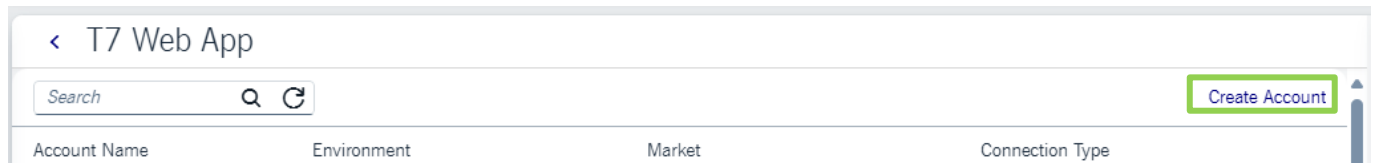
### 4.1 Creating a New T7 Web App Technical Account

Before a certificate can be generated and downloaded, it is necessary to first create a new technical account for the T7 Web Apps. This is done by logging into the DBAG Member Section and navigating to the section

> Technical Connection > Self Service Certificates > T7 WebApp



Once in the "T7 Web App" function of the DBAG Member Section, click on "Create Account" in the top right of the screen to create a first account:



The "Account Configuration" section will be extended to include mandatory fields that must be filled in followed by a section for the certificate creation.

The screenshot displays the 'Create Account' form. The title 'Create Account' is at the top. Below it is the 'Account Information' section, which contains several fields:


- Market:** A dropdown menu with 'Eurex' selected.
- Environment:** A dropdown menu with 'Production' selected.
- Business ID:** A dropdown menu with 'GDBXX' selected.
- Free Text:** A text input field containing 'MYCERT'. Below it, a note states: 'Max. 11 characters allowed <a-z>, <A-Z>, <0-9> but no blanks.'
- Connection Type:** A dropdown menu with 'Leased Line' selected.
- Account Name:** A text input field containing 'GDBXXEGUIPLMYCERT'. Below it, a note explains: 'The Account Name will be the combination of <BusinessID> <Market> <Interface=GUI> <Environment> <Connection Type> <Free Text>. Further information on entry see User Guide in navigation.'

Below the 'Account Information' section is a 'Certificates' section. It features a table with columns: 'Valid From', 'Valid To', 'Status', and 'Changed by'. The table is currently empty, with 'No data' centered below it. To the right of the table are three icons: a plus sign, a left arrow, and a trash can. At the bottom right of the form, there are two buttons: 'Save' (highlighted with a green border) and 'Cancel'.

The following fields need to be filled in:

- Select the desired “Market”.
- Select the required “Environment” from the drop-down menu (Production/Simulation).
- Select the “Business ID”
- Enter “Free Text” which helps identifying the account (up to 11 characters).
- Select the “Connection Type” (Internet or Leased Line).
- Finally, click on “Save”.

In case the selected account name is identical to an existing one, the following error message will appear:

 **Account exists already!**

If this error occurs, please change the “Free Text” field, and save the account again.

Please note A valid admission as a member in the desired market is required to create a technical account and generate a certificate.

An account needs to be saved first before the certificate can be generated and attached to the account.

The account name will be automatically created based on the information in the mandatory fields and will also be used as Common Name (Friendly Name) for the certificate. The account and CN name has the following structure:

<MemberID><Market>GUI<S|P><I|L><Free Text>

Example

CN=GDBXXMGUISIXMALSIMU

<Business ID> GDBXX

<Market> M -> Malta  
E=XEUR, X=XETR, F=XFRA, N=XEEE  
B=XBUL, M=XMAL, V=XVIE  
U=XBUD, L=XLJU, P=XPRA, Z=XZAG

<Environment> S = Simulation  
P = Production & Disaster Recovery

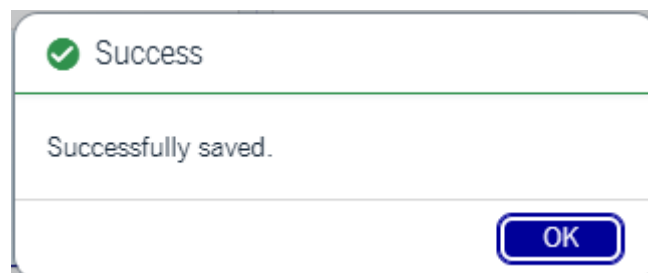
<Access> I = Internet  
L = Leased Line

<Free Text> XMALSIMU

---

**Important:** An account needs to be saved first before the certificate can be generated and attached to the account.

After the account has been successfully saved, the extended tab will be minimized, and the newly created technical account will now appear in the list of accounts with the selected information *Account Name*, *Interface*, *Connection Type*, *Market* and *Environment*.



## 4.2 Generating a New Certificate

It is possible to attach several certificates to one T7 WebApp account and use them in parallel. The uniqueness of a certificate is ensured via its individual serial number.

Attaching several certificates to one account is especially useful if a certificate will soon expire and participants want to extend the usage of an account.

To create or add a certificate to a specific account navigate to the section  
> Technical Connection > Self Service Certificates > T7 WebApp

Click on the respective account name for which a certificate should be created or added.  
The "Account Configuration" tab will then be extended:

### Edit Account

Account Information

Market:

Environment:

Connection Type:

Account Name:

Certificates

Valid From	Valid To	Status	Changed by
No data			

+ ↻ 🗑️  
Add Certificate

Delete Account Save Cancel

- Click on the “+” sign to create a new signed client certificate. A new form will appear:

Generate Certificate

Common Name:

Validity:

\*Passphrase (min. 8 characters):

\*Retype Passphrase:

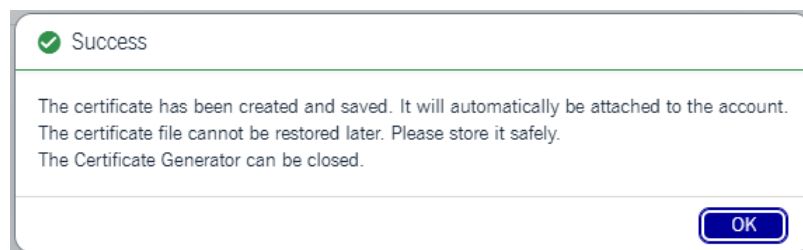
Generate

- Choose the validity of the certificate (1 year or 2 years). To ensure security, a validity period of one year for certificates is recommended. The maximum validity is two years

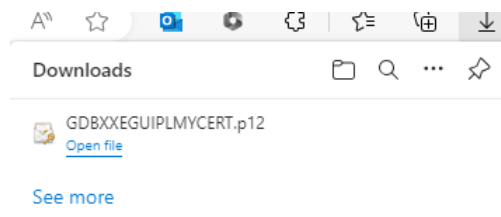
- Enter a passphrase to protect the certificate. The passphrase needs to have at least 8 characters. The passphrase is needed later when importing the certificate into a web-browser. In case a certificate passphrase is forgotten, it cannot be restored or reset. A new client certificate needs to be created in that case.
- Re-enter the passphrase.
- Click on "Generate".

When pressing the "Generate" button, the tool will generate the public and private keypair, create the certificate, send the certificate signing request to the Deutsche Börse CA, process the response and combine everything inside a PKCS#12-file.

After this successful step, the following status will appear:



At the same time the PKCS#12-file is offered for download or automatically downloaded to the location pre-defined by the user.



An entry for the certificate will automatically be attached to the Account (independent of whether the PKCS#12-file has been saved or not).

Please note: The PKCS#12-file will only be stored in the location selected by the user. It is not possible to download a client certificate later.

Only the Common Name and the serial number of the certificate are stored in the Account in the DBAG Member Section. In case the PKCS#12-file has not been downloaded or has been deleted, the user will have to revoke the respective certificate and create a new one.

To see the details of the newly created and attached certificate, click again on the respective Account Name.

The Certificates section will show the details of the certificate such as validity (“Valid from” and “Valid to”), the status of the certificate (“active” for newly created certificates) and the name of the person who created the certificate (“Changed by”):

The screenshot shows a user interface for account management. At the top, there is a section titled "Account Information" containing four fields: "Market" (Eurex), "Environment" (Production), "Connection Type" (Leased Line), and "Account Name" (GDBXXEGUIPLMYCERT). Below this is a "Certificates" section with a table. The table has four columns: "Valid From", "Valid To", "Status", and "Changed by". One row is visible with values: "08/07/2025", "08/07/2026", "active", and a partially visible name. To the right of the table are icons for adding (+), undo, and deleting. At the bottom right, there are "Delete Account" and "Cancel" buttons.

Valid From	Valid To	Status	Changed by
08/07/2025	08/07/2026	active	...

The unique serial number of the Certificate can be displayed by clicking on the certificates' line:

The screenshot shows a dialog box titled "Certificate" with the following fields: "Serial Number" (8f378177b9a8532cc29d796e540e27b32fef1a3), "Valid From" (08.07.2025), "Valid To" (08.07.2026), and "Common Name" (GDBXXEGUIPLMYCERT). A "Cancel" button is located at the bottom right.

### 4.3 Revoking and Deleting a Certificate

In case a certificate is no longer in use (e.g., because a certificate has been created by mistake or the PKCS#12-file has not been downloaded or the certificate has been compromised), participants can revoke certificates via the DBAG Member Section.

To revoke / delete the certificate, please navigate to the section  
> Technical Connection > Self Service Certificates > T7 WebApp

Click on the respective account name for which a certificate should be revoked.

The “Account Configuration” tab will then be extended with the certificate information (“Valid from”, “Valid to”, “Status” and “Changed by”):

Account Information

Market:


Environment:

Connection Type:


Account Name:

Certificates + ↶ 🗑️


Valid From	Valid To	Status	Changed by
08/07/2025	08/07/2026	active	

- Click on the arrow icon  “Revoke Certificate” to display the same revocation icon for each existing client certificate.

Certificates + ↶ 🗑️

Valid From	Valid To	Status	Changed by
08/07/2025	08/07/2026	active	

- Click on the icon for the certificate to be revoked and a pop-up will appear asking for confirmation of the revocation:

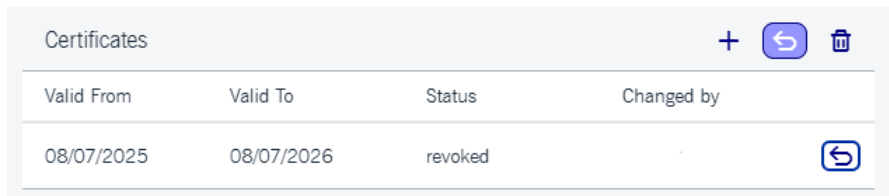
 Revoke Certificate


Do you really want to revoke the selected certificate? This cannot be undone!


Yes No

After clicking Yes” the revocation request will be sent to the Deutsche Börse CA and the certificate will no longer be valid.

The “Status” of the certificate shows “revoked” and the “Changed by” is updated with the person who revoked the certificate:



Valid From	Valid To	Status	Changed by
08/07/2025	08/07/2026	revoked	

The certificate can then be deleted from the account by clicking on the  “Remove Certificate” icon and then on “Save”.

Please note: A certificate can only be removed after it has been revoked. In addition, a technical account can only be deleted after all attached certificates have been revoked or expired.

#### 4.4 Certificate Usage

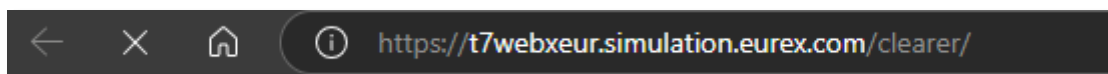
To use the T7 Web App, at least one certificate is required.

A certificate is not user specific and can be jointly used by several users.

The client certificate must be imported into the browser to use the T7 Web App. The process of importing PKCS #12 files into the browser varies depending on which browser is used. Usually, the option can be found when searching for “certificates” in the browser’s settings.

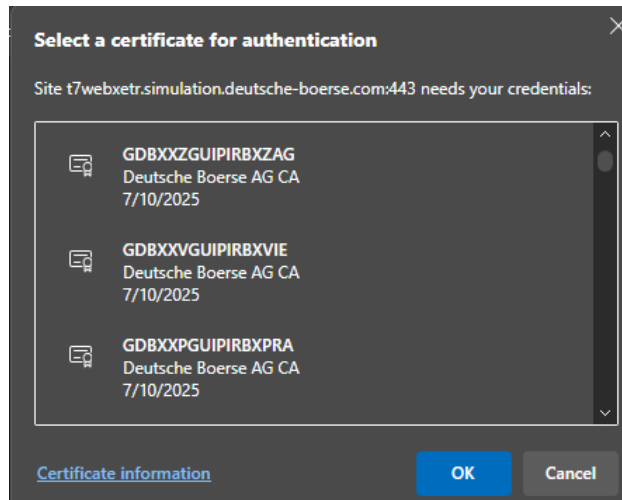
Some browsers have their own storage for certificates (Firefox), while other browsers make use of the certificate storage of the underlying operating system (Chrome, Edge).

The passphrase which was entered during the certificate creation process will be required during import. Once the client certificate is installed in the web-browser, navigate to the desired T7 Web App URL.

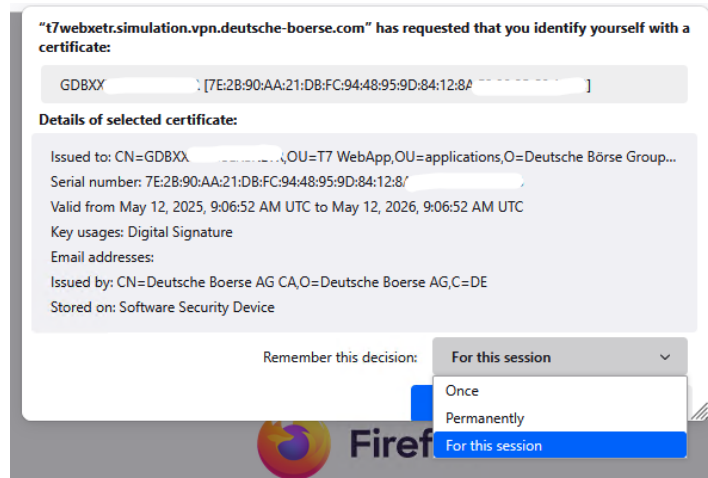


A popup message from the browser will ask the user to select the matching client certificate.

**“t7webxetr.simulation.vpn.deutsche-boerse.com” has requested that you identify yourself with a certificate:**



The choice of client certificate for a given URL is stored differently with different browsers. Mozilla Firefox allows to comfortably store the choice of client certificate for a given URL either permanently or only for a single session.



Chrome and Edge cache the certificate choice for some time but mostly require the user to select the client certificate after the browser is re-started.

In case a wrong certificate (i.e. wrong market, wrong environment: simulation vs. production, or wrong access: Internet vs leased line) has been selected, access to the desired T7 Web App is denied and an error message is displayed instead.

#### 4.5 Certificate Activation, Expiry and Renewal

Newly created certificates are valid and can be used immediately after generation.

In case a certificate approaches expiration, Technical User Administrators, Central Coordinators and the DBAG Member Section user who created the certificate are notified via email about the upcoming expiration.

There is no technical limitation on the number of certificates which can be registered under a given account and there is no technical limitation on the number of accounts which can be created for a given Business ID.

## 5 Change Log

Version	Date	Chapter	Change description
1	21.08.2025		Initial version for publication
2	22.09.2025	3.1.1, 3.2.1	Added the TCP/IP port to the leased line URLs, corrected URL for Zagreb Stock Exchange (XZAG)
3	01.12.2025	3.1.1.2, 3.1.1.4, 3.1.1.6  3.2.1.2, 3.2.1.4, 3.2.1.6	Changed IP addresses for all leased line URLs to reflect separation of derivatives and cash market services