## History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Reason for change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>10 June 2013</td>
<td>First public version describing token and certificate access</td>
</tr>
<tr>
<td>1.1</td>
<td>19 June 2013</td>
<td>Correction of IP address for leased line</td>
</tr>
<tr>
<td>2.0</td>
<td>04 July 2013</td>
<td>Document has been reorganized; sections about ordering WebTrading and certificate password change added</td>
</tr>
<tr>
<td>2.1</td>
<td>08 August 2017</td>
<td>Correction of the link in chapter 3</td>
</tr>
</tbody>
</table>
Table of Content

1  Introduction ........................................................................................................... 5
   1.1  Overview ........................................................................................................... 5
   1.2  Checklist for certificate authentication ............................................................. 6
   1.3  Checklist for Token hardware authentication .................................................... 7
   1.4  Login Overview ................................................................................................. 7

2  Certificate Authentication via Internet ................................................................. 8
   2.1  Authentication ................................................................................................... 8

3  Certificate Authentication via Leased Line ............................................................. 9
   3.1  Name Resolution .............................................................................................. 9
   3.2  Authentication .................................................................................................. 10

4  Token Authentication via Internet ........................................................................... 10
   4.1  Authentication .................................................................................................. 11

5  GUI Access ............................................................................................................. 12
   5.1  Market Selection .............................................................................................. 12
   5.2  Environment selection .................................................................................... 13
   5.3  System Connection ......................................................................................... 13
   5.4  Trader Login ................................................................................................... 14

6  Certificate Import into browsers ............................................................................ 16
   6.1  Internet Explorer ............................................................................................ 16
   6.2  Firefox ............................................................................................................. 16
   6.3  Certificate Password Change .......................................................................... 17
   6.3.1  Internet Explorer ........................................................................................ 17
   6.3.2  Firefox ........................................................................................................ 17

7  Citrix ...................................................................................................................... 18
   7.1  Installation of the Citrix Plugin ........................................................................ 18
   7.2  Password complexity rules ............................................................................. 18
   7.3  Printing ............................................................................................................ 19

8  Member Section ...................................................................................................... 19
   8.1  Ordering Access to WebTrading ..................................................................... 19
   8.2  Downloading Certificates .............................................................................. 20
   8.3  Downloading Token PIN Numbers and Details ............................................. 21

9  Frequently Asked Questions .................................................................................. 22
   9.1  General ........................................................................................................... 22
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2</td>
<td>Certificates</td>
<td>23</td>
</tr>
<tr>
<td>9.3</td>
<td>Tokens</td>
<td>23</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Overview

Deutsche Börse WebTrading is a mechanism for accessing a trading, clearing or administrative GUI without the need to administer the necessary software and hardware on on-site installations. The corresponding GUI is hosted and maintained at Deutsche Börse and members connect to it remotely.

This quick access guide shows the necessary steps that a member needs to perform in order to launch an instance of the trading, clearing or administrative GUI.

The options for connecting to the Deutsche Börse infrastructure that hosts the GUIs connections are:

- Internet connections with certificate authentication
- Leased line connections with certificate authentication
- Internet connections with token hardware authentication (please note that token hardware can not be ordered anymore)

There are two methods that can be used to authenticate oneself to the WebTrading infrastructure. However, not all options are available for all markets. The table below illustrates the supported possibilities:

<table>
<thead>
<tr>
<th></th>
<th>Certificate</th>
<th>Token</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain Internet</td>
<td>✓ (1)</td>
<td>✓ (1)</td>
</tr>
<tr>
<td>Leased Line (GUI Channel)</td>
<td>✓ (2)</td>
<td>X</td>
</tr>
</tbody>
</table>

Notes:

1. All potential GUIs are available: the @X-ceed Eurex Trading GUI, the @X-tract Eurex Clearing GUI, the @X-pert CCP GUI, the Xetra Frankfurt GUI, the Xetra Vienna GUI and Eurex Repo GUI.

---

1 This does not apply to the Wiener Börse, Irish Stock Exchange, Bulgarian Stock Exchange, Malta Stock Exchange and the Cayman Islands Stock Exchange

2 The Xetra Frankfurt GUI supports access to Xetra Frankfurt, Xetra International Market, Scoach, Eurex Bonds, Irish Stock Exchange, Bulgarian Stock Exchange, Malta Stock Exchange and the Cayman Islands Stock Exchange
2. Only the @X-ceed Eurex Trading, the @X-tract Eurex Clearing GUI and the @X-pert CCP GUI are available and a GUI Channel is required. For the access to the GUIs, the following rules apply:

- Access to several different GUIs can be ordered on the same certificate or token if the Member ID of the user is the same for the different GUIs.
- Production and simulation (as well as advanced simulation) can be ordered on one certificate or token. One certificate or token can be used to log into both environments at the same time, provided that the same Member ID is used.
- Certificates or tokens can support all available Exchange GUIs at once. Users can log into different GUIs at the same time. Once a user is logged into one GUI, the certificate or token cannot be used to log into the same GUI at the same time, e.g. Xetra Frankfurt and Xetra Frankfurt 2 cannot be accessed via one certificate or token at the same time.

Should further assistance be required than provided in this guide, please contact the Technical Account Manager at Deutsche Börse by using the VIP number.

1.2 Checklist for certificate authentication

Below is a checklist of information and items that need to be available prior to the first connection to the WebTrading service with certificate based authentication:

- Certificate has been ordered and downloaded from the Member Section
- Certificate password received via email from Deutsche Börse, and the certificate is installed in the browser
- https connections are possible using either leased lines or internet (both connection alternatives require port 443/tcp to be open)
- For leased line connections, the hostname of the destination URL and its IP address have to be added to the “hosts” file or name-server
- Login password
- Exchange trader-ID
- Exchange trader-ID password

---

3 The Eurex GUIs provide also access to the EEX Power Derivatives (EEX Futures)
4 For instructions on how to do this, please see section 8
5 For instructions on how to do this, please see section 6
6 For instructions on how to do this, please see section 3.1
In order to start the Citrix session, either Java needs to be available on the computer or the Citrix plugin needs to be installed. For the installation of the Citrix plugin, administrative privileges are needed. Details are described in section 7.1.

### 1.3 Checklist for Token hardware authentication

Below is a checklist of information and items that need to be available prior to the first connection to the WebTrading service with token based authentication:

- Hardware token device
- https connections through internet are possible (port 443/tcp is open)
- Token device PIN
- Token device user name
- Token device user name password
- Exchange Trader-ID
- Exchange Trader-ID password

In order to start the Citrix session, either Java needs to be available on the computer or the Citrix plugin needs to be installed. For the installation of the Citrix plugin, administrative privileges are needed. Details are described in section 7.1.

### 1.4 Login Overview

The general login logic into the WebTrading infrastructure is as follows:

1. Certificate or token authentication. Please see section 2 - 4
2. Optionally, installation of the Citrix plugin. Please see section 7.1
3. Market selection. Please see section 5.1
4. Environment selection. Please see section 5.2
5. System connection. Please see section 5.3
6. Trader login. Please see section 5.4

---

7 For members of Eurex, CCP and Xetra, the PIN and user name can be found on the Online Member Section (details in section 8.3). Members of other exchanges will receive the PIN via letter.
2 Certificate Authentication via Internet

In order to connect to the certificate based authentication via internet, a connection to https://webtrading-cert.deutsche-boerse.com/ needs to be made. This website is only accessible if a WebTrading certificate is installed in the browser.

Please note that this connection requires https, i.e. port 443/tcp needs to be open on the corresponding firewalls.

2.1 Authentication

When accessing the webpage, the certificate must be selected. In case that several certificates have been installed in the browser, then the correct one needs to be selected from the list as shown from the browser. It is necessary to restart the browser, if another Citrix user id needs to be used after a logout of Citrix.

In order to login, the following credentials are required:

User name: Filled in automatically based on the selected certificate. The user name cannot be changed.
Certificate Authentication via Leased Line

In order to connect to the certificate based authentication via leased line, a connection to

Eurex:
https://webtrading-line.deutsche-boerse.com

Xetra:
https://xgui-line.deutsche-boerse.com

needs to be made. This website is only accessible if a WebTrading certificate is installed in the browser.

Please note that this connection requires https, i.e. port 443/tcp needs to be open on the corresponding firewalls.

3.1 Name Resolution

In order to allow a success handshake of the ssl-protocol, the Citrix server certificate needs to be verified by the browser. This means that the hostname webtrading-line.deutsche-boerse.com and the corresponding IP address need to be known to the browser. For certificate access via internet and for token access, this is done automatically, since this name resolution will be done using the internet name servers of Deutsche Börse Group. However, this fails for leased lines. Therefore, this name resolution needs to be configured in the Member network. There are two possibilities to do so:

1. The hostname webtrading-line.deutsche-boerse.com and the corresponding IP address 193.29.93.177 are configured in the name server of the member network

2. The hostname webtrading-line.deutsche-boerse.com and the corresponding IP address 193.29.93.177 are configured in the “hosts” file of the used computer (/etc/hosts on UNIX systems, \system32\drivers\etc\hosts in Windows).

For example, the following line can be added to the local hosts file:

# Hosts file
193.29.93.177 webtrading-line.deutsche-boerse.com
3.2 Authentication

When accessing the webpage, the certificate must be selected. In case that several certificates have been installed in the browser, then the correct one needs to be selected from the list as shown from the browser. It is necessary to restart the browser, if another Citrix user id needs to be used after a logout of Citrix.

In order to login, the following credentials are required:

**User name:** Filled in automatically based on the selected certificate. The user name cannot be changed.

**Password:** The password associated with the user name. The initial password must be changed during the first login. Please see section 7.2 for the password complexity rules.

Please continue with Section 7.1 – Install Citrix Plugin and with section 5 for the access to the GUIs.

4 Token Authentication via Internet

In order to connect to the token based authentication, a connection to
https://webtrading.deutsche-boerse.com

needs to be made.

Please note that this connection requires https, i.e. port 443/tcp needs to be open on the corresponding firewalls.

4.1 Authentication

In order to login, the following credentials are required:

**User name**: The user name associated with the token device (usually in the form of the Member-ID and two digits)\(^a\)

**Token**: A temporary, six character code that is generated from the token device. The six character token code will be shown after the correct token PIN has been entered and the “Ent” has been entered.

\(^a\) For members of Eurex, CCP and Xetra, the PIN and user name can be found on the Online Member Section (details are described in section 8.3). Members of other exchanges will receive the PIN via letter. Please note that the user name is unique to a token. Any given user name can only be used with the designated token hardware device.
pressed. The generated token code can be used for a rather limited time (~ 7 seconds). Afterwards, a new code might have to be generated.

**Password:** The password associated with the user name. The initial password must be changed during the first login. Please see section 7.2 for the password complexity rules.

Please continue with Section 7.1 – Install Citrix Plugin and with section 5 for the access to the GUIs.

### 5 GUI Access

#### 5.1 Market Selection

After the successful login, an overview of the Exchange applications is visible:

In order to proceed, the Exchange application needs to be selected. Depending on the ordered markets for the Citrix user account, different markets will be shown.
5.2 Environment selection

Upon selecting a market the production or simulation environment needs to be chosen.

Selecting an environment will launch the GUI for the selected market and environment.

5.3 System Connection

An authentication window will be shown for the system connection towards the chosen backend. This step is required for accessing Xetra and Eurex Trading and Clearing. Eurex Repo and CCP do no have this system connection authentication step. The following example shows the authentication window for Xetra:
The credentials for this section are found in the table below:

<table>
<thead>
<tr>
<th>Environment</th>
<th>User ID</th>
<th>Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xetra (Simulation, Advanced Simulation and Production)</td>
<td>XetraTrd</td>
<td>11111111</td>
</tr>
<tr>
<td>Eurex Trading (Simulation and Production)</td>
<td>EurexTrd</td>
<td>11111111</td>
</tr>
<tr>
<td>Eurex Clearing (Simulation and Production)</td>
<td>EurexTrd</td>
<td>11111111</td>
</tr>
</tbody>
</table>

In order to access Xetra International Market, Eurex Bonds, Scoach, the Wiener Börse, the Irish Stock Exchange, the Malta Stock Exchange, the Bulgarian Stock Exchange or the Cayman Islands Stock Exchange, the Xetra credentials need to be used.

In order to access the EEX Power Derivatives (EEX Futures) market, the Eurex credentials need to be used.

Click “OK” to proceed.

5.4 **Trader Login**

Depending on the chosen GUI, a selection for the different markets can be shown. In order to login, the corresponding market needs to be selected and the credentials for this market need to be entered (note that the below image is from Xetra, other GUs look different):
In case of questions about trader credentials, please contact the corresponding help desk:

- Market Supervision – Clearing Data: +49 69 211 1 2453
- Market Supervision – Eurex: +49 69 211 1 1210
- Market Supervision – Xetra: +49 69 211 1 1400
- Market Supervision – Scoach: +49 69 211 1 9333
- Market Supervision – Clearing CCP: +49 69 211 1 1250
- Market Supervision – Eurex Bonds: +49 69 211 1 3890
- Market Supervision – EEX: +49 341 215 6229
- Market Operations Irish Stock Exchange: +353 1 617 4200
- Market Operation Cayman Islands Stock Exchange: +1 345 945-6060
- Trading Bulgarian Stock Exchange: +359 2 937 09 49
- Market Supervision – Malta Stock Exchange: +356 256 966 67 / 68
Certificate Import into browsers

Once the certificate has been downloaded from the Member Section and the password has been received, the certificate needs to be imported into the browser. This needs to be done before the connection to WebTrading is made.

6.1 Internet Explorer

The certificate can be imported into the Internet Explorer in the Certificates window. It can be accessed as follows:

Tools → Internet Options → Content → Certificates

In order to import the certificate, the Personal tab needs to be selected and then the Import button needs to be clicked. The certificate password will be requested during the import process. Please note, that the certificate has the file format .p12. Therefore it will be necessary to choose the correct file type before selecting the certificate.

6.2 Firefox

The certificate can be imported into Firefox in the Certificate Manager window. It can be accessed as follows:
In order to import the certificate, the *Your Certificate* tab needs to be selected and then the *Import* button needs to be clicked. The certificate password will be requested during the import process. Please note, that the certificate has the file format .p12. Therefore it may be necessary to choose the correct file type before selecting the certificate.

### 6.3 Certificate Password Change

Due to security considerations, a change of the certificate password might be considered. The following steps describe how to change the password. This can be done easily by exporting the certificate from the browser.

#### 6.3.1 Internet Explorer

The certificate needs to be flagged as exportable during the import process. Please be aware that this certificate then can be exported and moved to another computer by anyone who can access the browser with the corresponding user id. Therefore, it is highly recommended to perform this procedure only in a “secure” environment with a user id which supposed not to use the certificate. It is also highly recommended to delete the certificate from the browser after the export.

During the export process the *Yes, export the private key* option needs to be selected. The new password needs to be entered then during the export process.

#### 6.3.2 Firefox

Firefox allows exporting all certificates available. This implies that the certificate can be exported by anyone using the certificate.
In order to change the password, the **Backup** button needs to be clicked. The new password can then be set during the export process.

### 7 Citrix

#### 7.1 Installation of the Citrix Plugin

In order to access the Exchange services, either the Citrix plugin ("Native client"), or Java needs to be installed. It may be necessary to install the Citrix plugin during the first login into the WebTrading infrastructure. Privileged resources are needed for the installation of the Citrix plugin.

It is possible to select a preferred method of connecting to the services (Citrix native client or Java client) in the Preferences settings:

![Citrix Preferences](image)

#### 7.2 Password complexity rules

The Citrix password must be changed every 42 days. The requirements for a new password are:

- at least 8 characters long
- differ from the last 24 passwords

The password must meet certain complexity requirements:

- at least one capital and small letter e.g. A, a
- at least one numeric character e.g. "1" or "2"
- at least one special character e.g. "." or "," or "$"
7.3 Printing

In order to set up printing from the Exchange applications, please select the “System Settings” folder in the application selection:

This will open a configuration window showing which printers are installed on the local workstation. Clicking on the “Yellow Flash” icon will connect the selected printer. “Connected” printers will be usable in the Exchange applications:

8 Member Section

Details of the connectivity options assigned to a Member can be found in the Member Section. Please note that the Member Section is currently only available to members of Eurex or Xetra exchanges.

8.1 Ordering Access to WebTrading

Members who would like to order another set of WebTrading connection(s) for the Malta Stock Exchange, Bulgarian Stock Exchange and Cayman Islands Stock Exchange shall get in touch with these exchanges directly to obtain the respective forms for the setup. WebTrading for all other markets could be ordered via the Member Section portal of Deutsche Börse AG.

Access to WebTrading needs to be ordered in the Member Section:
2. At the top, select Technical Connection
3. Along the left-hand side, select Requests & Configuration
4. Click on New Request
5. Click on New Connection
6. Select WebTrading and click on Next step in order to proceed

8.2 Downloading Certificates

Certificates must be downloaded from the online Member Section:

2. At the top, select Technical Connection
3. Along the left-hand side, select Requests & Configuration
4. Select the Current Configuration tab
5. Select the WEBTRADING installation
6. Choose the certificate to be downloaded in the Components box
7. The certificate can then be downloaded from the box containing the details of the certificate.
If it is not possible to download the certificate, then please contact the Technical Account Manager at Deutsche Börse by using the VIP number.

8.3 Downloading Token PIN Numbers and Details

The token PIN for the Bulgarian Stock Exchange, the Malta Stock Exchange and the Cayman Islands Stock Exchange is sent via letter. Therefore, this section does not apply to the customers of these exchanges.

In order to view the PIN, Serial Number and User name of all Token devices belonging to an organization, navigate as follows:

2. At the top, select Technical Connection
3. Along the left-hand side, select Requests & Configuration
4. Select the Current Configuration tab
5. Select the WEBTRADING installation
6. Select “Print Token PIN”:
If the “Print Token PIN” button is not shown, then please contact the Technical Account Manager at Deutsche Börse by using the VIP number.

9 Frequently Asked Questions

9.1 General

1. Can I log in to different markets at the same time?

Users can log in to different GUIs at the same time. Once a user is logged in to one GUI, the token/certificate cannot be used to log into the same GUI at the same time. Therefore, logging into the Eurex Trading and Eurex Clearing GUI at the same time is possible.

Xetra Frankfurt and Xetra Frankfurt 2 can not be accessed via one token/certificate at the same time.

The use of a token/certificate is restricted to one user only at a time (determined in the respective connection agreements).

2. Are production and simulation environments supported on the same token/certificate?

Production and simulation are both available on one token/certificate. One token/certificate can be used to log in to both environments at the same time, provided that the same Member ID is used.
3. Are there limits on the amount of transactions I can make?

A maximum of 1,000 transactions per hour is possible for each WebTrading connection.

9.2 Certificates

1. I need to have multiple connections with multiple certificates

This is possible. Firstly, ensure that all necessary certificates are imported into the browser, then, when prompted to by the browser, select the certificate to be used and proceed to connect. In order to use another certificate, a restart the browser is needed.

2. How will I receive my certificate password?

The certificate password is sent to the email address of the “owner” as selected during the ordering process.

3. I have lost my certificate password

Because we do not store passwords in the Member Section, it is necessary to order a replacement certificate.

4. Can I use the same certificate for internet based and leased line based connections?

Yes.

9.3 Tokens

1. I have lost my Token, my Token is broken or out of batteries.

To imitate the process of receiving a replacement Token, please contact your Technical Account Manager at Customer Technical Support.

2. BAD PIN is appearing on my Token screen

“BAD PIN” appears after the wrong PIN has been entered into the Token more than three times. The token should unlock by itself after 24 hours. If not, please contact the Technical Account Manager at Customer Technical Support.

Please do not hesitate to contact your Technical Key Account Manager at Customer Technical Support (via the VIP number), your Account Manager at Member Services & Admission or the Trading Helpdesks with any further questions.