MFG140 - ComTrader Setup Guide

M7 6.6

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Table of Contents

1 Technical Requirements to run ComTrader

1.1 Client PC

To run the ComTrader application a PC is required with at least 2 Gigabyte Memory and a processor that runs with not less than 3 GHz single core or not less than 2 GHz dual core processors.

ComTrader application requires **a dedicated amount of 1.1 GB of memory**, optimal amount of memory can be found in Section 2.3 depending on the version in use.

Sound card is also required.

Platform	Notes to JavaFX Media
Windows Vista	JavaFX Media requires that one of the following external modules be installed (by order of preference) to play AAC audio and H.264/AVC video: • MainConcept H.264/AVC Pro Decoder Pack • DivX Plus Codec Pack • MainConcept Showcase (includes demo version codecs)
Windows 7 Windows 8 Windows 10	The pre-installed Microsoft AAC and H.264 DirectShow decoder filters are used by default. However, if the MainConcept H.264/AVC Pro Decoder Pack is installed on your system, then the first available AAC or H.264 decoder from the following list is used within the following order: • MainConcept • Microsoft • DivX Plus • MainConcept trial version (demo codecs from Showcase) If none of these decoders is available, AAC and H.264 decoding will fail.
Linux	You must install GLIB 2.28 in order to run JavaFX Media. You must install the following in order to support AAC audio, MP3 audio, H.264 video, and HTTP Live Streaming: libavcodec53 and libavformat53 on Ubuntu Linux 12.04 or equivalent.

Supported Graphics Cards are listed below. In addition, to avoid rendering issues on Windows platform, upgrade the ATI driver to Catalyst 11.09 or later.

Graphics Card	Supported Graphics Processing Units (GPUs)
NVIDIA	Mobile GPUs: GeForce 8M and 100M series or higher, NVS 2100M series or higher, and Mobility Quadro FX 300M series or higher Desktop GPUs: GeForce 8 and 100 series or higher Workstation GPUs: Quadro FX 300 series or higher
ATI	Mobile GPUs: Mobility Radeon HD 3000, 4000, and 5000 series Desktop GPUs: Radeon HD 2400, 3000, 4000, 5000, and 6000 series
Intel	Mobile GPUs: GMA 4500MHD and GMA HD Desktop GPUs: GMA 4500 and GMA HD

Operating systems Windows Vista, Windows 7, Windows 8, Windows 10, Mac OS X and Linux are supported for running Java applications by Oracle Corporation.[1]

Windows 7 and Linux Ubuntu (both 64 bit versions) are the Operating Systems supported by Deutsche Boerse AG for M7 ComTrader application.

Running ComTrader on a Virtual Desktop based Infrastructure, as well as any other type of virtualisation setup (e.g. Citrix) is currently possible, but is not supported. Therefore, levels of performance cannot be guaranteed.

The Client PC must have a suitable internet connection. (DSL or higher is recommended). The connection to the backend can be done directly or over a leased line (dedicated network connection to the backend network). HTTP and SOCKS proxies are supported.

The ComTrader needs a Java Plugin (JRE) with version 8 update 60 or higher version (latest 64 bit version is recommended). Furthermore, the end-user of ComTrader needs access rights to the Java Plugin (e.g. Plugin cache).

When standalone version is used, the proper Java version is bundled and does not require a separate installation.

To access the initial website an internet browser is required (Java Web Start supports primarily Internet Explorer 4 or higher and Mozilla).

For the export functionality Microsoft Excel 2010 is supported by Deutsche Boerse AG.

1.2   Start ComTrader and Getting Connected

The ComTrader will be started via web site (address is provided in a separate document) or running an executable file from a standalone package[2].

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[1] http://www.oracle.com/technetwork/java/javase/certconfig-2095354.html
  JavaFX for Linux requires gtk2 2.18+.
[2] If standalone package(s) are part of delivery configuration.

During the program start process, the WebStart[3] mechanism does a version check and if necessary, the most actual version of the ComTrader will be downloaded.

At first start, a security warning can be shown. The application is signed by a certificate of the Deutsche Börse Group signed by verisign. If verisign is not in trusted authorities on operation system level, the checkbox "I accept the risk and want to run this application" has to be checked, before clicking "Run". A message showing certificate details can also appear depending on Java settings.
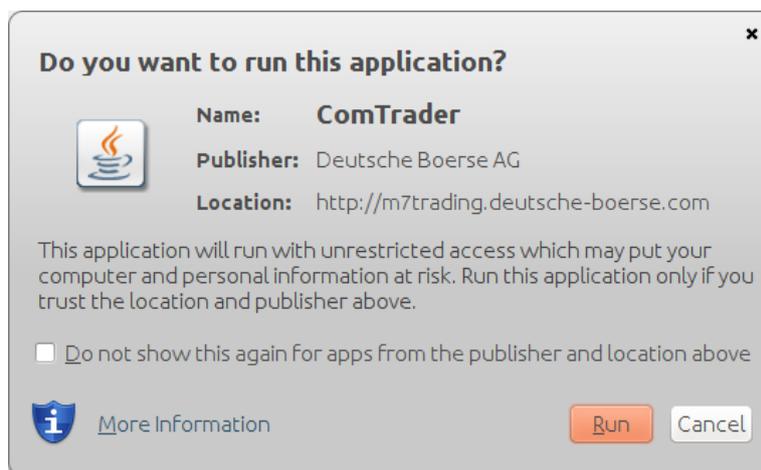
The size of this file may change in the future (e.g. by updates). Please make sure that the download of this file is not restricted by size limitations for zip or jar archives in your infrastructure. Furthermore, please make sure that the jar archive is not changed by any virus scanner.

1.2.1 Connections from ComTrader to Endpoints

A running ComTrader application connects to two different endpoints:

- An AMQPS based connection to the M7 Backend Application;

- An HTTPS based connection to the M7 Profile Server (the same Profile Server instance is used for all M7 services)- Profile server connection is not mandatory and provision of this functionality depends on delivery configuration;

- Additional customer specific documentation (Environment Details) contains details for every environment. If the access to the internet is restricted from the user's desk (e.g. by firewalls or specific proxy restrictions), the provided endpoints must be unlocked.

1.2.2 Proxy Server

If a proxy server is used, you need to configure your ComTrader client in the login window:

- Go to tab "Connection"

- Fill the parameters depending of the kind of proxy you use (SOCKS or HTTP) according to your local settings

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[3] Java Web Start technology enables Java software applications to be run with a single click over the internet. It ensures the most current version of the application will be run.

No Proxy ▼

| Host | Port | User Name | Password |
| webproxy | 8080 | User Name | Password |

Safeguards   Connection

- **Note**:

    1. Regardless the kind of proxy used (SOCKS or HTTP), it needs to be allowed to connect to the correct server and port (refer to IP and Port below).

    2. If you are using HTTP proxy, HTTP CONNECT method must be enabled.

    3. After successful login proxy settings get locally saved on user computer and are pre-filled in future application executions.

    4. When selecting No proxy, all communication (AMQP and Profile Data) will be performed directly, without proxy.

    5. When using SOCKS Proxy, all communication (AMQP and Profile Data) will be performed via the SOCKS proxy, according to the user-specified proxy settings.

    6. When using HTTP Proxy, all communication (AMQP and Profile Data) will be performed via the HTTP proxy, according to the user-specified proxy settings.

Note that AMQP traffic is tunneled via HTTP CONNECT request, which is often disabled by default. Proxy admins must enable HTTP CONNECT method.

1.2.3   Leased Line

If a leased line is used, you need to configure your ComTrader client in the login window:

- Go to tab "Connection"

- Select "Leased-Line" from the drop-down menu

The parameters for the Host or Port shall not be filled in, because are related to the proxy connection type (see *1.2.2*).

To be able to select this option, Leased Line must be configured in M7. The IP Addresses for the Leased Line are environment-specific and hard-coded in M7 meaning the client cannot change them.

You can find the IP Addresses for the Leased Line in the Environment Details document. **The client must ensure that he can access these IP Addresses.**

1.2.4   Changing Password

It is recommended that user should change provided initial password. This is done after login by navigating to application menu **Profile**->**Change Password**.

2 Check Infrastructure

2.1 Test Java Plugin

Open the provided URL[4] in your internet browser.

Click on the link "Start the ComTrader via Webstart". If the browser wants to download, show or save a file named like "<FileName>.jnlp", the Java plugin is not configured correctly. Sometimes just the file association .jnlp file -> Java plugin is missing.

A manual for the ComTrader application can be either downloaded from this website or opened from the ComTrader application itself.

The actual version of this Setup Guide can be also downloaded from this website.

2.2 Java Plugin Settings

Open the Control Panel via the Windows start menu:
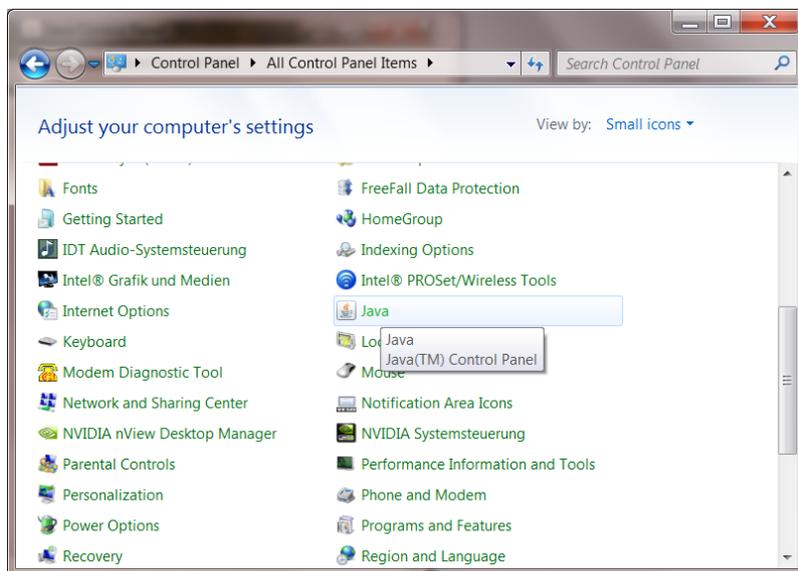
Double click the icon "Java" to open the plugin settings. If the icon is missing, the plugin is missing or it has not been correctly installed.

The following window should open:

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[4] See the document "Environment details".
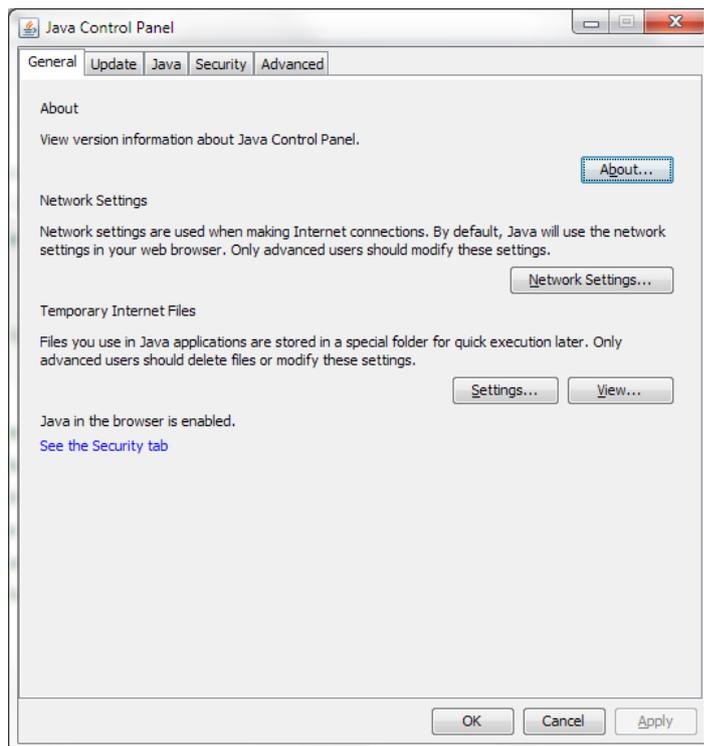
The Java plugin version can be verified by clicking on "About…":

The version should be 8 update 60 or higher.

Open the network settings with a click on "Network Settings…":
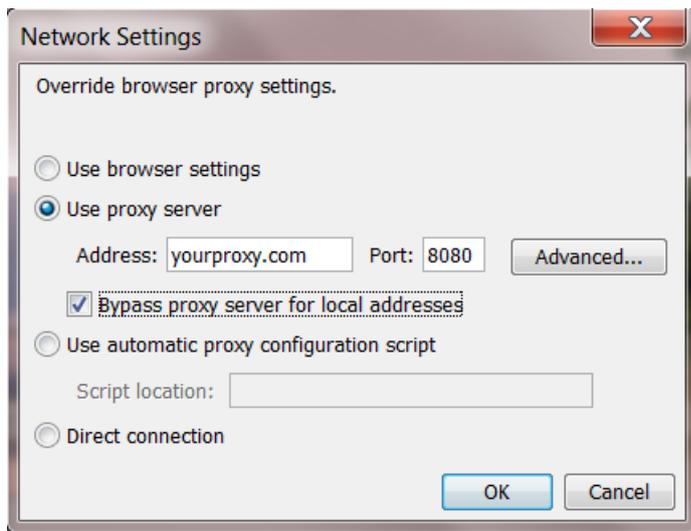
These settings are specific for your infrastructure. Please ask your system administrator for help. When no user access restriction is in place, you can adjust the settings in your internet browser and use it here by checking the "Use browser settings option".[5]

Open the settings for temporary internet files with a click on "Settings…"
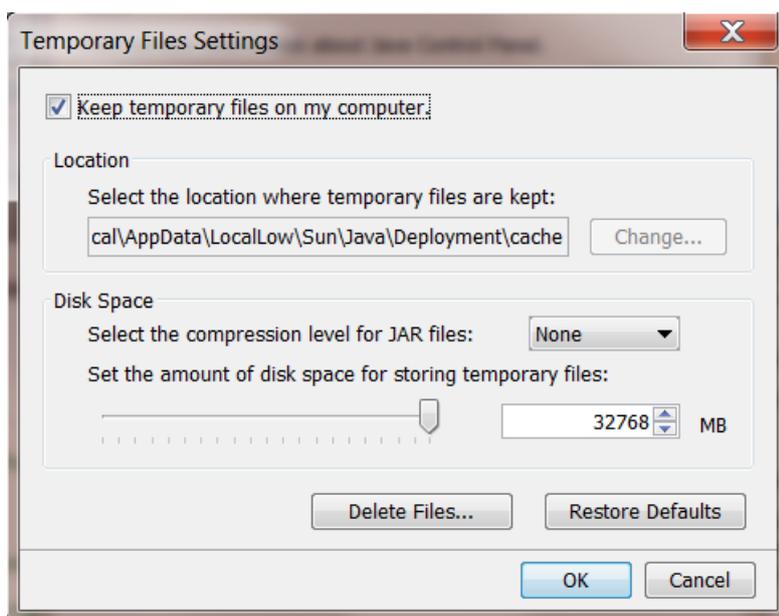
We suggest leaving the temporary files on the computer because otherwise the ComTrader application will be downloaded completely with every application start.

The end-user of ComTrader must have read and write access to the temporary files location. If you encounter problems with the download, please try to clear the cache (Button "Delete Files…") and download the application again.

Change the tab to "Advanced". The following settings are recommended:

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[5] For Internet Explorer: Tools -> Internet Options => Connections => LAN Settings
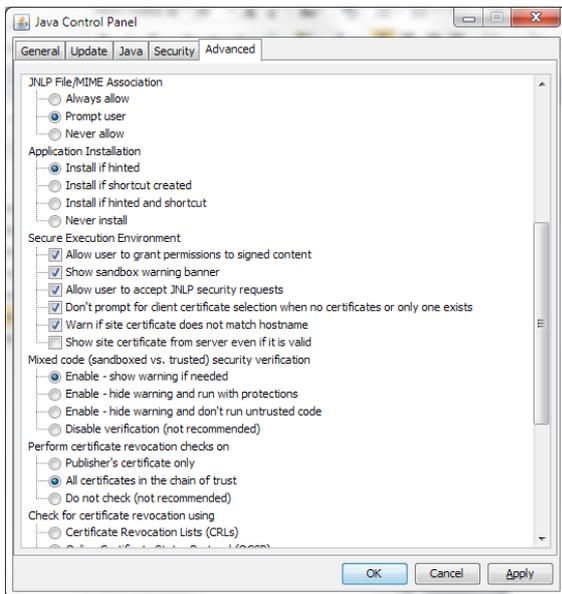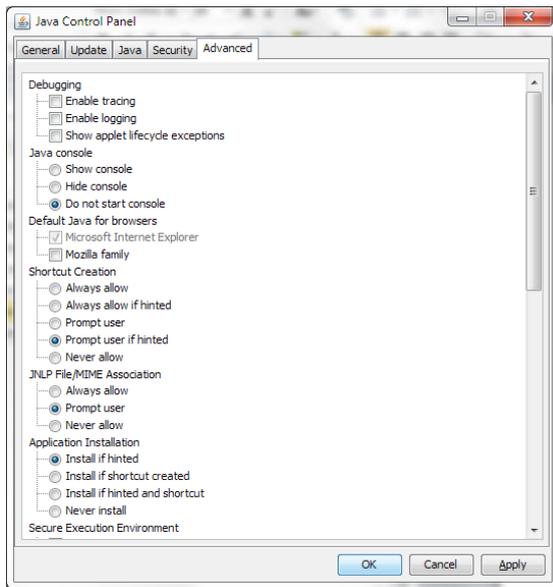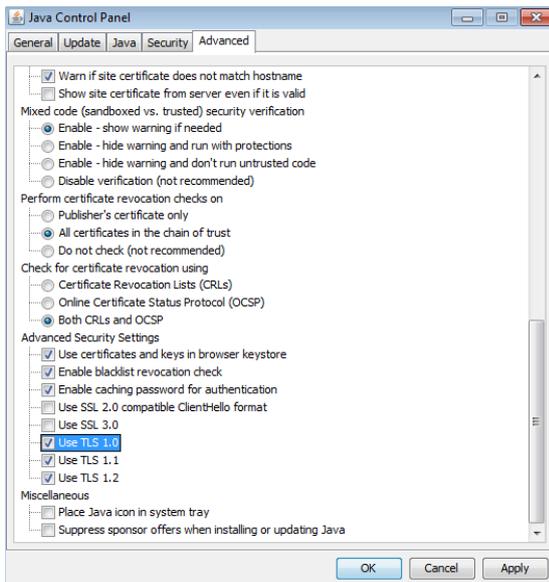
TLS 1.0 and higher must be used for Advanced security settings. SSL 3.0 (and older) is no longer supported as it is vulnerable to "poodle attacks" and must be unchecked.

2.3   Using Standalone Version

In case there are troubles running WebStart version of the ComTrader, standalone versions for windows operation systems (64bit version) - are also provided. User can download these versions and run without installing.

The standalone package contains a folder with two exe files. The content of any files must not be changed. To run an 4G exe file, a user must have at least 6 GB RAM. For Administrators, there is a 6G exe file which requires at least 8 GB RAM.

The standalone package has proper Java version bundled and does not use the WebStart technology. Therefore, it is independent on Java version installed in the user's computer.

32 bit standalone version is no longer provided.

3 Troubleshooting

Symptom	Possible causes	Measure
ComTrader does not start over desktop link	Miscellaneous	• Start ComTrader via the URLs described in chapter 1.2 • Or download and start standalone version (see 2.3)
Java Plugin does not start, instead an .jnlp file is downloaded	Java Plugin not correctly installed	• Verify Java Plugin version and installation according to section 2.2
Java Plugin starts, but immediately shows an error. ComTrader do not start.	Application cannot be downloaded or saved.	• Ensure that you have write access to the temporary cache location and the disk is not full. • Ensure that the downloaded jar archive was not changed by an internal virus scanner.
ComTrader starts, but login is denied with error message	Connection to AMQP-Broker cannot be established.	• Check the security settings of the Java plugin (2.2). • Check the proxy settings in ComTrader application according to Chapter 1.2.2 information
At the start of the application only Java logo is shown and application does not start	User uses wrong "bit version" or does not have enough memory	• Use different "version" (see 2.3) • Or use different memory version (see 2.3)