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CASCADE-PC Version 9.0
Installation Manual

for customers of Clearstream Banking

November 2015

CASCADE-PC Version 9.0 Installation Manual

Clearstream Banking AG Frankfurt

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Table of Contents

1. Installation Manual 1

1.1 About this Manual 1
1.2 Trademarks and Applications 1
1.3 Support 2
1.4 CASCADE–PC Download Area in the Internet 2
1.5 What's New in CASCADE-PC Version 9.0? 2
1.6 Mandatory Release Implementation of CASCADE-PC Version 9.0 3

2. Technical Specifications 4

2.1 Hardware Requirements 4
2.2 Software Requirements 4
2.2.1 Operating System 4
2.2.2 Terminal Emulation 5
2.3 Communications Lines 5
2.3.1 Dedicated Line 5
2.3.2 Access via Internet 6
2.4 CASCADE Backend Security 6

3. Installation of CASCADE-PC 8

3.1 CASCADE-PC Installation Options 8
3.2 Transfer of User Settings of a Former Version 10
3.3 Standard Installation (Standalone) 11
3.3.1 Standard Installation 11
3.3.2 De-installation of CASCADE-PC (Standard Installation) 21
3.4 Installation as Client/Server 23
3.4.1 Server Installation 23
3.4.2 De-installation of CASCADE-PC Server 25
3.4.3 Client Installation 26
3.4.4 De-installation of CASCADE-PC Client 29
3.5 Right of Access (Windows) 30

4. IBM Personal Communications for Windows 31

4.1 Dedicated Line 33
4.2 Host Code Page 33
4.3 PC Code Page / Enabling the EHLLAPI Interface 33
4.4 Welcome Screen of Deutsche Börse 34

5. HOB J-Term RD VPN 35

5.1 Installation of HOB RD VPN - HLLAPI_COM 36
5.2 Session settings 36
5.3 Host Code Page 36
5.4 PC Code Page / Enabling the EHLLAPI Interface 37
5.5 Welcome Screen of Deutsche Börse 37

6. CASCADE-PC 38
6.1 Configuration of CASCADE-PC 38
6.2 Logon in CASCADE-PC 40

7. Error Handling 41
7.1 E00041, E00012: Timeout 41
7.2 E00045: PCSHLL32.DLL not found 42
7.3 E00049, E00024: System Error – Wrong Host Position 44
7.4 E00051: Unable to write to file *WALKBACK.LOG* 45
7.5 E00055: EHLLAPI Error 46
7.6 E00059, E00060: Incorrect Version 47
7.7 E00064: Incorrect EHLLAPI or Host Code Page 48
7.8 E00075, E00077: Printer and/or font not defined 49
7.9 SY0006F: Action not allowed: xxxx 50
7.10 Unknown Publisher 51
7.11 Fatal Application Error (general protection fault) 55
7.12 Primitive failed in: PlatformFunction (printer) 56

8. CASCADE backend transaction security codes 57
8.1 CASCADE-PC > CASCADE backend transaction security codes 57
8.2 CASCADE backend transaction security codes > CASCADE-PC 61

1. Installation Manual

1.1 About this Manual

This version of the installation manual refers to CASCADE-PC version 9.0 and it is intended for all customers wishing to install CASCADE-PC and for all administrators who are in charge of maintaining CASCADE-PC.

Some screen shots used in this document were taken under previous Windows and previous CASCADE-PC versions. On the whole, however, the contents are identical for CASCADE-PC Version 9.0 as well as Windows 7. Differences are mainly to be found in the layout or in the version number.

Please use the latest version of Adobe Acrobat Reader to view this document. You can download the Reader from the Internet. The quality of the display, in particular the diagrams, in the Acrobat Reader is at its best if you set your display to 133 %. The setting 'Smooth Text and Images' should be enabled. If need be, print out the document.

1.2 Trademarks and Applications

In certain countries, the following names are trademarks or applications of other companies:

IMS Personal Communications	IBM Corporation
VA Smalltalk	Instantiations Corporation
Internet Explorer Windows	Microsoft Corporation
InstallShield	Flexera Software
HOB J-Term HOB RD VPN	HOB Elektronik GmbH
Acrobat Reader	Adobe

1.3 Support

Clearstream Banking Frankfurt
Mergenthalerallee 61
65760 Eschborn
Germany

Customer Service
Telephone +49 (0)69 211 1 11 77
Fax +49 (0)69 211 61 11 77

Technical Helpdesk
Telephone +49 (0)69 211 1 10 00
Fax +49 (0)69 211 1 10 01

1.4 CASCADE–PC Download Area in the Internet

The software and manuals have been available for downloading in the dedicated Download Area in the Internet. You can access this area via:

- CASCADE-PC Software Download, User and Installation Manuals
  http://www.clearstream.com/
  Clearstream > Products and Services > Connectivity > CASCADE > CASCADE Online

- Or directly via:
  http://www.clearstream.com/cascadepc

If you use the Clearstream site the first time you will have to register yourself. You will be provided with the required registration code if you enter your personal details and e-mail address and then click on **submit**. The code will be sent directly to you via e-mail.
To download either the German or English version of the CASCADE-PC software, please click on the corresponding link. Upon entry of this data, the basic download process is started. We recommend using 'download save'. Call up the downloaded exe-file to unpack the required files. If required, you can change the pre-selected directory. To start the installation of CASCADE-PC please double click on the unpacked file setup.exe.

1.5 What's New in CASCADE-PC Version 9.0?

To achieve a smooth T2S migration in 2016, some T2S functionalities will already be implemented starting with the CBF release November 2015 onwards. Gradual and early implementation of system changes will reduce the effort during the migration weekend in September 2016 (wave 3) and thus reduce risk.

CASCADE-PC has been enhanced by the following functionality:
- Custody: Record Date for income and non income events in Germany
- OTC: Matching of Party Level 2
- OTC: Matching of Common Trade Reference
- OTC: Enabling of T2S specific fields (ISO Transaction Codes)
- s/e transactions: Decommission of reconciliation and checking totals

For further information please see "CBF Release Information November 2015" and announcements available for downloading in the Internet: http://www.clearstream.com/

1.6 Mandatory Release Implementation of CASCADE-PC Version 9.0

CASCADE-PC version 9.0 will go into production on 23rd November 2015. This release has been defined as a mandatory release, i.e.:

CASCADE-PC customers may work exclusively with CASCADE-PC version 8.0/8.0a up until and including Friday, 20th November 2015. Version 9.0 will not be up and running by that date. However, the new version 9.0 must be used as from 23rd November 2015. Version 8.0/8.0a will no longer be up and running as from 23rd November 2015.

Hence, de-installation of CASCADE-PC version 8.0/8.0a and installation of the new version 9.0 should take place after 20th November 2015 eob, but before the first logon on Monday, 23rd November 2015.

Both versions of CASCADE-PC can also be installed at the same time without problems. Parallel installation of CASCADE-PC is the default for the standard installation. The paths for a parallel client/server installation must be adjusted accordingly. Please refer to chapter 3.1 for additional information on parallel installation.

With the parallel installation, the old CASCADE-PC version can be de-installed at a later date.

Please note:

Customers that still log on with the old **CASCADE-PC version 8.0/8.0a as from 23rd November 2015** will receive the following error message:

E00060:	Your currently installed program version is 8.0, but you need version: 9.0. Please terminate this application.
E00061:	Please contact the user service.

It is now impossible to call up any other CASCADE-PC functions. Please close the application and install version 9.0.

Customers that log on with the new **CASCADE-PC version 9.0 before 23rd November 2015** will receive the following error message:

E00059:	Your currently installed program version is 9.0, but you need version: 8.0. Please terminate this application.
E00061:	Please contact the user service

It is now impossible to call up any other CASCADE-PC functions. The user has to stop the application and (re)install version 8.0/8.0a for the time till 20th November 2015.

2. Technical Specifications

The installation or upgrade of the product CASCADE-PC and the configuration in connection with the terminal emulation are described separately below. The installation routines are in line with normal standards. No particular technical knowledge is required to install the product. Customization (drive and paths) is available through dialog boxes.

In addition to CASCADE-PC, a 3270 terminal emulation (only IBM or HOB) is required for the operation of the system.

CASCADE-PC communicates with the mainframe computer of Deutsche Börse AG through 3270 data stream (LU2) via a EHLLAPI interface for the terminal emulation which must always be started before CASCADE-PC. An active connection to Deutsche Börse's CASCADE backend must also be established.

The CASCADE-PC application has been developed with "VA Smalltalk" on Windows available for the target platform Windows 7.

Please note that various software and hardware requirements are to be met prior to installation.

2.1 Hardware Requirements

The following minimum configuration is prerequisite for using CASCADE-PC:

- an IBM compatible PC with a Pentium III, or a compatible processor with at least 800MHz
- CD-ROM drive for installation (only if a CD was requested for installation)
- 64 MB free RAM
- around 40 MB free hard disk space (Standard and Server Installation)
- another 40 MB temporary free hard disk space for the duration of installation
- around 1 MB free hard disk space (Client Installation)
- At least XGA resolution (min 1024 x 768 pixels)
- mouse or other pointing device

If the connection to the host of Deutsche Börse is to be established via HOB J-Term / Internet, please also take into account requirements stipulated by Deutsche Börse AG.

Please note:
For performance reasons it is recommended to install CASCADE-PC on a local hard disk and not on a server drive. The client/server version is only recommended for sufficiently high-performance networks (≥ 100MBit).

2.2 Software Requirements

2.2.1 Operating System

One of the following operating systems (English version recommended) is required for using CASCADE-PC:

- Microsoft Windows 7

Please note that the Windows system locale has to be set to a SBCS (Single Byte Character Set), e.g. English. DBCS (Double Byte Character Set) configurations like Simplified Chinese are not supported. CASCADE-PC will stop executing in this case.

2.2.2 Terminal Emulation

One of the following terminal emulation is prerequisite for using CASCADE-PC:

- IBM Personal Communications for Windows version 5 or higher

Please note:
In certain circumstances there might be an abnormal program end (general protection fault) if using CASCADE-PC in combination with **IBM PCom version 5.5**. If that is the case please use version 5.0 or 5.7 of the terminal emulation.

- HOB J-Term RD VPN

Please note:
HOB requires at least Internet Explorer version 5 (or higher), especially a version of **mfc42.dll** that is not older than version 6.00.8665.0.

Very Important:

CASCADE-PC can be operated using either IBM Personal Communications or HOB J-Term. CASCADE-PC does not support any other terminal emulation.

Parallel installation of numerous terminal emulations will lead to problems and should be avoided at all cost. This is also true for the parallel installation of HOB J-Term and HOB RD VPN.

Please contact the competent staff at Clearstream Banking Frankfurt for information on suitable terminal emulation.

2.3 Communications Lines

CASCADE-PC supports the following types of connection:

- Dedicated line to host of Deutsche Börse (LU2 – 3270 data stream)
- Internet connection

Please contact the competent staff at Clearstream Banking Frankfurt for information on appropriate adapters for your host connection.

2.3.1 Dedicated Line

The dedicated line has to provide a 3270 data stream (LU2 protocol).The following connection types have been tested for the terminal emulation:

- protocol IEEE802.2 via LAN interface
- linkup via LAN interface using Netware for SAA Personal Communications version 4.2 with IBM Fix W3242HLL is required for linkup with Netware for SAA
- linkup via LAN interface with Microsoft SNA

- TCP/IP Telnet 3270.

Other types of linkups should be discussed in advance. However, if in doubt, the modem connection via HOB Link J-Term is the recommended alternative.
The dedicated line and the settings for the terminal emulation have to be set up by your network / infrastructure division in cooperation with Deutsche Börse AG.

2.3.2 Access via Internet

Deutsche Börse AG provides a connection to the host via Internet. All transferred data are encrypted, for HOB with a specially developed token. The Internet connection is only possible with the HOB terminal emulation HOB J-Term RD VPN, which is also provided by Deutsche Börse AG.
The settings for the terminal emulation have to be set up by your network / infrastructure division in cooperation with Deutsche Börse AG.

2.4 CASCADE Backend Security

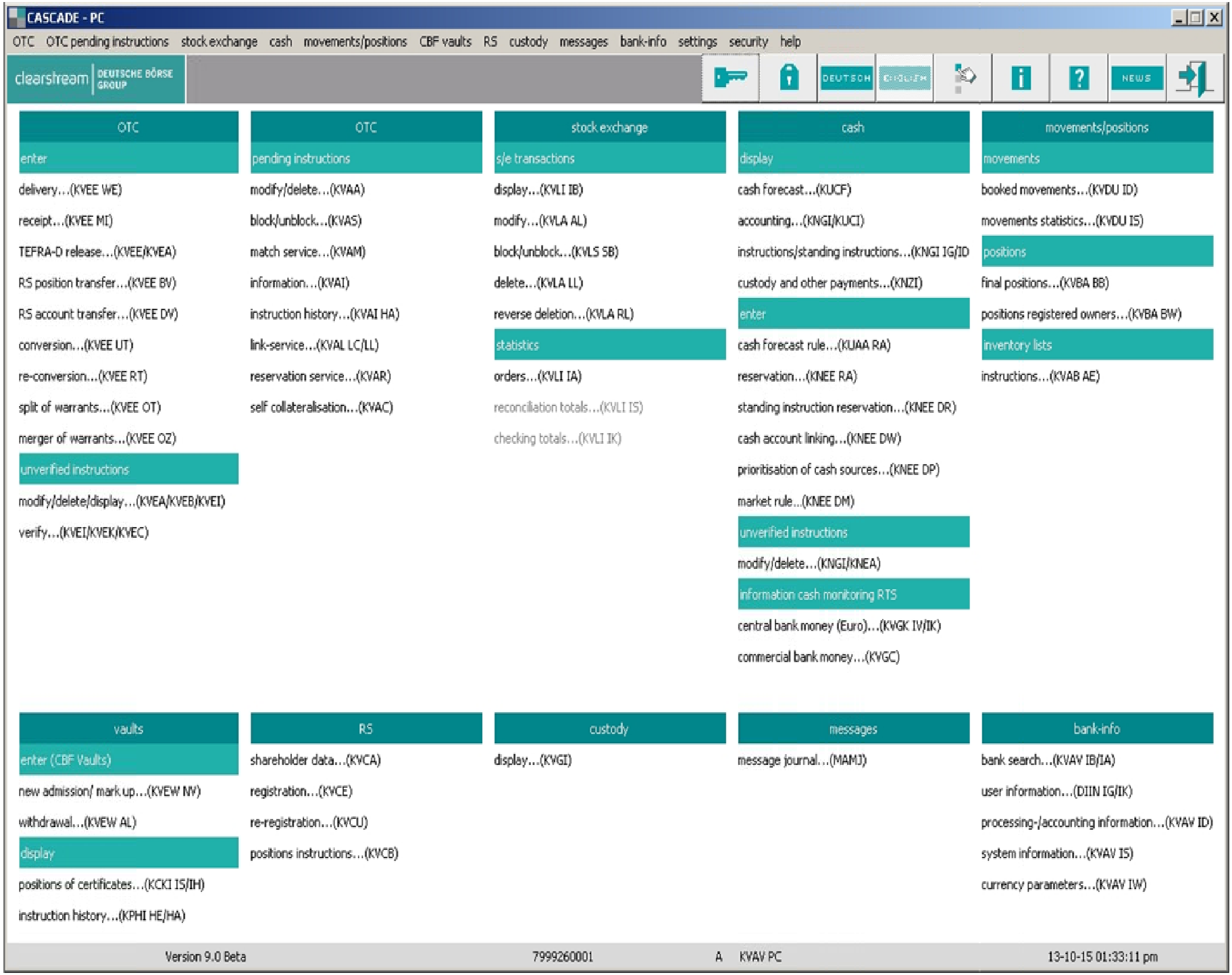
A security release of the technical and functional CASCADE functionalities is required for access to the CASCADE backend. For the assignment of transaction and function to the CASCADE-PC main menu please have a look at the graphic next page.

To be able to use all CASCADE functions offered by CASCADE-PC, the required transactions / functions must be released for each user. It is possible to create and administrate user account data directly in CASCADE-PC by the customer's security manager. So the security managers will have at any time exact control to which users' authorisations were assigned.

The customer's security manager itself and all rights for transaction 'SECU' cannot be created via CASCADE-PC. Clearstream Banking Frankfurt is still responsible for the creation of the customer's security manager. Should this not have yet been carried out, please contact Clearstream Banking Frankfurt.

Please note:
The use of CASCADE-PC renders mandatory the release of the transactions 'MENU' and 'KVAV PC'.

For a detailed list of CASCADE-PC functions and associated CASCADE backend transaction, function codes please refer to chapter 8.


CASCADE - PC
OTC OTC pending instructions stock exchange cash movements/positions CBF vaults RS custody messages bank-info settings security help
clearstream DEUTSCHE BÖRSE GROUP
DEUTSCH
ENGLISH
NEWS
OTC
enter
delivery...(KVEE WE)
receipt...(KVEE MI)
TEFRA-D release...(KVEE/KVEA)
RS position transfer...(KVEE BV)
RS account transfer...(KVEE DW)
conversion...(KVEE UT)
re-conversion...(KVEE RT)
split of warrants...(KVEE OT)
merger of warrants...(KVEE OZ)
unverified instructions
modify/delete/display...(KVEA/KVEB/KVEI)
verify...(KVEI/KVEK/KVEC)
OTC
pending instructions
modify/delete...(KVAA)
block/unblock...(KVAS)
match service...(KVAM)
information...(KVAI)
instruction history...(KVAI HA)
link-service...(KVAL LC/LL)
reservation service...(KVAR)
self collateralisation...(KVAC)
stock exchange
s/e transactions
display...(KVLI IB)
modify...(KVLA AL)
block/unblock...(KVLS SB)
delete...(KVLA LL)
reverse deletion...(KVLA RL)
statistics
orders...(KVLI IA)
reconciliation totals...(KVLI IS)
checking totals...(KVLI IK)
cash
display
cash forecast...(KUCF)
accounting...(KNGI/KUCI)
instructions/standing instructions...(KNGI IG/ID
custody and other payments...(KNZI)
enter
cash forecast rule...(KUAA RA)
reservation...(KNEE RA)
standing instruction reservation...(KNEE DR)
cash account linking...(KNEE DW)
prioritisation of cash sources...(KNEE DP)
market rule...(KNEE DM)
unverified instructions
modify/delete...(KNGI/KNEA)
information cash monitoring RTS
central bank money (Euro)...(KVGK IV/IK)
commercial bank money...(KVGC)
movements/positions
movements
booked movements...(KVDU ID)
movements statistics...(KVDU IS)
positions
final positions...(KVBA BB)
positions registered owners...(KVBA BW)
inventory lists
instructions...(KVAB AE)
vaults
enter (CBF Vaults)
new admission/ mark up...(KVEW NV)
withdrawal...(KVEW AL)
display
positions of certificates...(KCKI IS/IH)
instruction history...(KPHI HE/HA)
RS
shareholder data...(KVCA)
registration...(KVCE)
re-registration...(KVCU)
positions instructions...(KVCB)
custody
display...(KVGI)
messages
message journal...(MAMJ)
bank-info
bank search...(KVAV IB/IA)
user information...(DIIN IG/IK)
processing-/accounting information...(KVAV ID)
system information...(KVAV IS)
currency parameters...(KVAV IW)
Version 9.0 Beta
7999260001
A
KVAV PC
13-10-15 01:33:11 pm

3. Installation of CASCADE-PC

CASCADE-PC can be installed as standard installation (standalone) or as client/server version. Parallel installation of different CASCADE-PC versions is default for the standard installation. The client/server version can still be installed independent of any version (by merely exchanging the server). The paths for a parallel client/server installation must be adjusted accordingly. Please refer to chapter 3.1 for additional information on parallel installation. The automatic installation of the German and English manuals for CASCADE-PC is also coming with the installation.

The actual operation of CASCADE-PC does not require the system settings to be changed or entries to be made in the registry. Only the installation routine requires registry entries for the de-installation of CASCADE-PC.

3.1 CASCADE-PC Installation Options

Name conventions for different installation versions of CASCADE-PC, where '9.x' stands for any version, for instance, x=0 for CASCADE-PC version 9.0.

Standard Installation (standalone)
The proposed default installation directory has changed, its name now contains the version number and the term "Standard". This facilitates the parallel standard installation of different CASCADE-PC versions.

Default target path:	C:\Program Files\CASCADE-PC 9.x Standard
Default name of program folder:	CASCADE-PC 9.x
Name of shortcut:	CASCADE-PC 9.x
Name of entry for de-installation:	CASCADE-PC version 9.x

If parallel installation is not required and if a CASCADE-PC directory already exists, then this directory can be selected as installation directory. The existing installation will then be overwritten.

Server Installation
The proposed default installation directory has changed, its name now contains the term 'Server'.

Default target path:	C:\Program Files\CASCADE-PC Server
Default name of program folder:	(not required for server installation)
Name of shortcut:	(not required for server installation)
Name of entry for de-installation:	CASCADE-PC version 9.x

The default installation directory should be changed to facilitate parallel server installation of different CASCADE-PC versions. It is recommended to make a reference to the version numbers in the name of the installation directory
(e.g.: ...\CASCADE-PC 9.x Server).

Please note:
CASCADE-PC client components must always be re-installed each time the server is installed.

If parallel installation is not required and if a server directory already exists, then this directory can be selected as installation directory. The existing server installation will then be overwritten. In this case, the client need not be re-installed.

For performance reasons, the client/server version is only recommended for sufficiently high-performance networks (≥ 100MBit).

Client Installation
The proposed default installation directory has changed, its name now contains the term 'Client'.

Default target path:	C:\Program Files\CASCADE-PC Client
Default name of program folder:	CASCADE-PC Client
Name of shortcut:	CASCADE-PC
Name of entry for de-installation:	CASCADE-PC version 9.x
Default name of server folder:	\\<SERVER>\<SHARE> [\<PATH>]\CASCADE-PC Server

The default installation directory should be changed to facilitate parallel client installation of different CASCADE-PC versions. It is recommended to make a reference to the version numbers in the name of the installation directory
(e.g.: ...\CASCADE-PC 9.x Client).

Please note:
In this case, parallel installation of the server is paramount.

If parallel installation is not required and if there already is a client directory, it should be selected as installation directory to avoid redundant (double) entries of CASCADE-PC in the start menu. The existing client installation will then be overwritten. The client need not be re-installed if the corresponding server directory has not changed.

For performance reasons, the client/server version is only recommended for sufficiently high-performance networks (≥ 100MBit).

3.2 Transfer of User Settings of a Former Version

User-specific settings relating to CASCADE-PC are stored in the file CPCSYS.INI. This file can still be used without problems as it provides the familiar options in the new version as well.

Therefore, please observe the following procedure:

- First, the file *CPCSYS.INI* has to be secured from the CASCADE-PC directory. This file comprises the settings of the old version (e.g. language, user ID, etc) and is fully compatible with the new version. After installation of the new CASCADE-PC version, the file can be initialised again. Saving of the file is not necessarily required but recommended as otherwise all requested settings have to be entered manually.

- The former version should be removed by de-installation routine before starting to install the new version, unless you wish to carry out parallel installation of several CASCADE-PC versions.
  The existing version can be de-installed through the icon 'Add or Remove Programs' of the control panel. (See chapter 3.3.2 of this Manual).

- Installation of the new version as standard (standalone) or as client/server.
  The separate steps are itemised in the following chapters.

- After installation of the new version, the secured *CPCSYS.INI* must be initialised again. In this way, the parameters of the old version are adopted automatically and the user can work with his usual settings.

Should any problems arise in connection with the use of the former CPCSYS.INI, the file can be deleted. When restarting the new version of CASCADE-PC, this file can be retrieved with default settings by clicking on settings/options. However, in this case, the user-relevant settings have to be entered manually.

Please note:
Please consider that during a client/server installation, the file *CPCSYS.INI* is not copied into the server directory but into the client directory.

3.3 Standard Installation (Standalone)

3.3.1 Standard Installation

Please ensure that there is enough hard disk space on the drive where CASCADE-PC is to be installed. The application requires approx. 40 MB. Another 40 MB are temporarily required for the duration of installation. Administrator privileges are mandatory for the installation.

Please make sure that Windows has been started, close all other applications and unzip the CASCADE-PC Internet download file to a temporary folder \CASCADE.PC. If a CD ROM was requested and received, please insert the installation CD into your CDROM drive.

The installation has to be started manually.

Via the

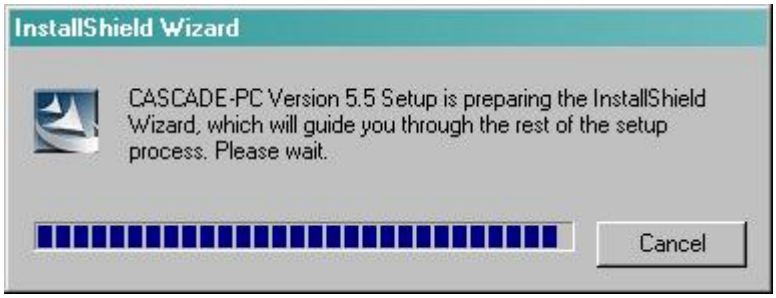
button, call up the dialogue Run and enter:

X:\CASCADE.PC\SETUP.EXE

where X has to be replaced by the letter representing your drive.

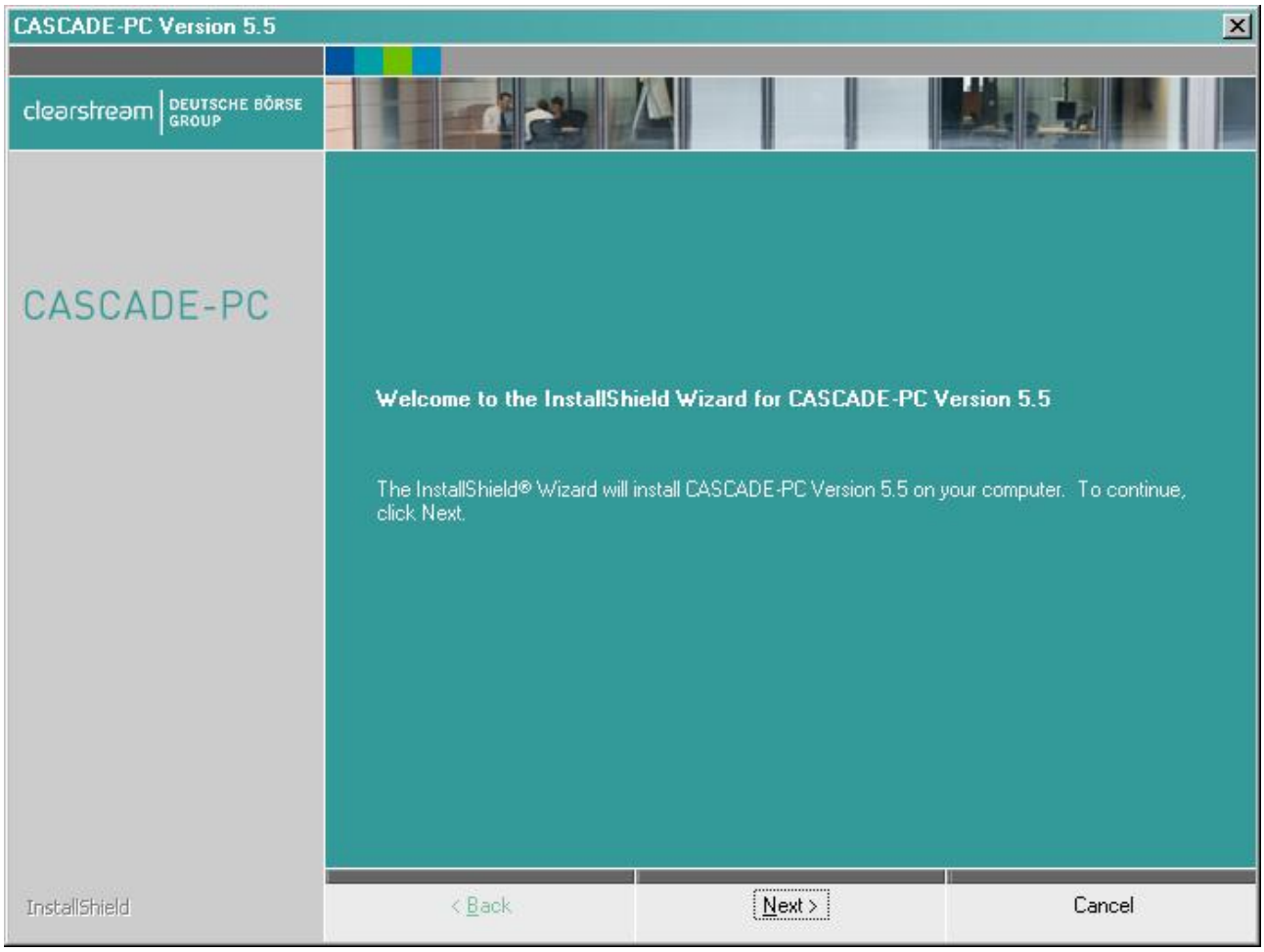
This command starts the InstallShield assistant which will guide you through the installation.

Please start by choosing the language in which the installation program shall be performed and confirm your choice with **OK**.

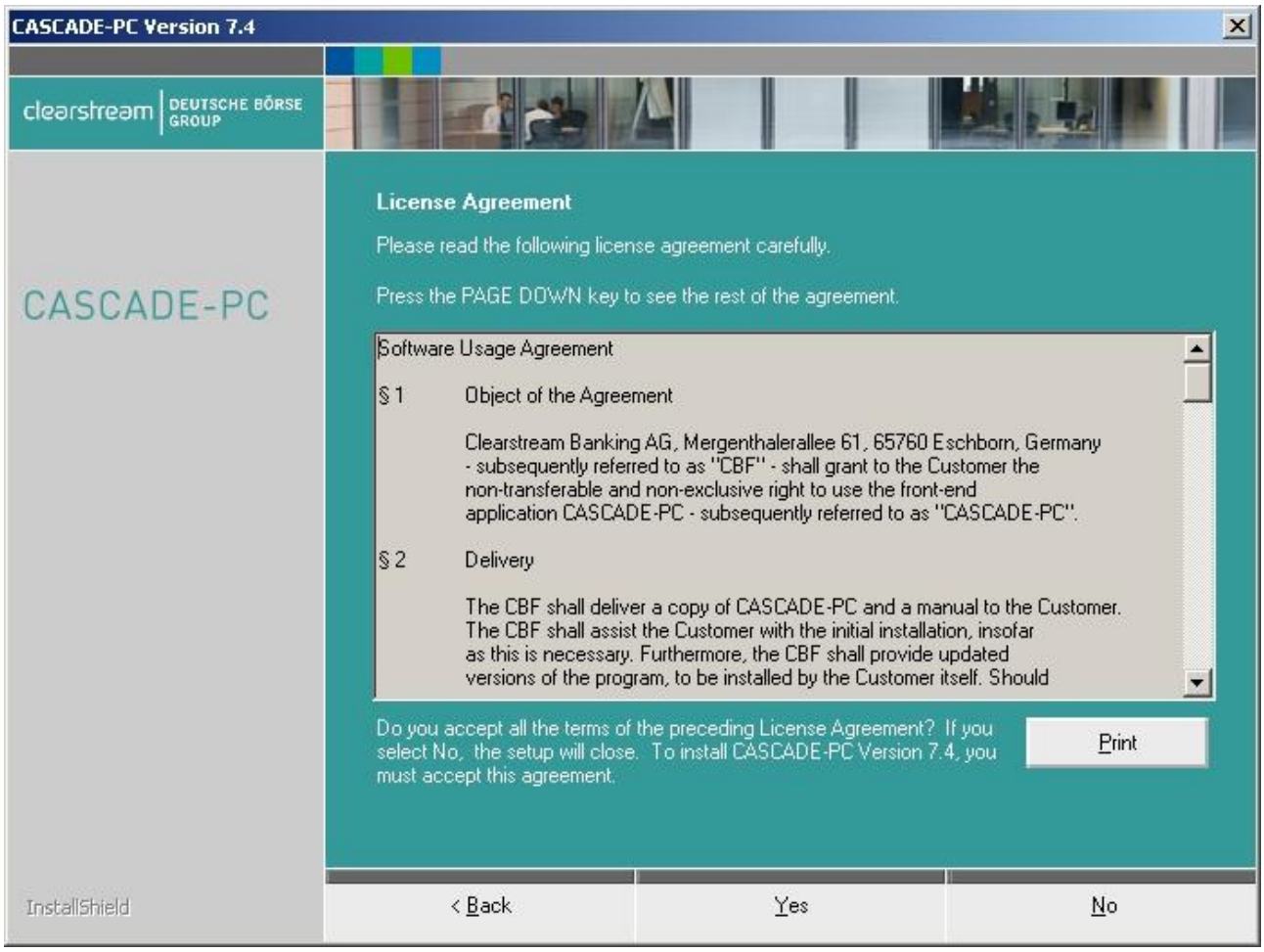


The setup window shows to which percentage the InstallShield assistant has prepared the installation. The installation itself starts after this window.

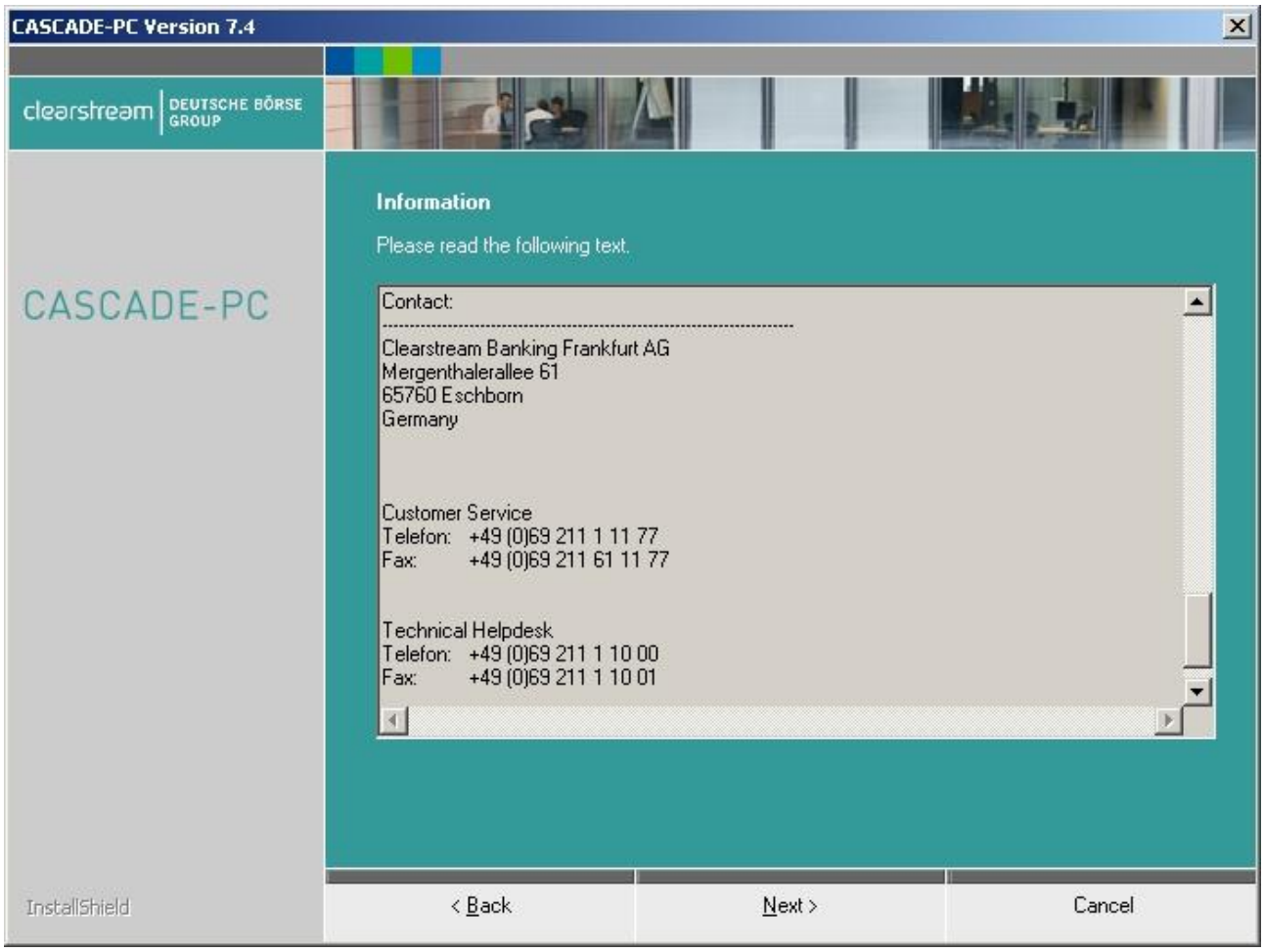
Installation of CASCADE-PC



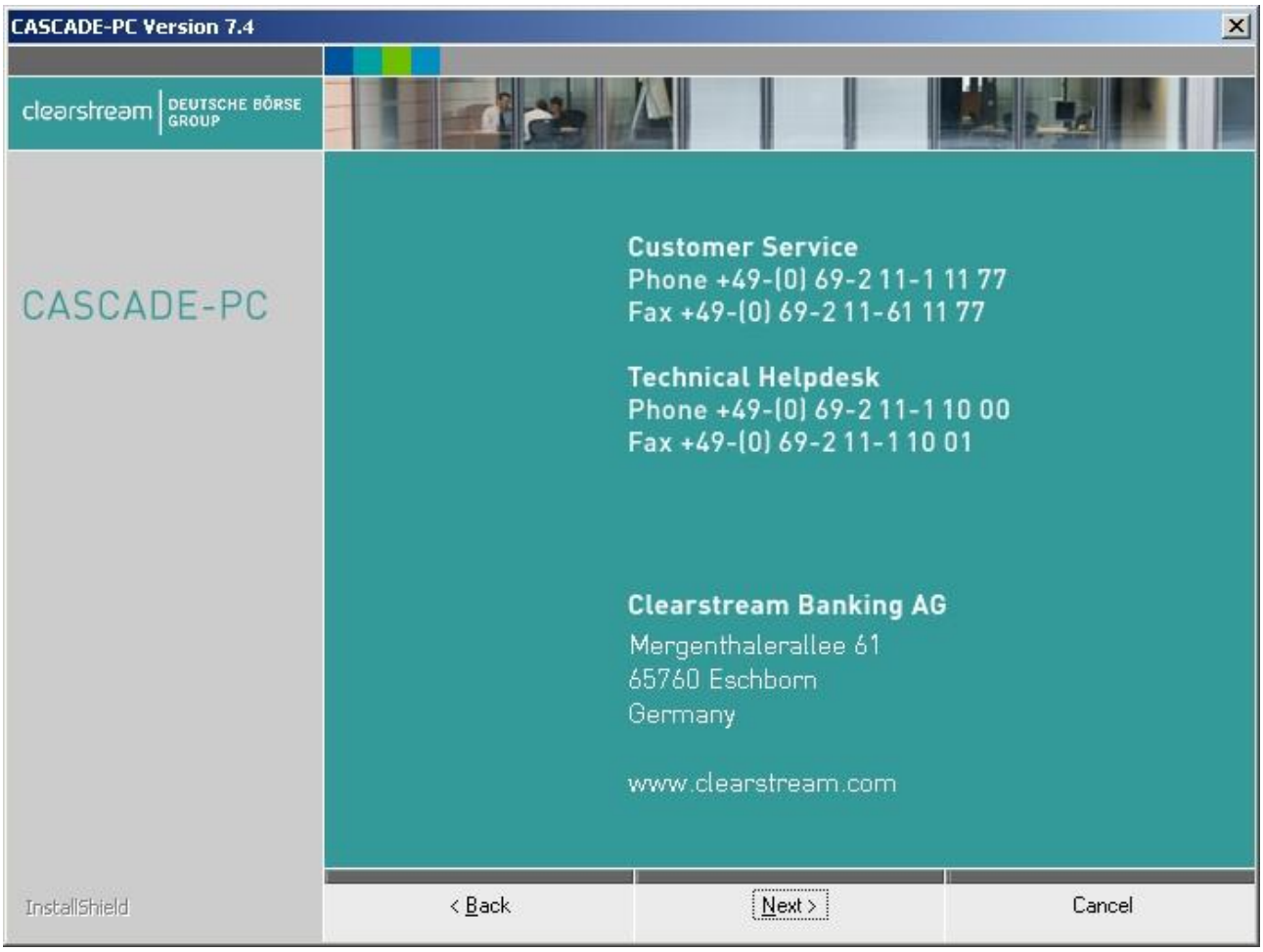
The welcome window of the CASCADE-PC installation program appears.
The installation process is started by clicking on the button **Next**.



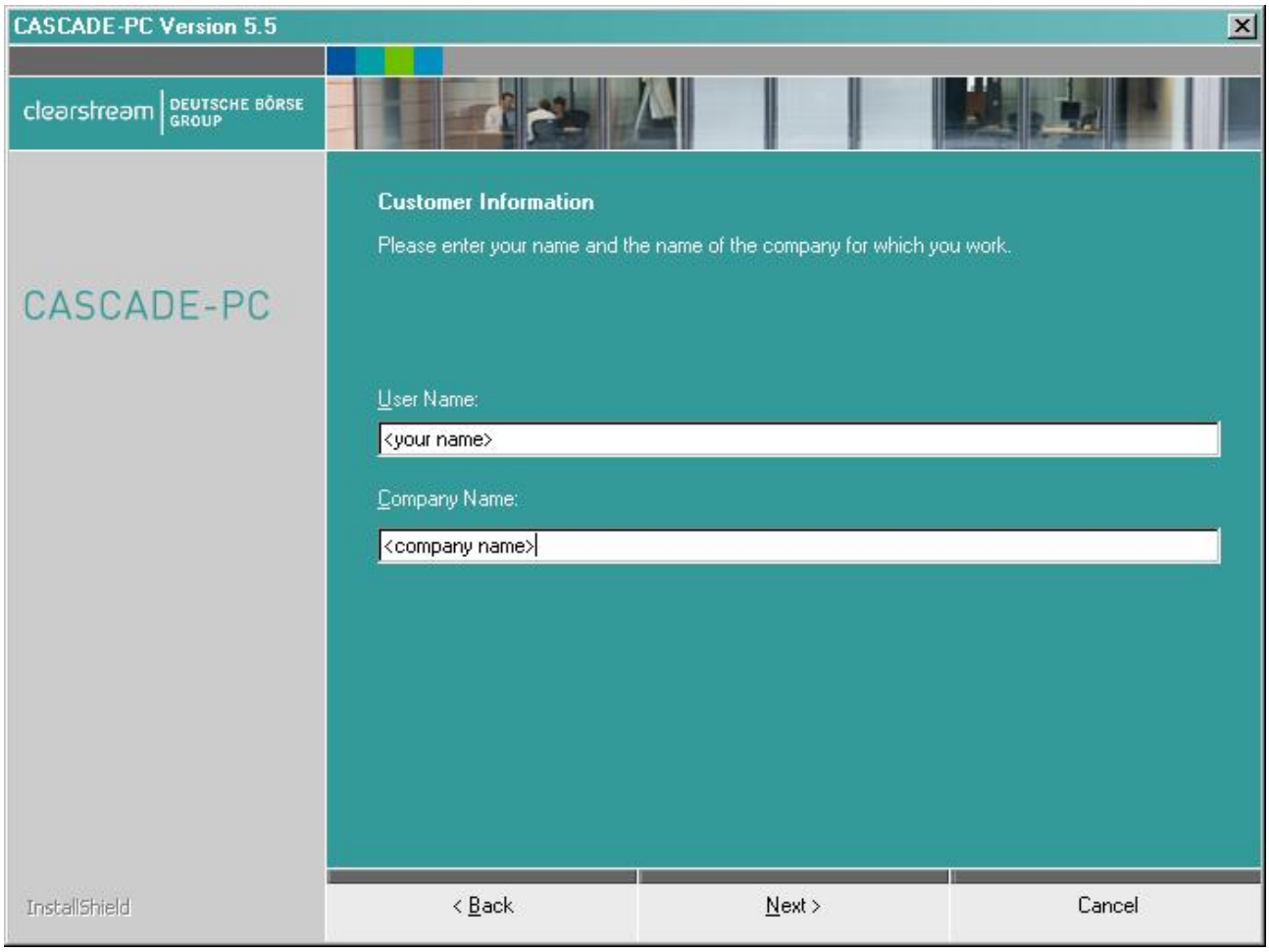
The first window displays the Software Usage Agreement. You should read this information carefully. To continue with the installation you have to accept it by clicking on the **Yes** button.



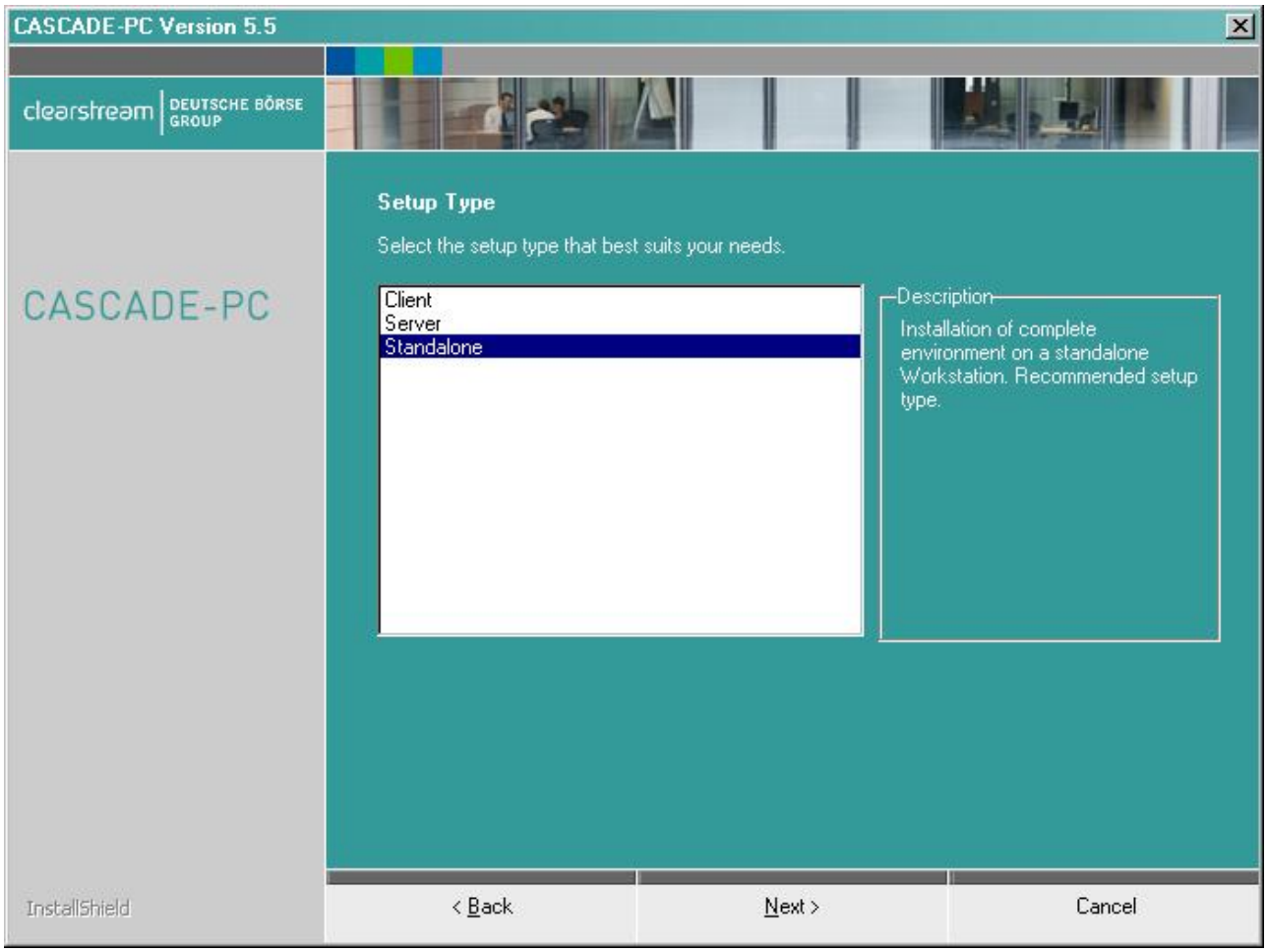
This window displays the current README.TXT file in the language of your choice. You should read this file carefully. It contains the latest information and hints on installing and operating CASCADE-PC and may contain some information which was not available when the manual went to print. Once you have finished reading the file, click on the **Next** button.



The support numbers of the Customer Service team at Clearstream Banking AG Frankfurt and those of the Technical Helpdesk of Deutsche Börse AG are displayed for your information. Once you have finished reading, click on the **Next** button.



Please enter your name and also the name of your company and press **Next**.

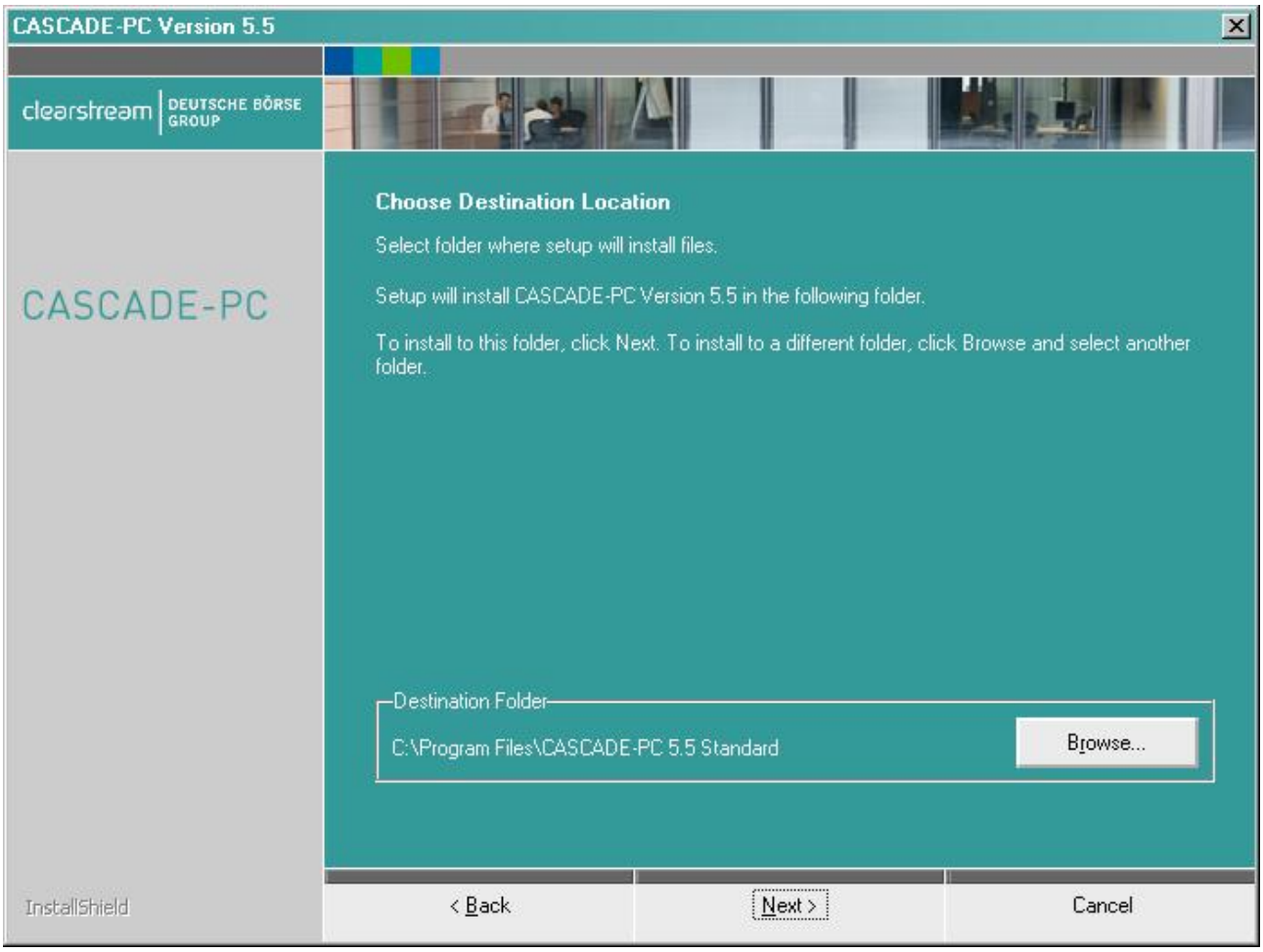


You can choose the setup type for your installation in this dialogue. For a **standard installation (stand-alone)**, please select the entry Standalone and confirm your selection with **Next**.

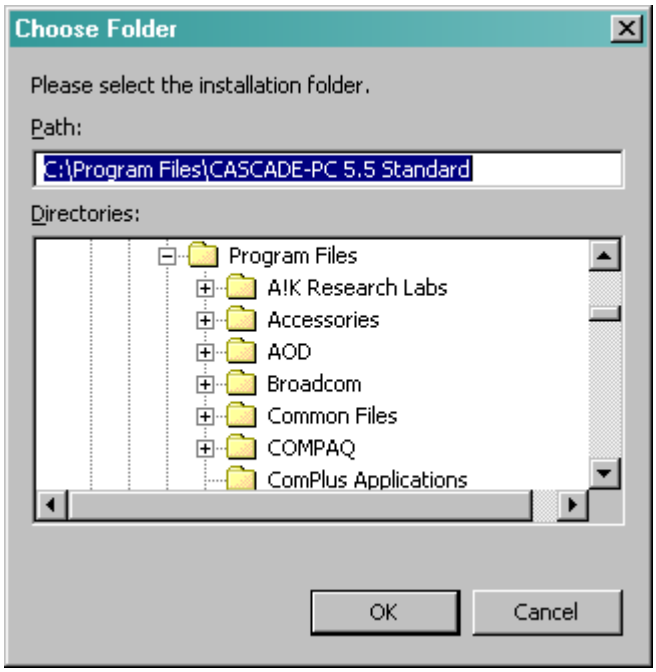
Please note the following. Please go to chapter 3.1 of this Manual for additional details on the different installation versions and on parallel installation.

Please contact the competent staff at Clearstream Banking Frankfurt for information on suitable installation versions.

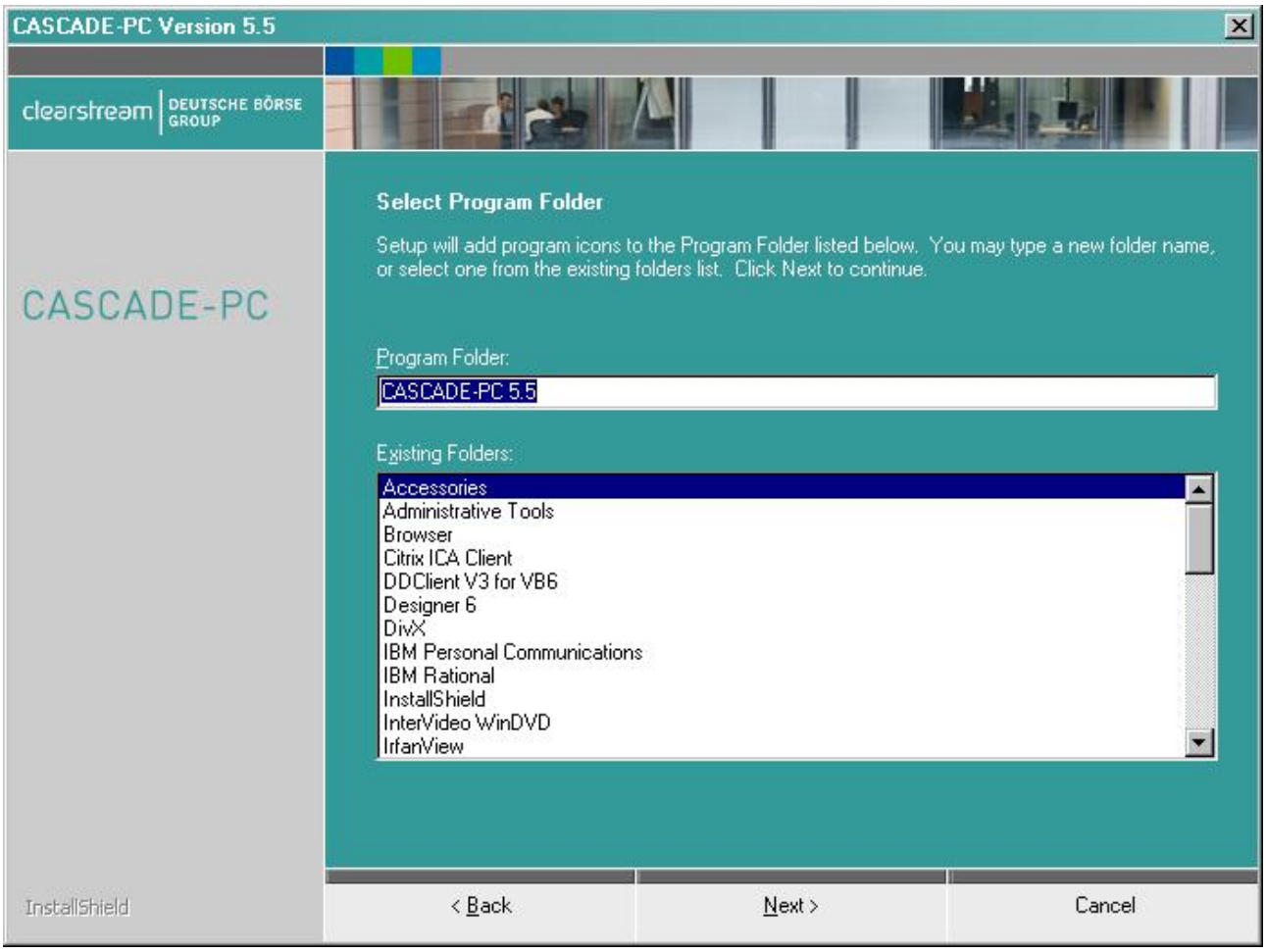
To continue, please press **OK**.



On this screen you can select another installation directory, or continue with the following screen by pressing the button **Next**.
With the button **Browse**, you can change the directory in which CASCADE-PC is to be installed. If you do not indicate a different directory, then the default directory "C:\Program Files\CASCADE-PC 9.x Standard "will be used as installation directory.

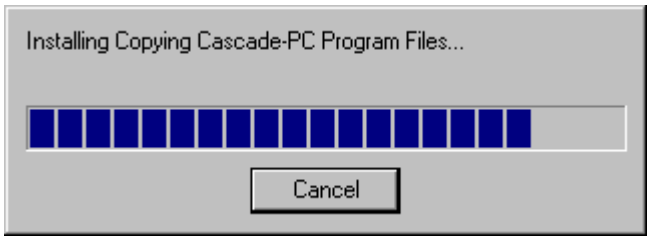


In case you indicated a new directory or the preset one is not yet available, it will be created automatically during installation.

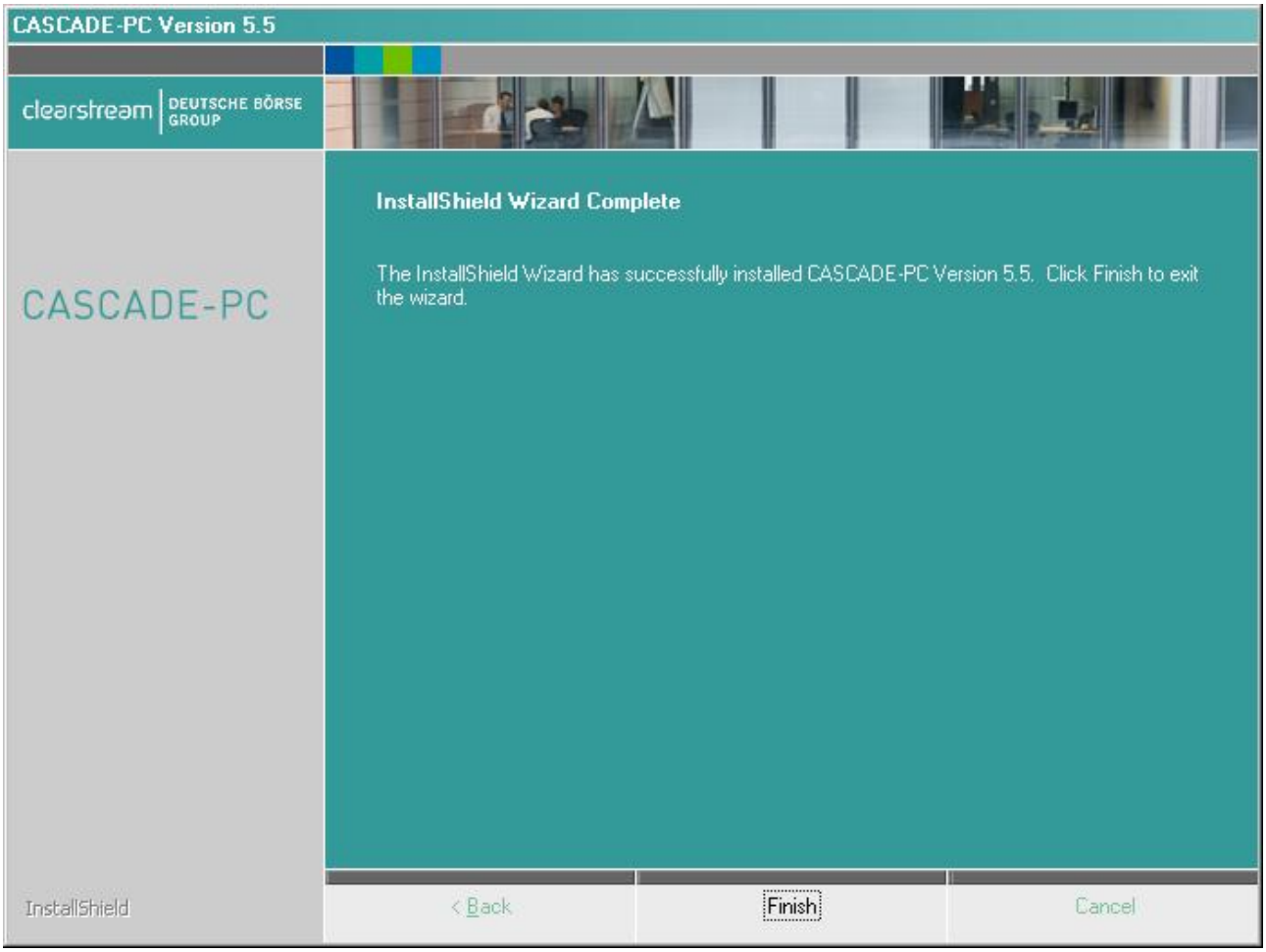


Installation of CASCADE-PC

Choose a name for the program folder or confirm the presetting with **Next**.

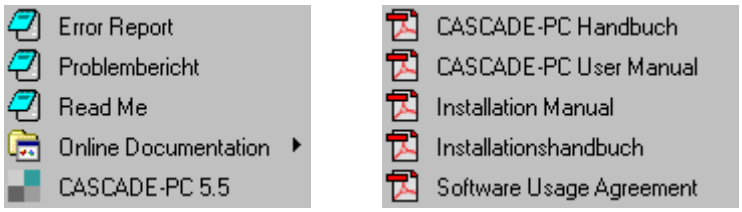


The rest of the installation is carried out automatically…



After confirmation through **Finish**, you have completed the installation and can start CASCADE-PC directly.
In the new program group **CASCADE-PC 9.x** there are now five icons which have been placed in the programs menu.

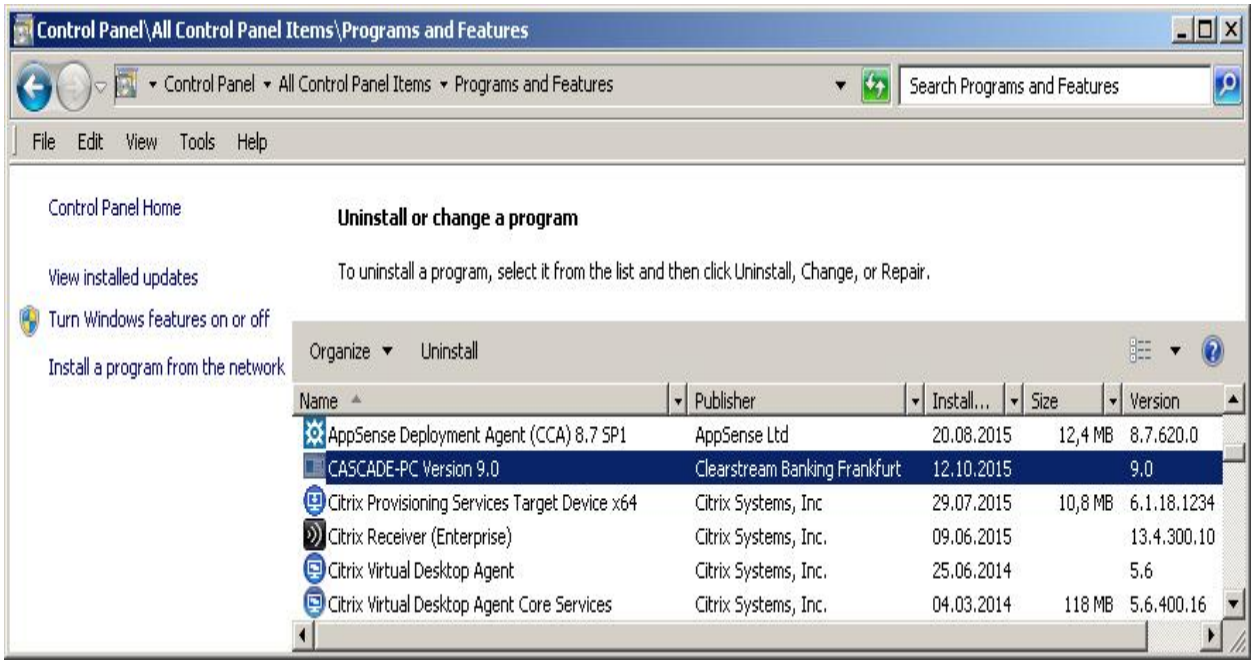
Please note:
In case you have selected a different name for the program folder name, you will find the program entries under this name.



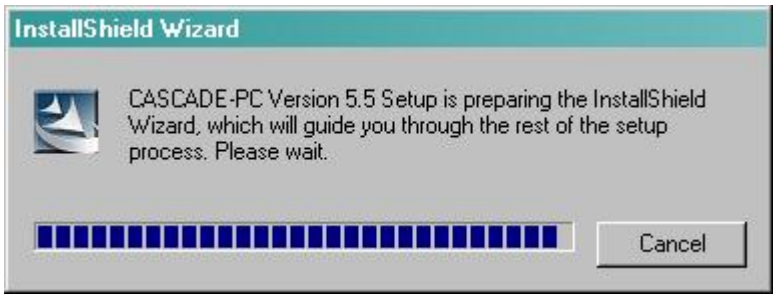
- The icon **CASCADE-PC 9.x** starts the application.
- Via the icons **Error Report** and **Problembericht**, the errors and problems connected with the program can be documented and reported to the Customer Service at Clearstream Banking Frankfurt.
- The icon **Read Me** allows you to view the information file. Here you may find some changes brought to the User Manual after it went to print.
- The English and German Manuals for CASCADE-PC can be retrieved via the icon **Online Documentation**.

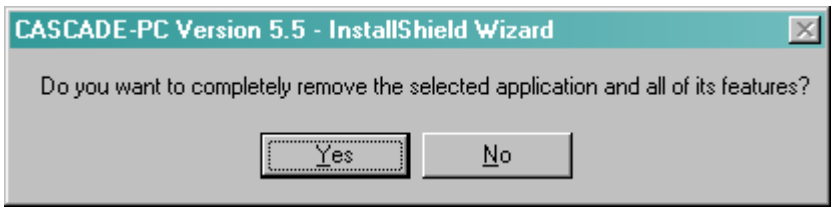
3.3.2 De-installation of CASCADE-PC (Standard Installation)

You can reverse the installation at any time using the icon **Programs and Features** in the **Control Panel**.

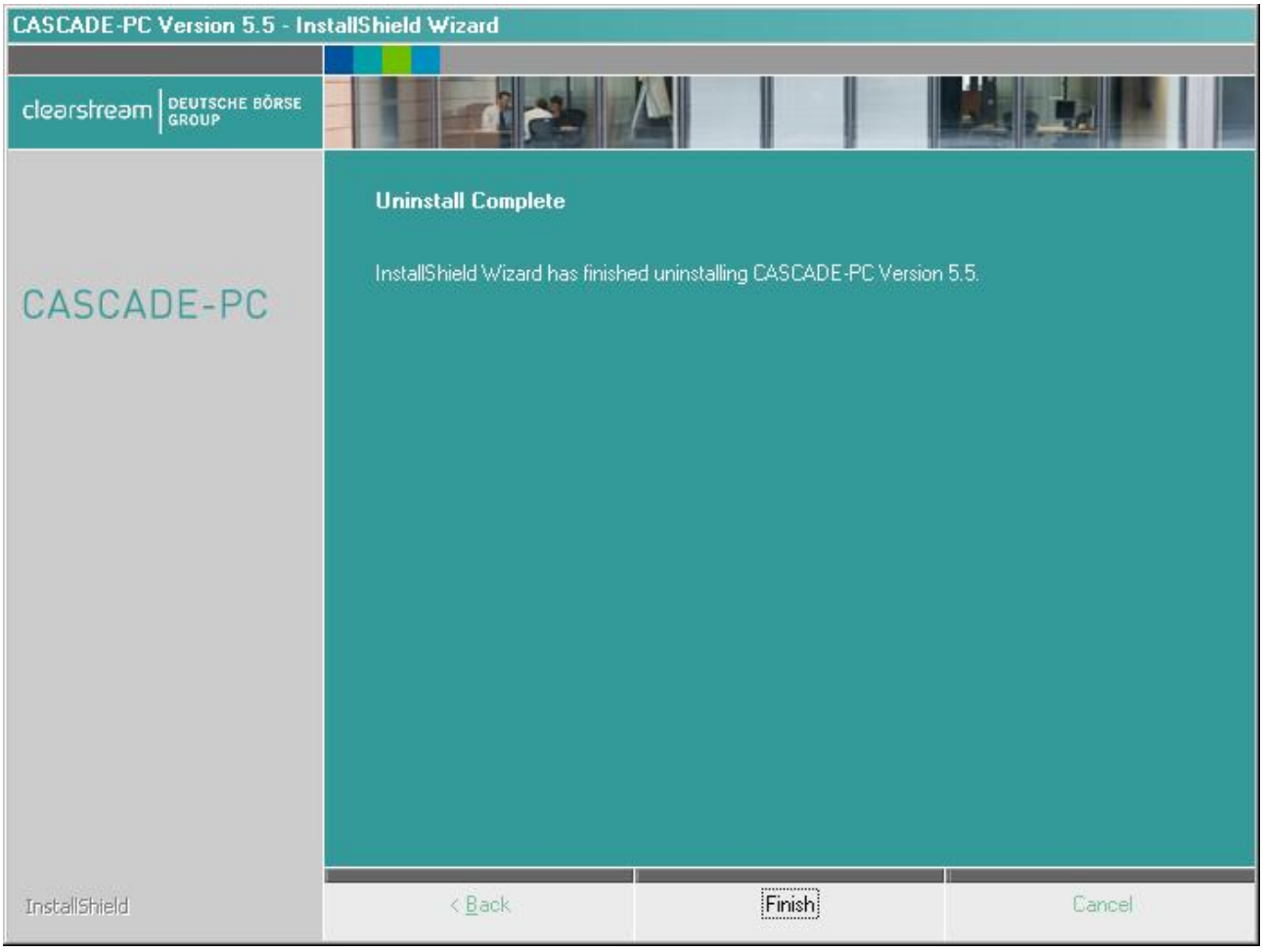


Select the entry CASCADE-PC Version 9.x and start the de-installation process by clicking on **Uninstall**





Answer the confirmation screen with **Yes**.



All directories / files of the selected CASCADE-PC installation will be removed from the current PC.

3.4 Installation as Client/Server

If CASCADE-PC is to be installed on several PCs, which are linked by a network, it is possible to install CASCADE-PC as server/client version. In connection with the server installation, all necessary data will be installed on a network accessible to all PCs.

The clients do not require any write authorisation for the drive of the server. All files for which CASCADE-PC requires write authorisations will be stored per client, locally in a separate directory with the client installation.

The next step is the client installation on every single PC. Here, the path to the server drive is entered and the files are installed which have to be available separately for every PC.

For further updates of the CASCADE-PC product, only the server installation has to be initialised again as a rule. Data which is filed locally at the client installation is usually compatible with higher versions and does not have to be replaced.

A parallel client/server installation of different CASCADE-PC versions is also possible. In this case, the default installation directories have to be changed. It is recommended to make a reference to the version numbers in the name of the installation directory (e.g.: ...\CASCADE-PC 9.x Server).

Please note:
CASCADE-PC client components must always be re-installed each time a new server is installed parallel.

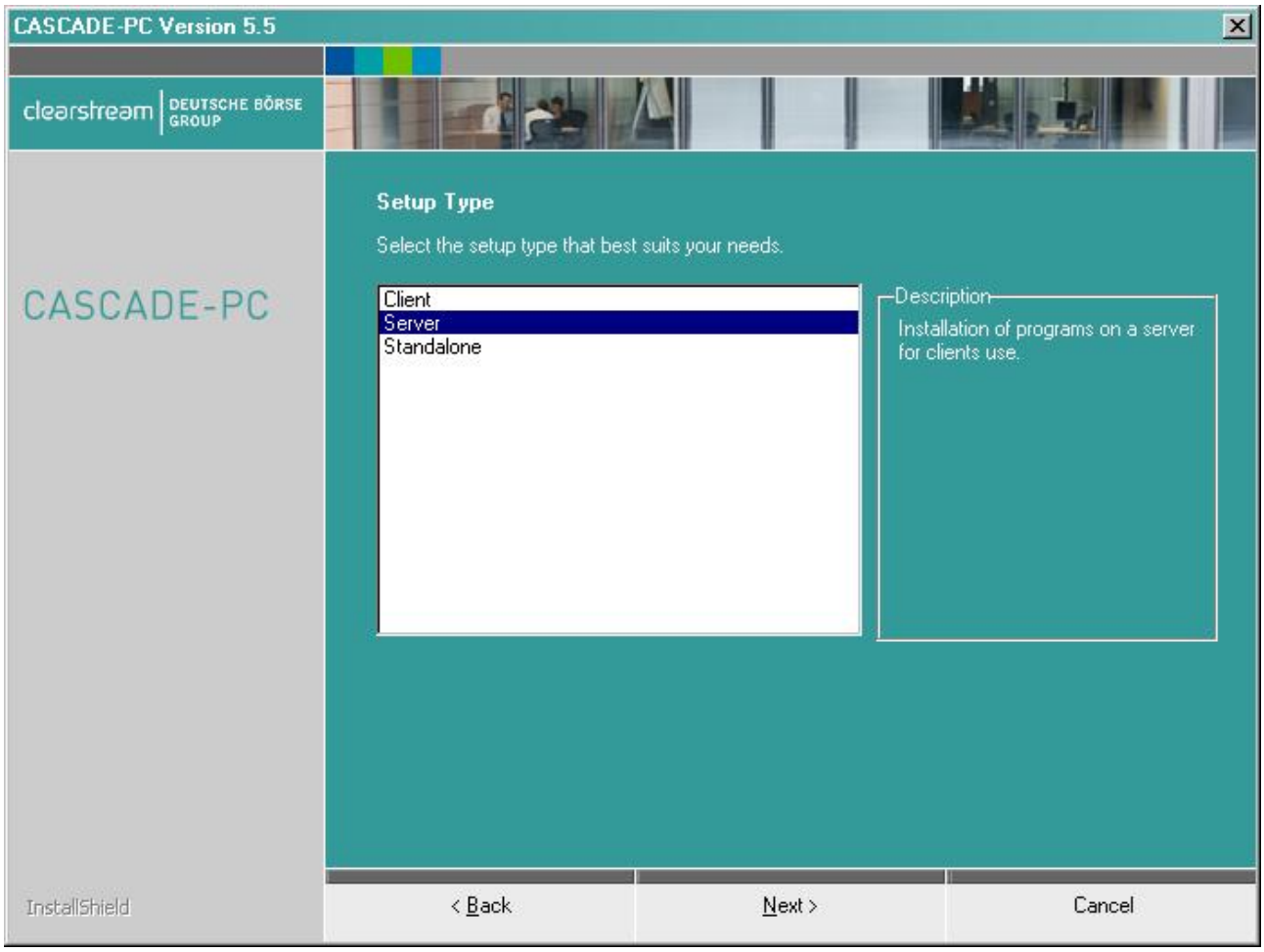
3.4.1 Server Installation

Please ensure that there is enough hard disk space on the drive where CASCADE-PC is to be installed. The application requires approx. 40 MB. Another 40 MB are temporarily required for the duration of installation. Administrator rights are mandatory for the installation.

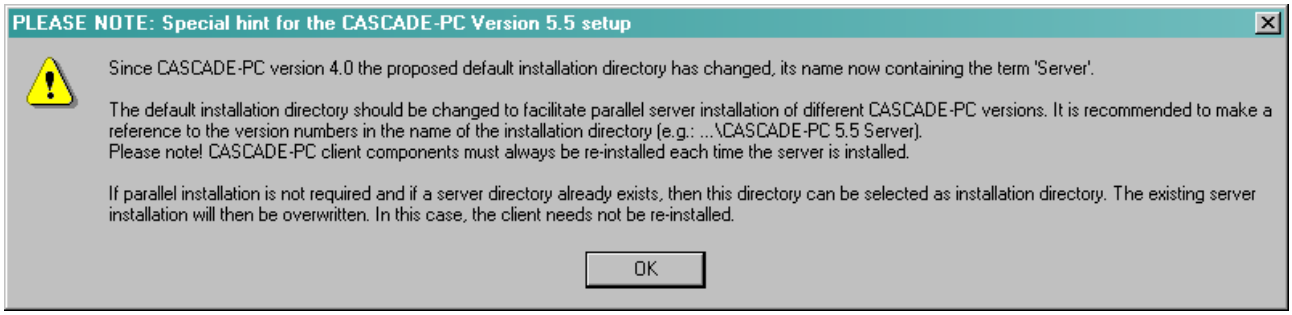
Please note:
The server **must** be set up **first** for a client/server installation.

Please make sure that Windows has been started close all other applications.

Perform the steps analogue to the standard installation (see chapter 3.3).
Choose the setup type **Server**.



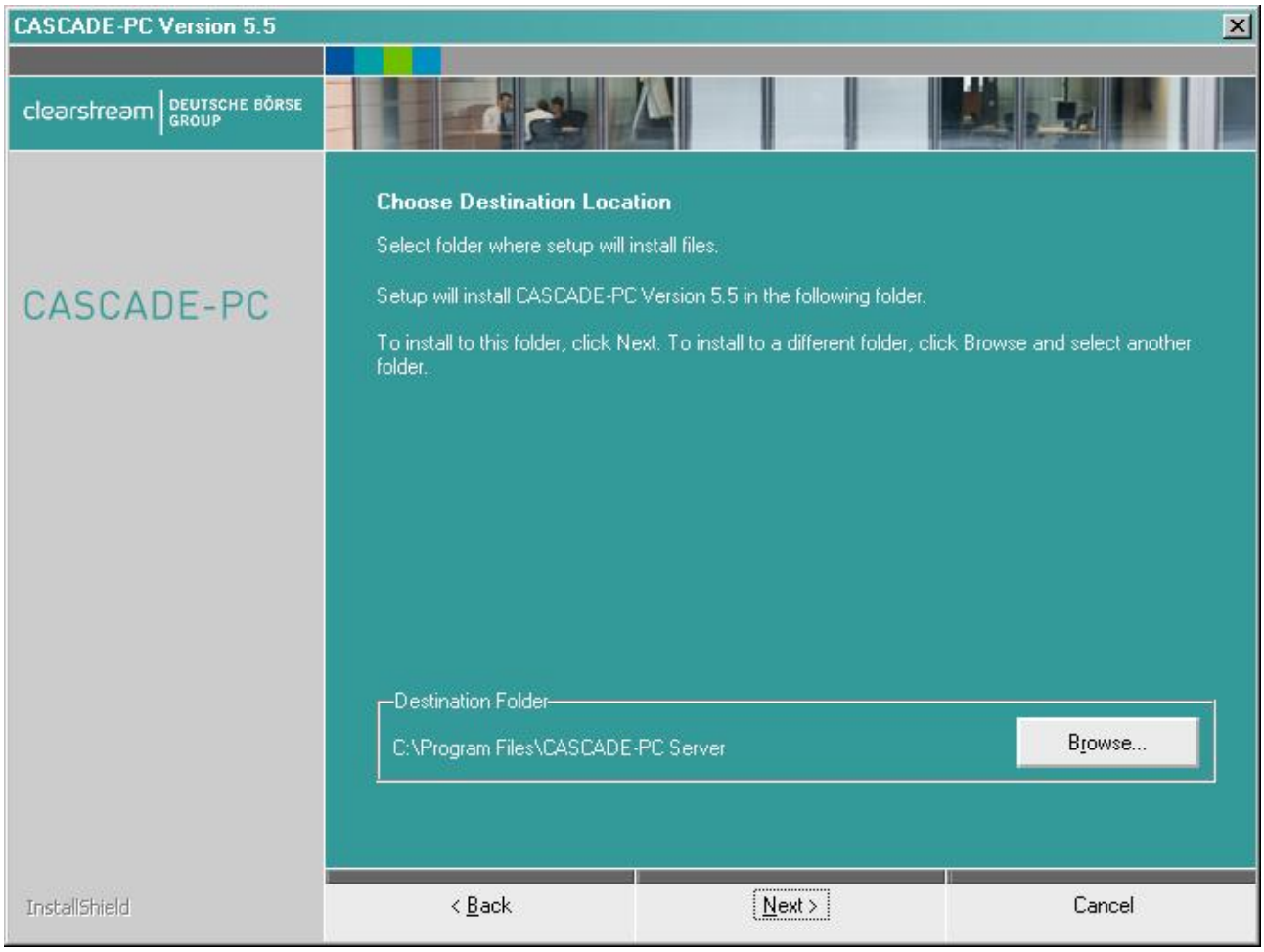
Confirm with **Next**.



Please note the following. Please go to chapter 3.1 of this Manual for additional details on the different installation versions and on parallel installation.

Please contact the competent staff at Clearstream Banking Frankfurt for information on suitable installation versions.

To continue, please press **OK**.



On this screen you can select another installation directory, or continue with the following screen by pressing the button **Next**. To run CASCADE-PC (not for the installation), the clients require read access to this directory.

With the button **Browse**, you can change the directory in which CASCADE-PC is to be installed. If you do not indicate a different directory, then the default directory "C:\Program Files\CASCADE-PC Server" will be used as installation directory.
In case you indicated a new directory or the preset one is not yet available, it will be created automatically during installation.

The installation is performed. Please consider that during the server installation, **no** program groups and **no** program icons are created.

Please note:
If the PC where the server installation was performed is also to be used for CASCADE-PC as well, the client installation has to be carried out in addition.

3.4.2 De-installation of CASCADE-PC Server

The de-installation of the server installation is analogue to the de-installation of the standard installation (see chapter 3.3.2).

Please note:
If you have installed a client installation after installing the server on the same PC, the client and the server installation will both be deleted upon de-installation.

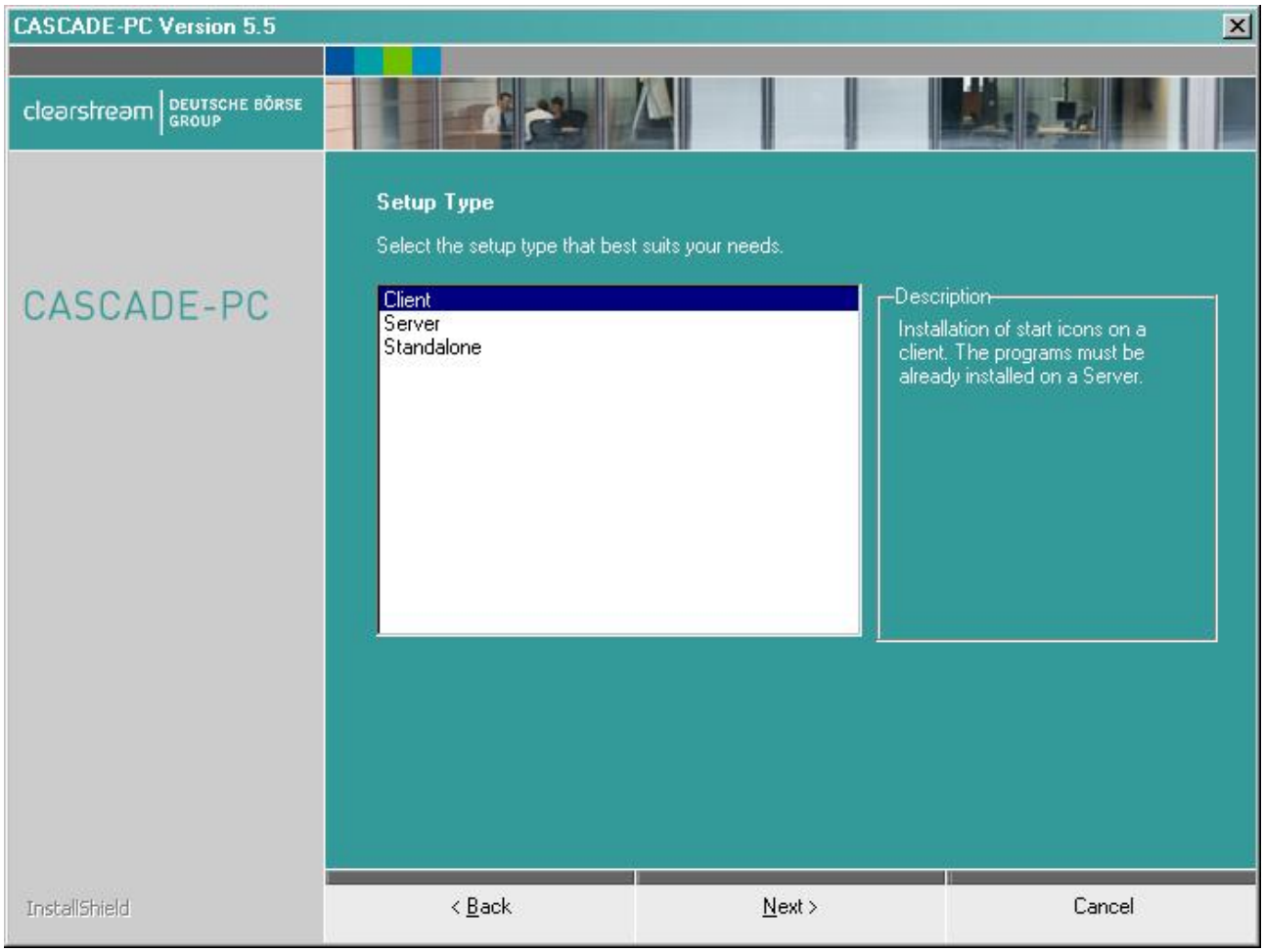
3.4.3 Client Installation

Administrator rights are mandatory for the installation. During the client installation the program groups and program icons, which refer to the program files on the server, are created (see chapter 3.4.1 Server Installation).

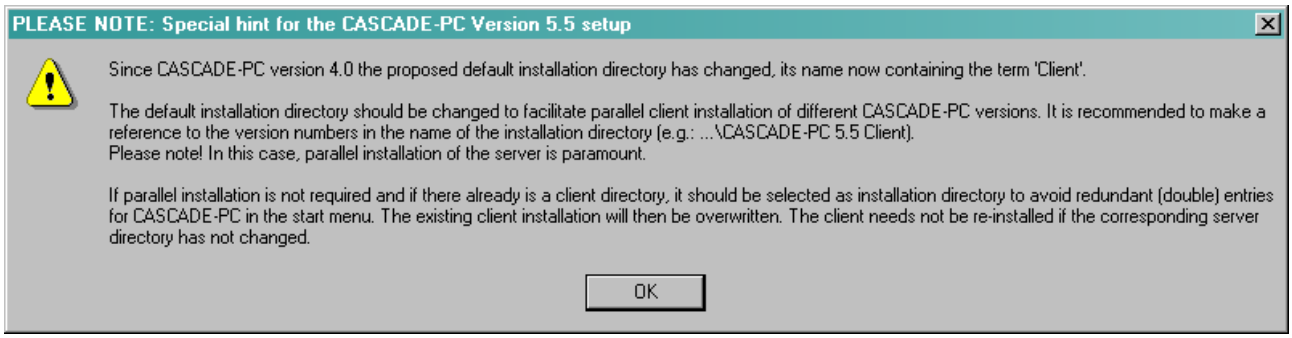
Please note:
The server **must** be set up **first** for a client/server installation.

Administrator rights are mandatory for the installation.

The client installation requires about 1 MB of hard disk space. Please make sure that Windows has been started and close all other applications.
Perform the steps analogue to the standard installation (see chapter 3.3).
Choose the setup type **Client**.



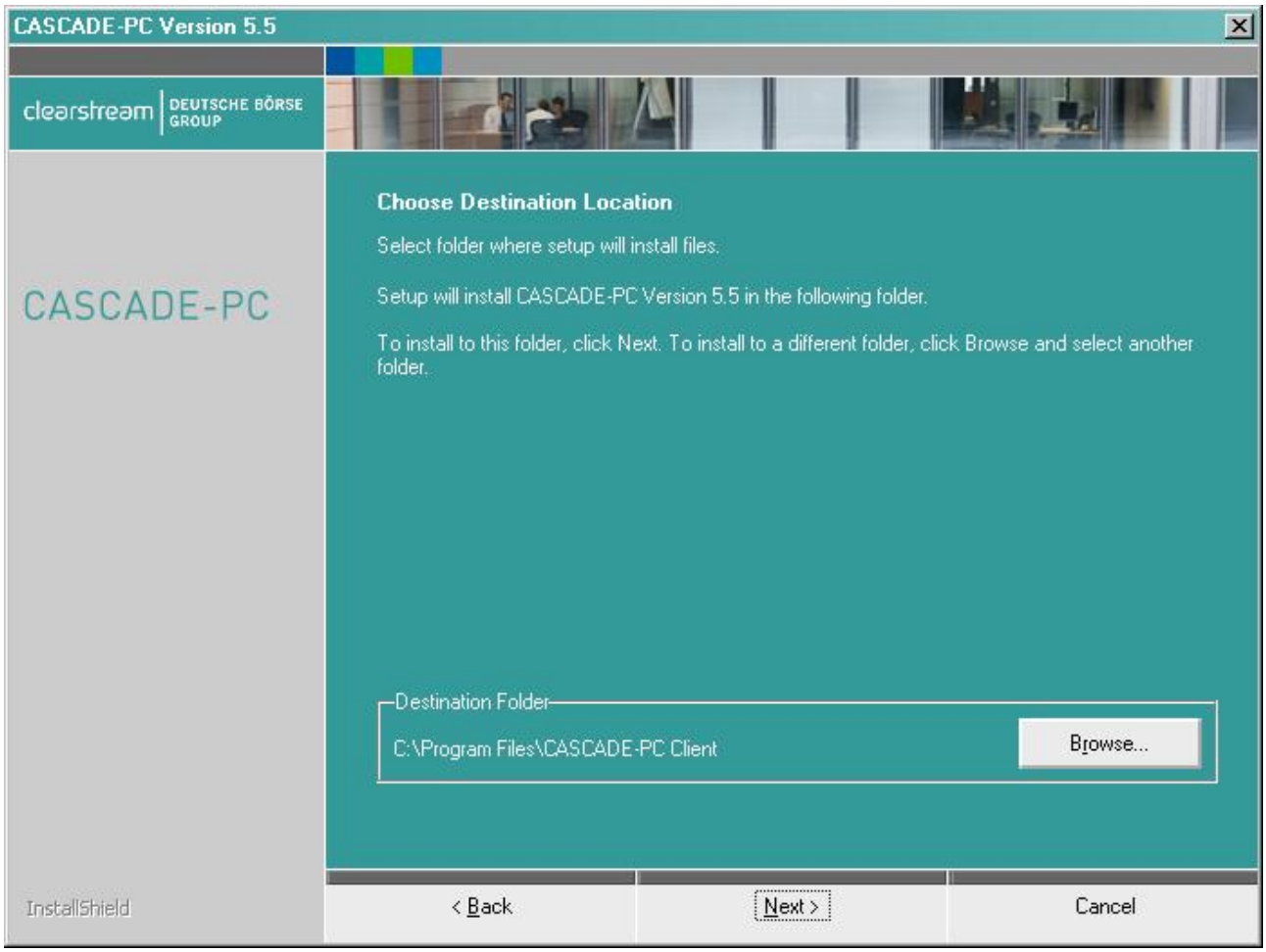
Confirm with **Next**.



Please note the following. Please go to chapter 3.1 of this Manual for additional details on the different installation versions and on parallel installation.

Please contact the competent staff at Clearstream Banking Frankfurt for information on suitable installation versions.

To continue, please press **OK**.



On this screen you can select another installation directory, or continue with the following screen by pressing the button **Next**. Choose the directory in which the files - that are required particularly for this client - shall be filed. The user requires full write and read authorisations in this directory.

With the button **Browse**, you can change the directory in which CASCADE-PC is to be installed. If you do not indicate a different directory, then the default directory "C:\Program Files\CASCADE-PC Client" will be used as installation directory.
In case you indicated a new directory or the preset one is not yet available, it will be created automatically during installation.

If the program paths are changed at a later date, the properties of the program icon have to be edited manually.

For the icon of the standard installation go to:

"C:\ Documents and Settings \All Users\Start Menu\Programs\CASCADE-PC Client\CASCADE-PC"
.
(The path changes correspondingly if you made changes to the default settings during the installation of CASCADE-PC or Windows.)

The call of CASCADE-PC is extended by the parameters -n and -w:

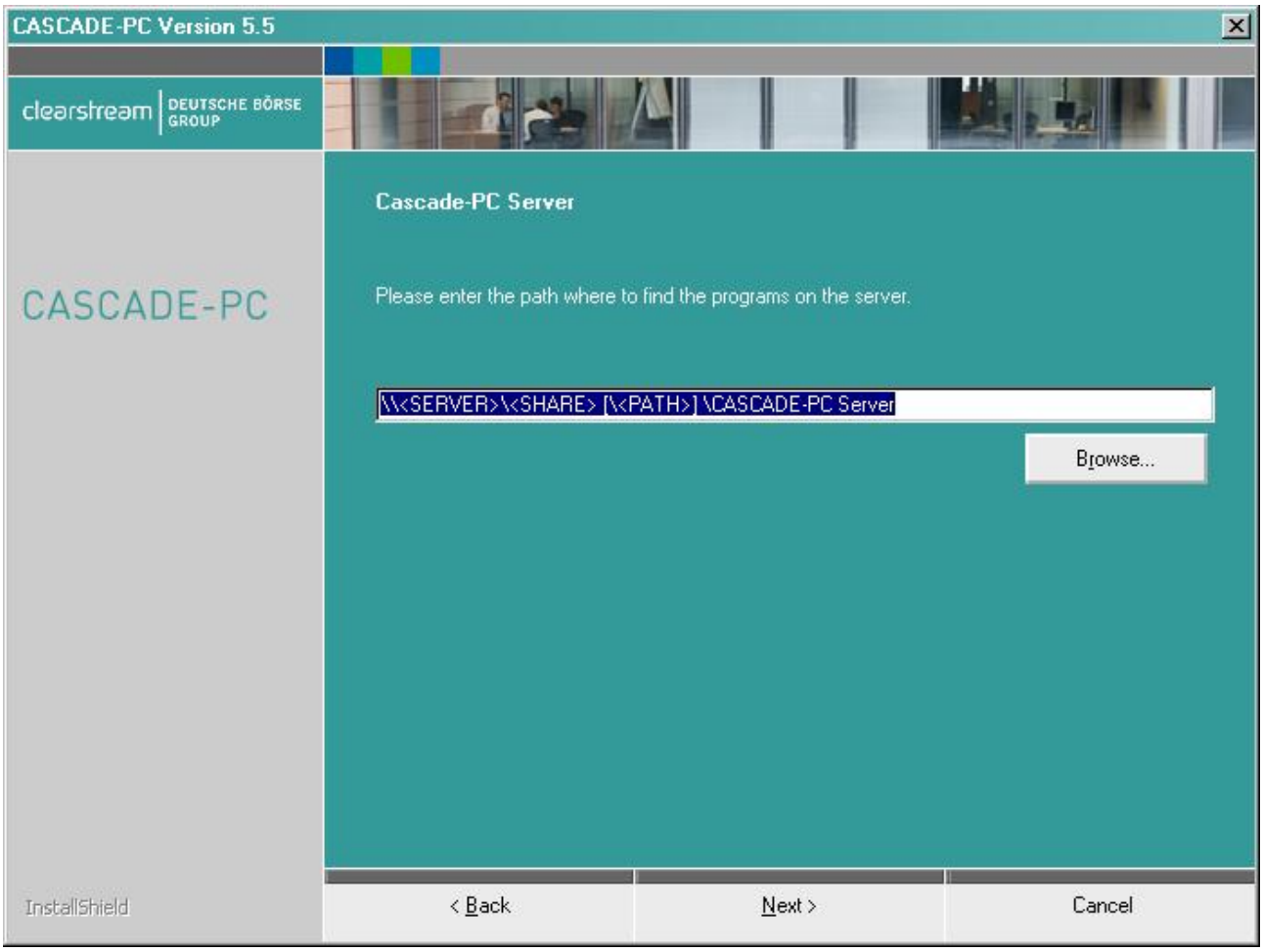
-n<path name >[<file name>]	default: CPCSYS.INI
-w<path name >[<file name>]	default: WALKBACK.LOG

For example:

```
"\\<SERVER>\<SHARE> [\<PATH>] \CASCADE-PC Server\CPCMAIN.exe" -NC:\Program
Files\CASCADE-PC Client\cpcsys.ini -WC:\Program Files\CASCADE-PC Client\walkback.log"
```

(The term"\\<SERVER>\<SHARE>[\PATH>]" has to be replaced by the actual server name).

Next, choose the server directory in which the CASCADE-PC program files were installed during the server installation.



Please note:
The term"\\<SERVER>\<SHARE> [\<PATH>]" cannot be adopted and has to be replaced by the actual server name. Any CASCADE-PC user accessing this directory requires at least read access.

Confirm with **Next**.

Perform the next steps analogue to the standard installation (see chapter 3.3).

3.4.4 De-installation of CASCADE-PC Client

The de-installation of the client installation is analogue to the de-installation of the standard installation (see chapter 3.3.2).

3.5 Right of Access (Windows)

Please ensure that every user account has sufficient rights to access CASCADE-PC, particularly with regard to Windows 7.

Standard Installation (Standalone)
This process installs the configuration files, the log files and the program files into the selected program folder. For the successful use of CASCADE-PC you need to allocate the following rights to the program folder (Default: "C:\Program Files\CASCADE-PC 9.x Standard") and all files:

- Read,
- Write,
- Modify,
- Execute

Please note:
If there is a need to separate the program files from the configuration files and the log files the client/server-installation has to be selected.

Server-Installation
This process installs the program files to the target folder. For the successful use of the program you need to allocate the rights

- Read,
- Execute

to the program folder (Default: "C:\Program Files\CASCADE-PC Server") and all files.

Client-Installation
This process installs the configuration files and the log files to the selected folder. For the successful use of the program you need to allocate the rights

- Read,
- Write,
- Modify

to the selected folder (Default: "C:\Program Files\CASCADE-PC Client") and all files.

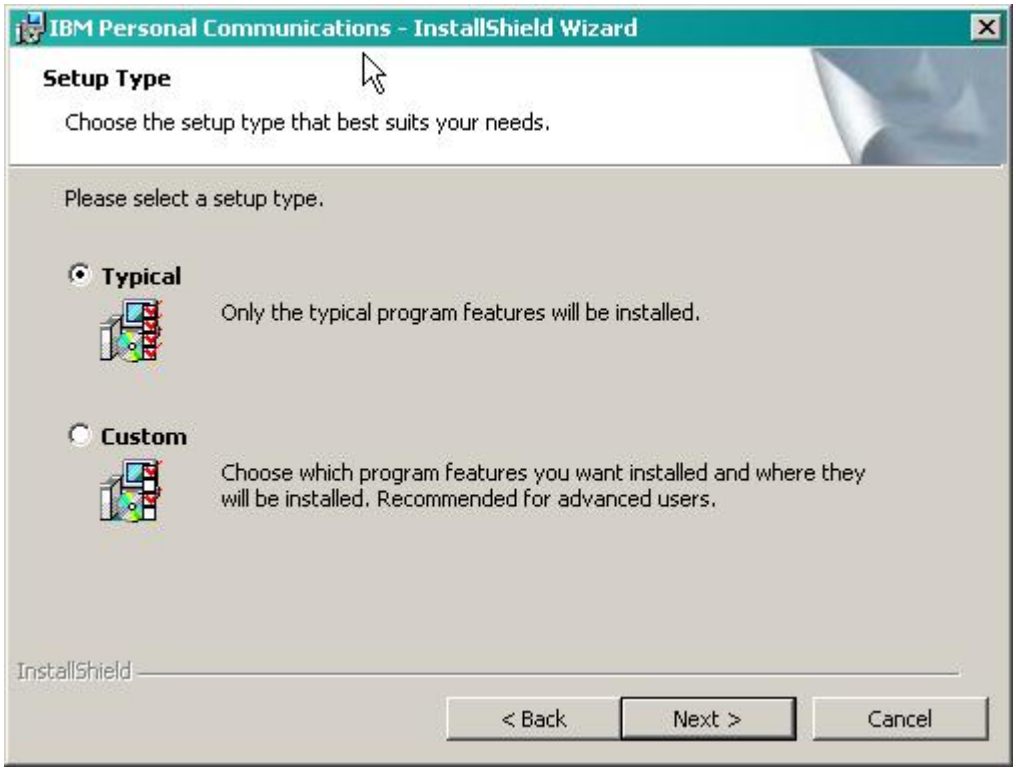
4. IBM Personal Communications for Windows

The following screen shots were taken with IBM Personal Communications Version 6. The contents of version >= 5.x are basically identical. Differences are mainly to be found in the layout.

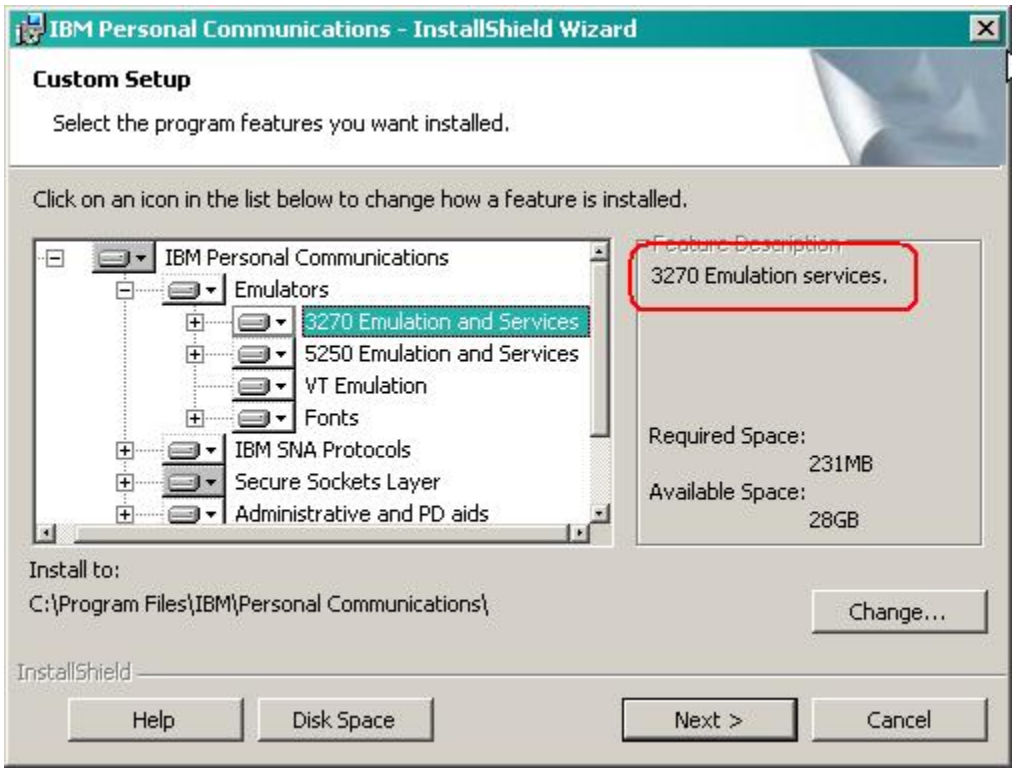
Please note:
In case HOB J-Term was installed on the PC, the HOB J-Term path must be removed manually from the System Environment panel. Parallel operation of the EHLLAPI interface of both terminal emulations is not possible.

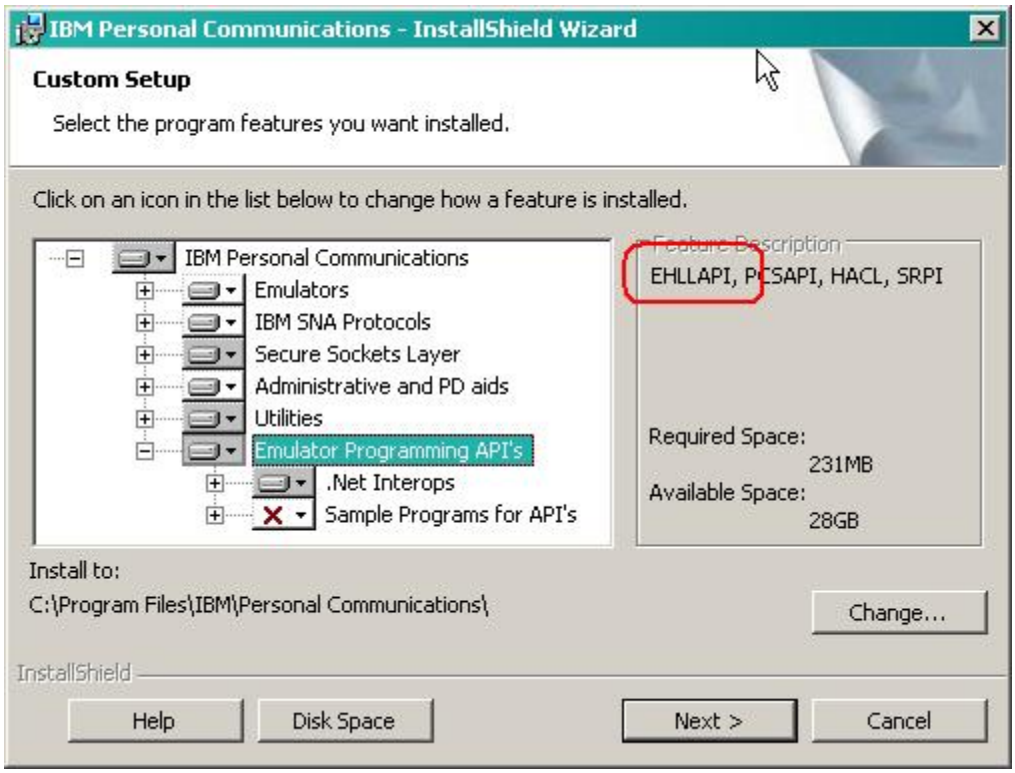
Install the terminal emulation on your host according to the installation instructions.

Please note:
You may either choose <Typical> or <Custom> installation, but please make sure to install the 3270 and the EHLLAPI communication APIs in any event.



IBM Personal Communications for Windows





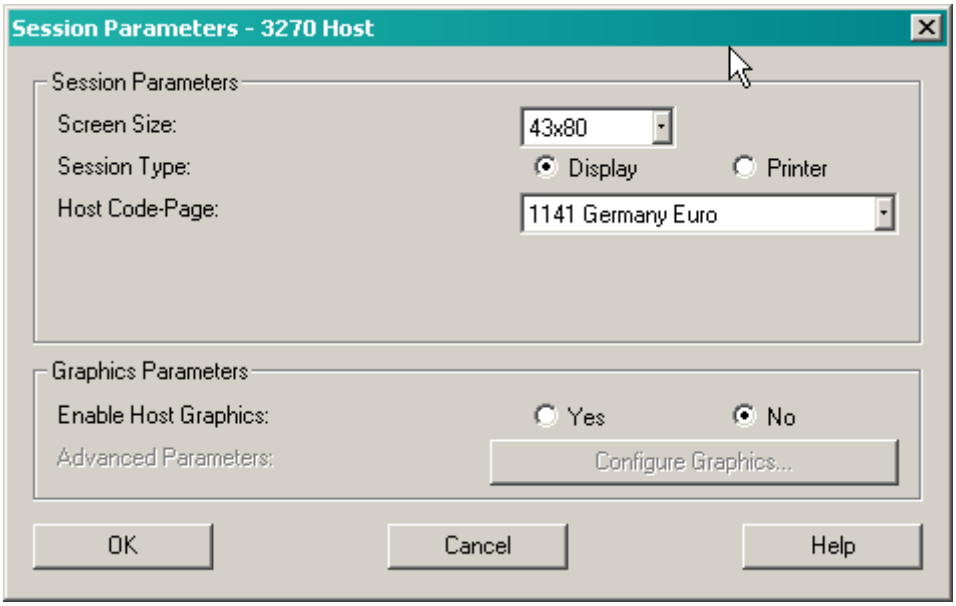
4.1 Dedicated Line

The required connection (linkup) settings correspond to the standards which are customary in your company and, as a rule, they need not be changed for CASCADE-PC.
If the IBM Personal Communications (LU2) to the host of Deutsche Börse AG has already been configured on your PC, no further actions should be taken, otherwise please contact your local systems support.

4.2 Host Code Page

It is absolutely mandatory that you change the host code page of Personal Communications to "German" for CASCADE-PC so that special characters can be displayed correctly. Please refer to the respective IBM Manual for details on the configuration. In the different versions of the PC3270, the respective settings can be accessed as follows:

- V 6 / V 5.x: Communication > Configure..., then button 'Session parameters...'



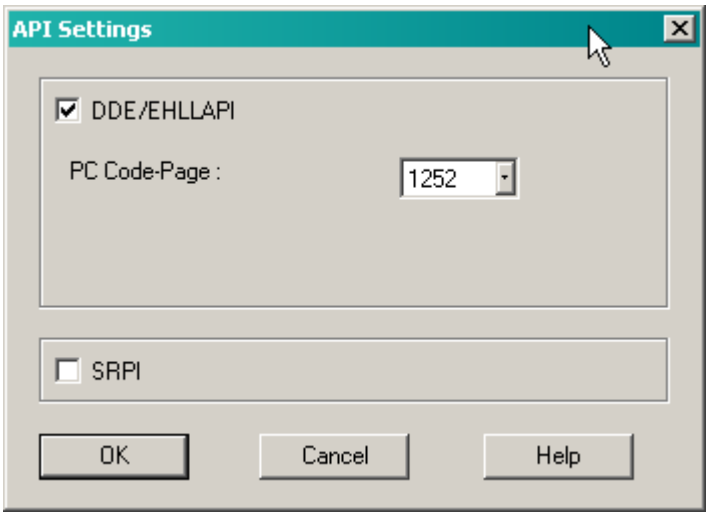
Select host code page 273 (Germany) or host code page 1141 which includes the euro sign.

Confirm with **OK** and then save your settings.

4.3 PC Code Page / Enabling the EHLLAPI Interface

It is absolutely mandatory that you change the PC code page of Personal Communications to "German" for CASCADE-PC so that special characters can be displayed correctly. Please refer to the respective IBM Manual for details on the configuration. In the different versions of the PC3270, the respective settings can be accessed as follows:

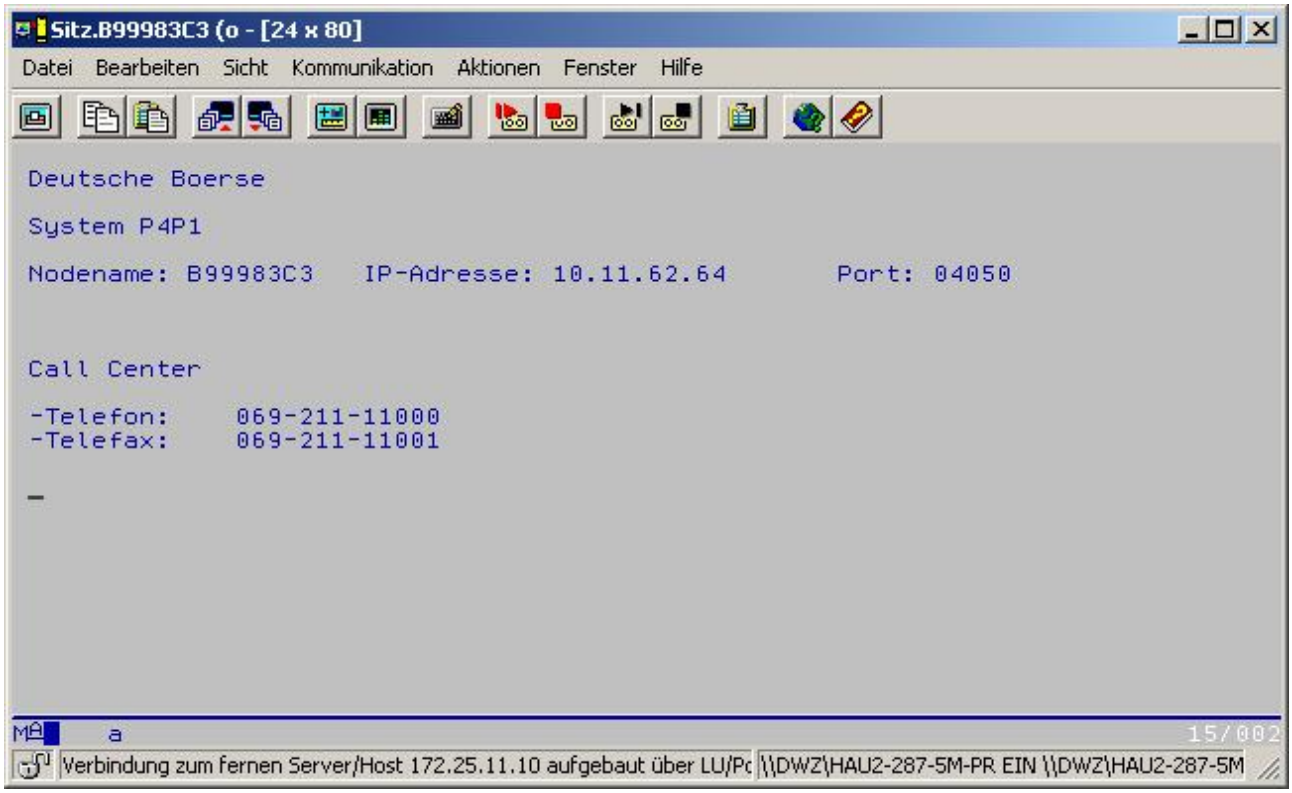
- V 6 / V 5.x: Edit > Preferences > API...



Enable EHLLAPI and select PC code page 819 (Windows - Germany) or PC code page 1252 which includes the euro sign. Confirm with **OK** and then save your settings.

4.4 Welcome Screen of Deutsche Börse

As soon as the connection has been established, the welcome screen of Deutsche Börse AG's mainframe will appear.



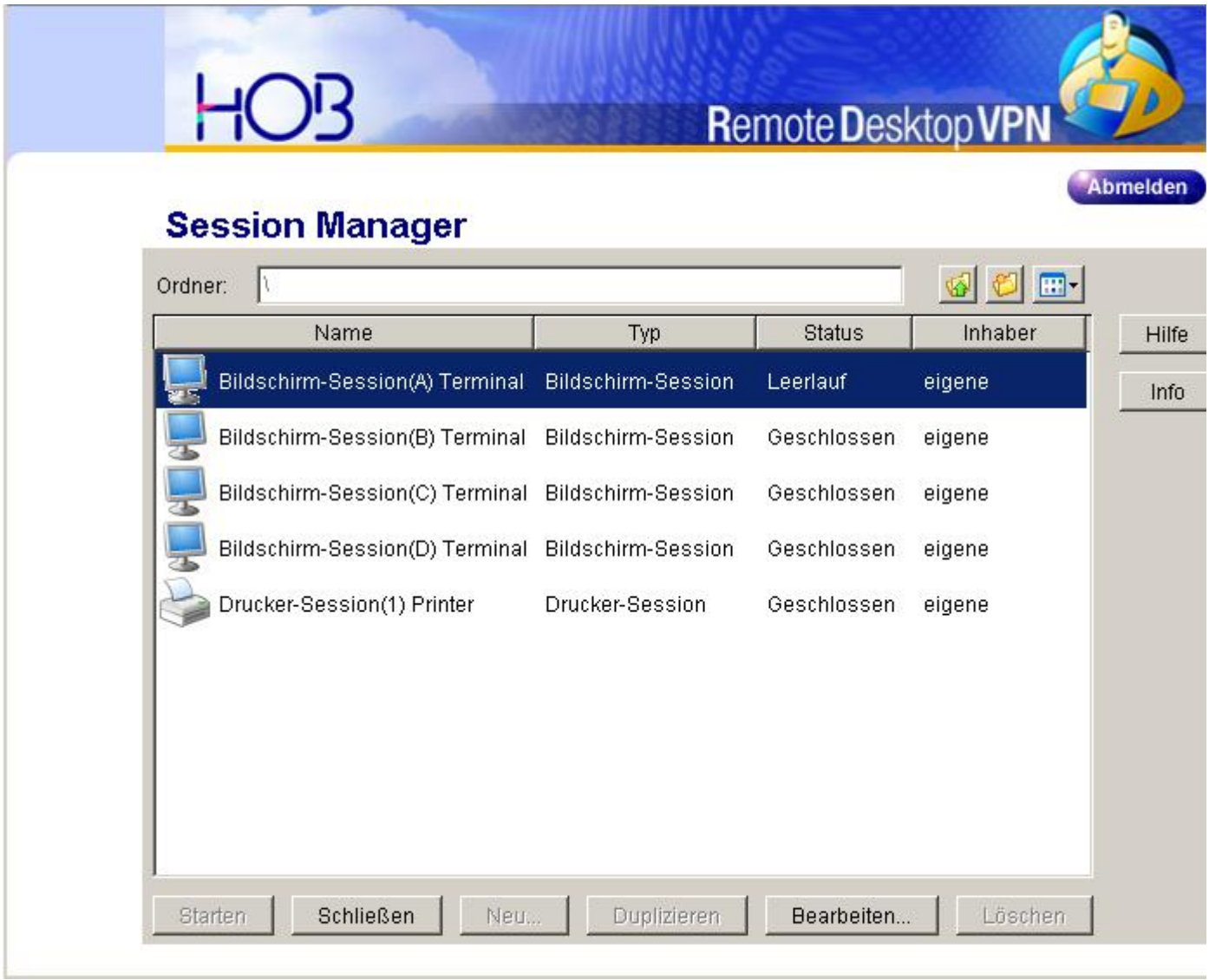
Please note:
Only now can CASCADE-PC be started!

5. HOB J-Term RD VPN

To start HOB J-Term Remote Desktop VPN client, please access the following Internet page:

- https://interhost.deutsche-boerse.com

Please enter now User-ID and password (Token-ID). With a click on button **Run** you can start the terminal emulation and connect to the CASCADE backend host.



Please note:
For CASCADE-PC the HOB EHLLAPI interface is mandatory. The software (HLLAPI_COM) must be installed before starting CASCADE-PC!

Please download the software "CASCADE-PC HOB RD VPN HLLAPI installation files" via the common CASCADE-PC Internet link: http://www.clearstream.com/cascadepc

5.1 Installation of HOB RD VPN - HLLAPI_COM

Please make sure that Windows has been started and close all other applications. The installation has to be started manually.

Via the

button, call up the dialogue <Run…> and enter:

cmd

In the "DOS Box" (Windows Command Interpreter) please enter:

..> X:
..> cd \HOB_RD_VPN\HLLAPI_COM\Web_Installers\InstData\Windows\NoVM
..> install –i silent

where X has to be replaced by the letter representing your drive.

In the above installation variant the option "-i silent" is used, that means, the installation takes place invisibly in the background. All necessary settings for the interface EHLLAPI (4 byte boundary - compatible to IBM) are already preselected and stored in the "installer.properties" file. The software HLLAPI_COM will be saved by default in the directory **C:\Program Files\HOB\HLLAPI_COM** and a corresponding entry will be written in the PATH variable.

Attention!
After successful installation in "Silent-Mode" an automatic restart of the system will be initiated. There will be no further prompt for confirmation.

If there should be deviations from the default settings needed, so please do a regular "manual" installation (run: install.exe). This command starts the install wizard, which leads you through the installation process. Please change the default values in the dialog boxes of the installation procedure accordingly. Please note the selection of the "4-byte boundary HLLAPI interface (compatible to IBM)" is mandatory for the usage of CASCADE-PC.

Please note:
In case HOB RD VPN or IBM Personal Communications were installed on the PC, the path to the "former" 3270 emulation must be removed manually from the System Environment panel. Parallel operation of the EHLLAPI interface of both terminal emulations is not possible.

5.2 Session settings

The session settings are already configured for CASCADE-PC and can not be changed via the Session Manager Editor.

5.3 Host Code Page

It is absolutely mandatory that the host code page of the HOB J-Term RD VPN emulation is set to "German" (273/1141) so that CASCADE-PC can display special characters (like ä, ö, ü, etc) correctly. The host code page settings are already configured for CASCADE-PC and can not be changed via the Session Manager Editor.

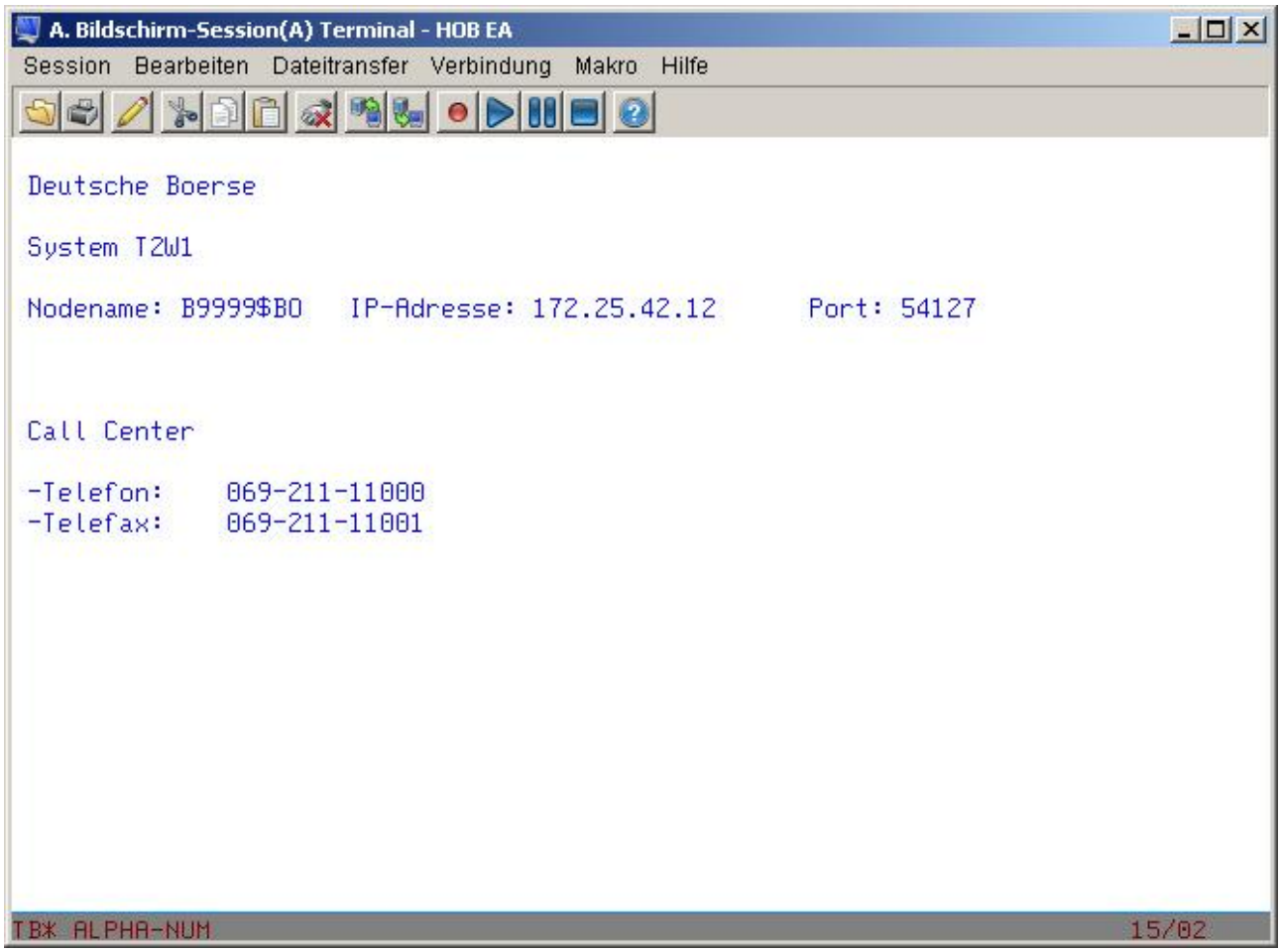
5.4 PC Code Page / Enabling the EHLLAPI Interface

HOB J-Term RD VPN is already configured with the correct PC code page for Windows (819/1252), and the EHLLAPI interface activated as well.

Without the EHLLAPI active HOB J-Term RD VPN will not operate with CASCADE-PC. For HOB J-Term RD VPN the EHLLAPI interface software (HLLAPI_COM) must be installed additionally. Please refer to chapter 5.1

5.5 Welcome Screen of Deutsche Börse

As soon as the connection has been successfully established, the welcome screen of Deutsche Börse AG's mainframe computer will appear.



Please note:
Only now can CASCADE-PC be started!

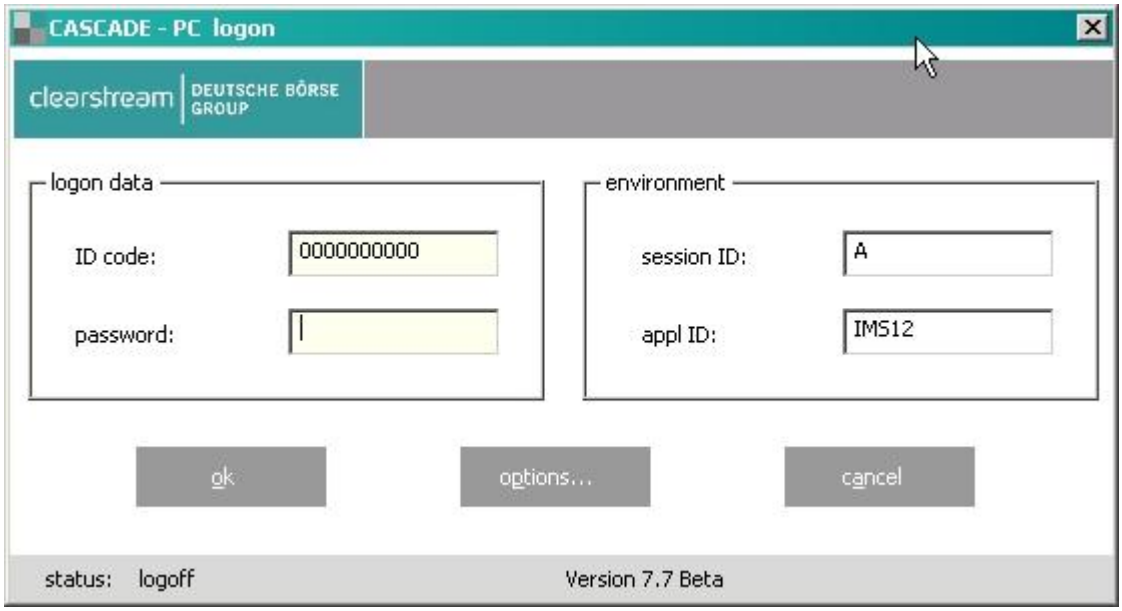
6. CASCADE-PC

6.1 Configuration of CASCADE-PC

After successful installation of CASCADE-PC and double-click on the created program icon, the logon screen appears.
The terminal emulation serves as the basis for CASCADE-PC. If the terminal emulation has not been started first, a CASCADE-PC error message will pop up and CASCADE-PC will be terminated automatically.

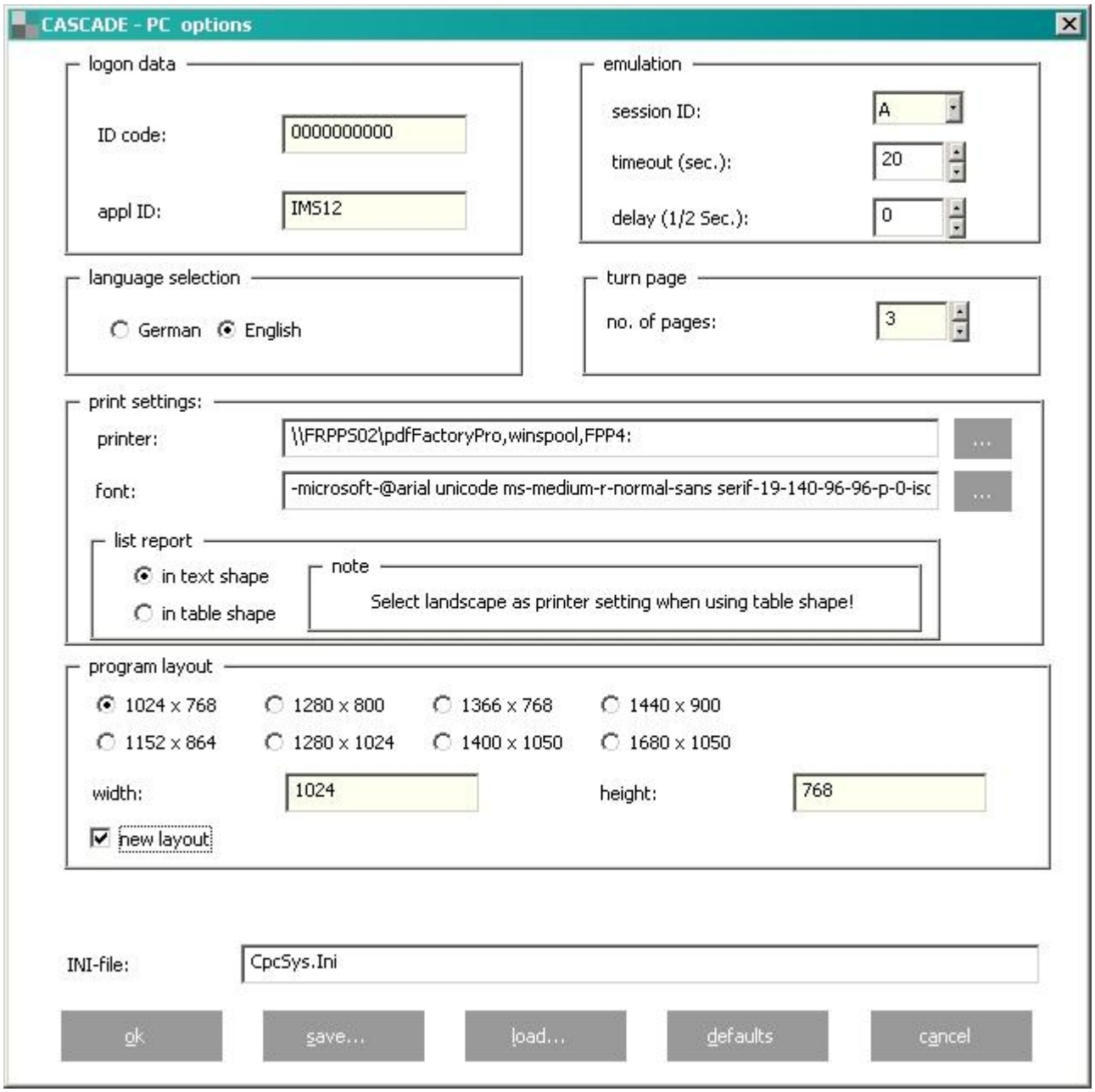
In this case you will have to start the terminal emulation and then CASCADE-PC.
Should the message be repeated, re-boot the PC and start the applications in the required order.

After starting CASCADE-PC, the logon screen should look like this:



In cases where the user-specific settings were stored in the file CPCSYS.INI prior to installation and initialised after the installation, the settings of the old version are adopted and the user can continue to work with the usual settings.

With a mouse-click on the button **Options**... the user is guided to the options screen where he can change the user-specific entries.



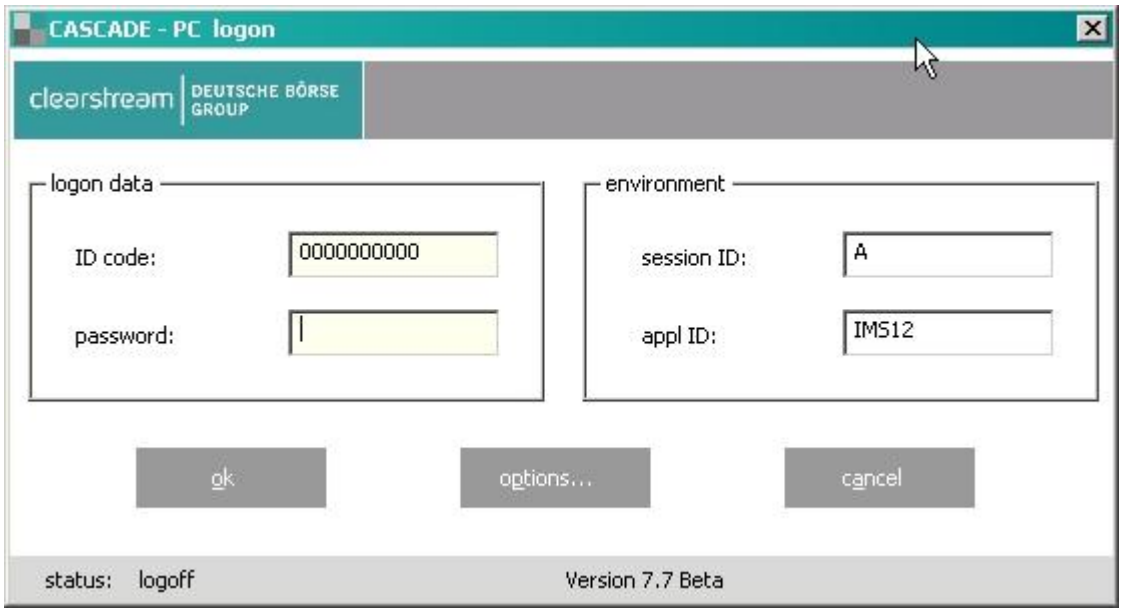
The entries have to be made only once and stored by the user.

- *ID Code*: User identification for CASCADE-PC
- *AppID:* IMS12 (production system)
- Printer & Font

By pressing the button **save**... the settings are stored in an INI file to be available for the next logon.

You can leave the options screen by pressing **OK**. The entered parameters are now displayed in the logon screen.

6.2 Logon in CASCADE-PC



Now enter the password for CASCADE-PC.

Now you are logged on to the system you have chosen and can start with the entries. The logon process is completed.

7. Error Handling

7.1 E00041, E00012: Timeout

This error

(pressing the button **Cancel** displays the following message:)

is caused by the following:

1. The reference message E00041 indicates that CASCADE-PC is still waiting for data from the host. Please press **OK**. If the message E00041 re-appears, terminate the process by pressing **Cancel**. Please take note of the following:

   The length of time (in seconds) CASCADE-PC spends waiting for a reply from the CASCADE Backend Host can be set in CASCADE-PC under Settings>Options: Timeout (sec.) The default is set at 20 seconds and should not be changed. Please check whether a value that is too small has been entered.

2. If a reply from the host has not been received upon expiry of the Timeout, the message E00041 is displayed. Press **OK** to wait again, or cancel the process with **Cancel**. Error message E00012 is displayed. Please check your last entry.

   If the required result does not appear after pressing **OK** several times, please contact your local systems support. Please refer to the CASCADE-PC program group for the respective error reporting form.

7.2 E00045: PCSHLL32.DLL not found

This error

is caused by the following:

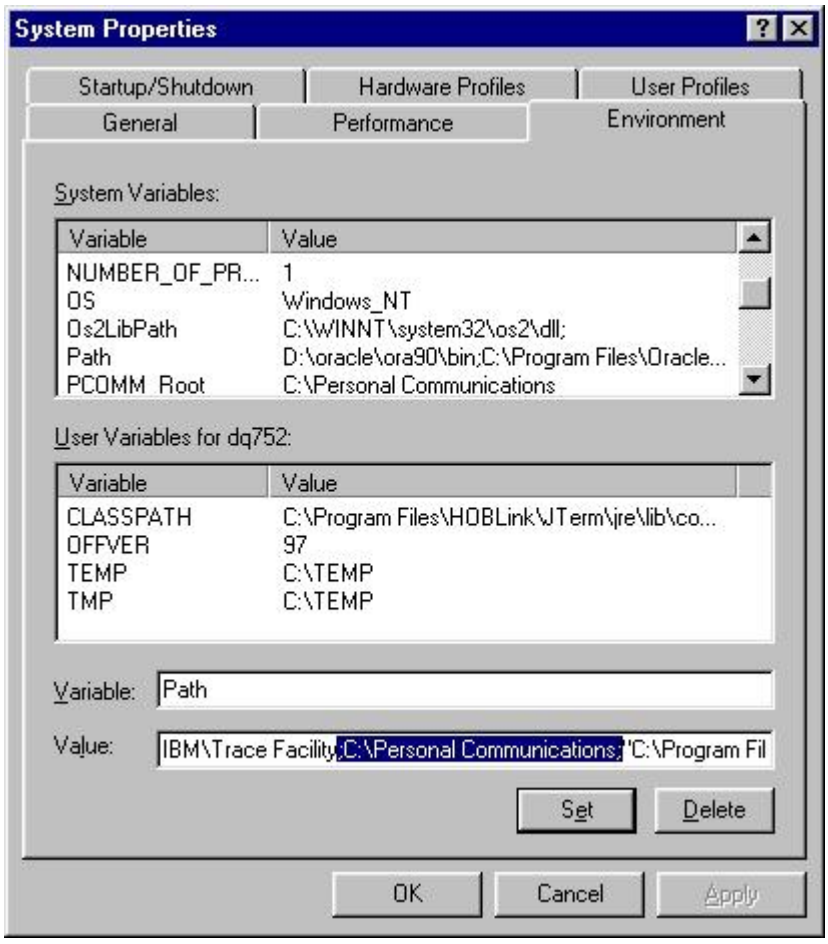
1. The terminal emulation (HOB or IBM Personal Communications) was started after CASCADE-PC (in some cases the PC has to be rebooted).

2. EHLLAPI option not enabled (see "Enabling the EHLLAPI Interface" for IBM PCom chapter 4.3 or HOB RD VPN chapter 5.1).

3. In some cases, the path to the file **PCSHLL32.DLL** is not included in the path variable. In this case, the path must be entered **according to your system environment,**

   for example:

HOB J-Term RD VPN	"C:\Program Files\HOB\HLLAPI_COM "
IBM Personal Communications:	"C:\Personal Communications"



Please note:
If there is more than one terminal emulation on your computer, all other paths must be removed manually from the System Environment panel. Parallel operation of the EHLLAPI interfaces of several terminal emulations is not possible.

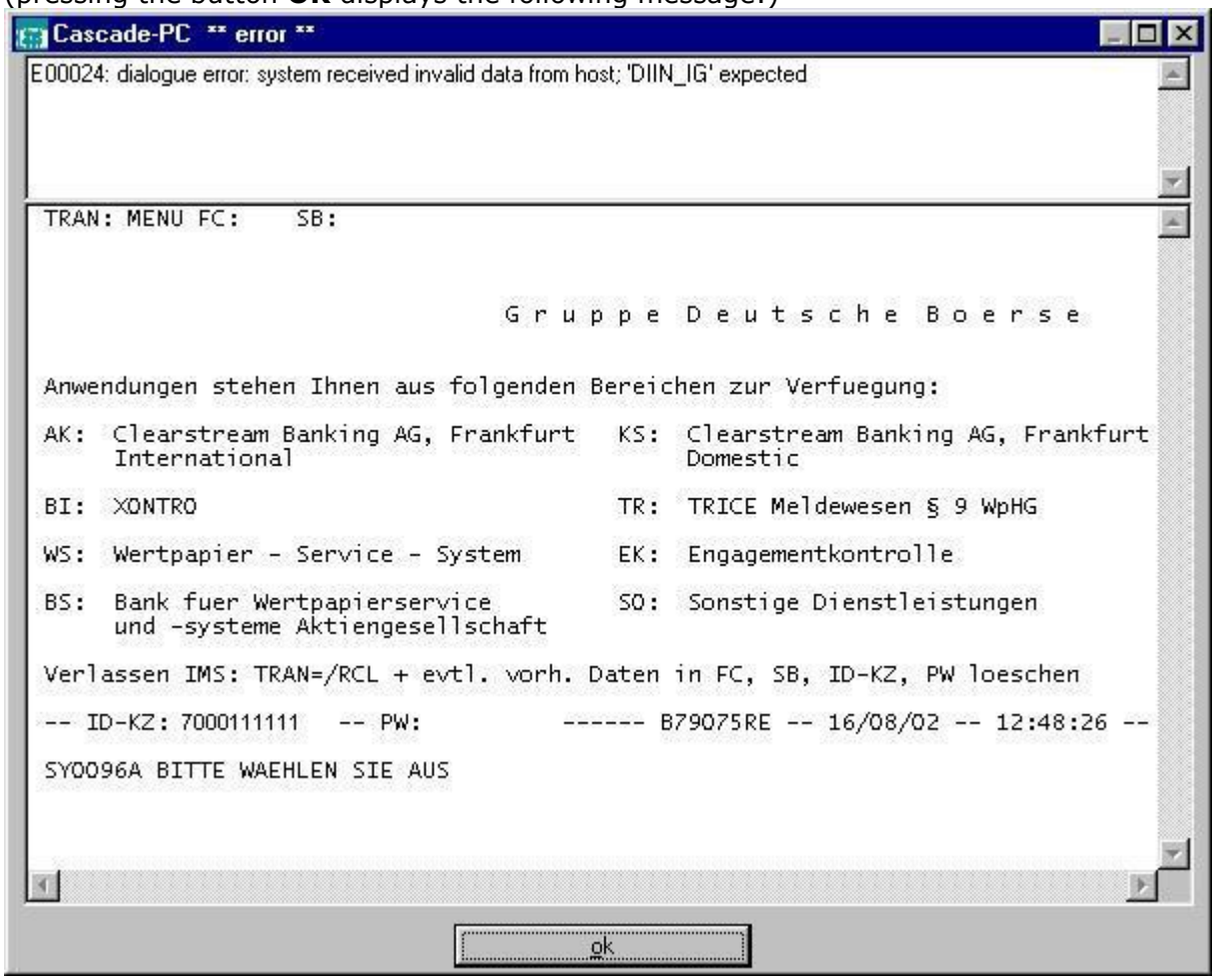
4. An old version of the Internet-Explorer is installed; especially the version of **mfc42.dll** is older than 6.00.8665.0 (Requirement of HOB RD VPN).

   In that case please install a new version of the Internet Explorer (> version 5) or a newer version of mfc42.dll.

7.3 E00049, E00024: System Error – Wrong Host Position

This error

(pressing the button **OK** displays the following message:)



is caused by the following:

1. This is a flow control error in CASCADE-PC. It is paramount that you make a copy of the CASCADE-PC error screen. It contains program-related information for error analysis. Please also note down the steps that lead to this error and contact your local systems support. Please refer to the CASCADE-PC program group for the respective error reporting form.

7.4 E00051: Unable to write to file *WALKBACK.LOG*

This error

is caused by the following:

1. Your user account does not have the required privileges.

   Please contact your local system administrator. You need to have the Read, Write, Modify and Execute permission for the CASCADE-PC program folder and all program files (see "Right of Access (Windows)" chapter 3.5).

7.5 E00055: EHLLAPI Error

This error

is caused by the following:

1. Communication between CASCADE-PC and the CASCADE-PC host has failed. After pressing the button **OK** all functional menu entries are deactivated. Please logon again to CASCADE-PC.

2. Please check whether several CASCADE-PC sessions are being run at once on your computer. Close all CASCADE-PC applications and re-start CASCADE-PC. Multiple CASCADE-PC sessions are not supported.

3. If you cannot logon to CASCADE-PC, close CASCADE-PC and then the terminal emulation. Now, first start the terminal emulation and, after the connection to the host of Deutsche Börse has been established successfully, start CASCADE-PC.

7.6 E00059, E00060: Incorrect Version

This error

respectively

is caused by the following:

1. You are using an incorrect version of CASCADE-PC. Close CASCADE-PC. Please install the required CASCADE-PC version and logon again. (See also "Mandatory release implementation of CASCADE-PC version 9.0", chapter 1.6).
   Please also refer to chapter 3.1 (CASCADE-PC Installation Options) for information on parallel installation.

7.7 E00064: Incorrect EHLLAPI or Host Code Page

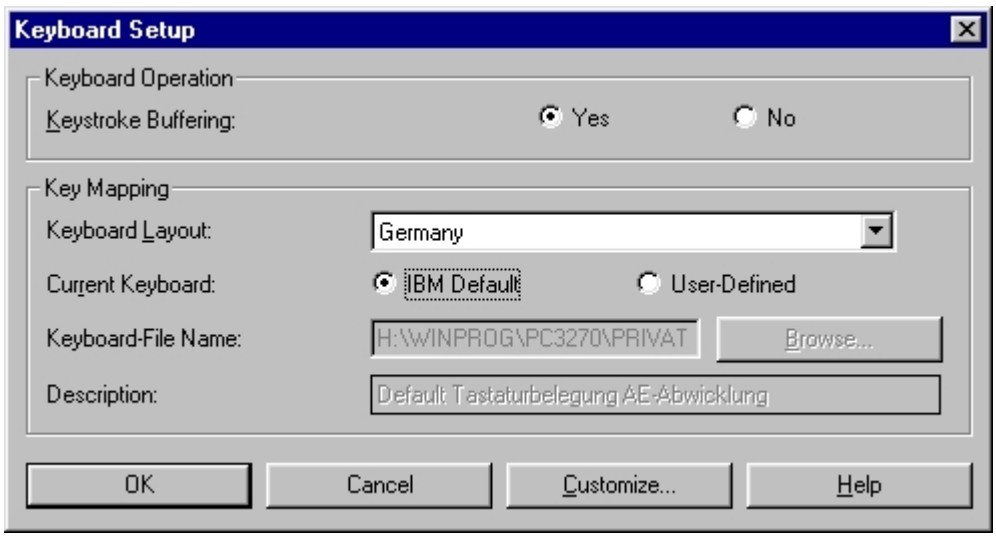
This error

is caused by the following:

1. It is absolutely mandatory that you change the **host code page** of the terminal emulation to "German" for CASCADE-PC so that special characters (such as § $ % & # @) can be displayed correctly. An incorrectly configured host code page may be the cause for this error. (See "Host Code Page" for IBM PCom chapter 0).

2. It is absolutely mandatory that you change **the PC code page** of the terminal emulation to "German" for CASCADE-PC so that special characters (such as § $ % & # @) can be displayed correctly. An incorrectly configured PC code page may be the cause for this error. (See "PC Code Page" for IBM PCom chapter 4.3).

3. If the characters displayed on the screen are not the same as on the **keyboard**, incorrect settings in the Keyboard Setup of the IBM Personal Communication might be the source of the error. Select the correct entry to correspond with your keyboard layout.



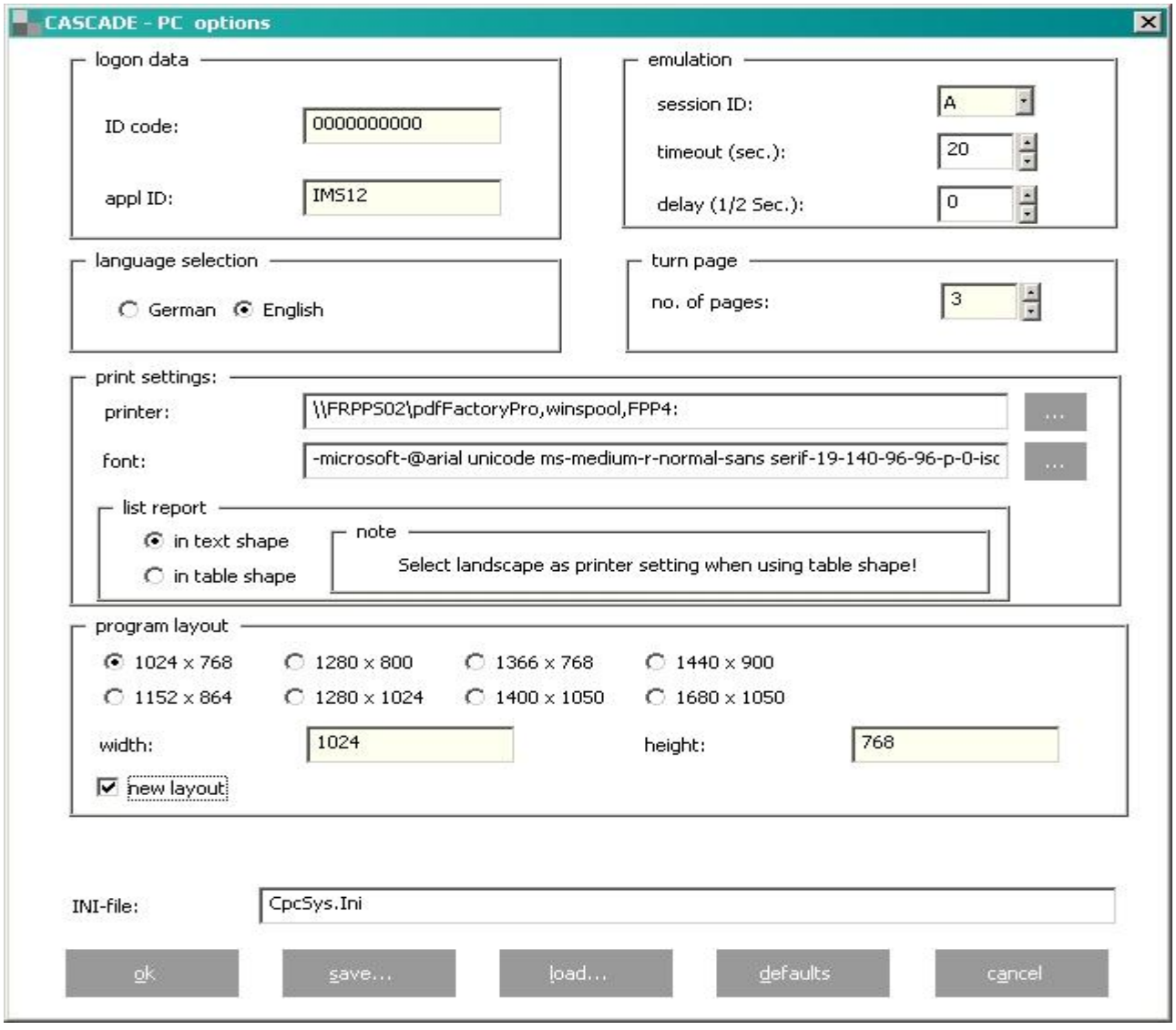
7.8 E00075, E00077: Printer and/or font not defined

This error

is caused by the following:

1. CASCADE-PC has no user definition for printer and font. The standard printer and font will be used.

   To define a printer or font, please choose **settings/options...** , make the desired selections and save settings.



7.9 SY0006F: Action not allowed: xxxx

This error

is caused by the following:

1. A security release of the technical and functional CASCADE functionality is required for access to the CASCADE backend. To be able to use all CASCADE functions offered by CASCADE-PC, the required transactions / functions must be released for each user.

   Please note that after a password change performed by the Security Agent with instructor rights the modified user is in status "blocked". After the user changed his password the Security Agent with approver rights must release the user (status "released").

   Please note also that use of CASCADE-PC renders mandatory the release of the transactions **'MENU'** and **'KVAV PC'**.

7.10 Unknown Publisher

This error

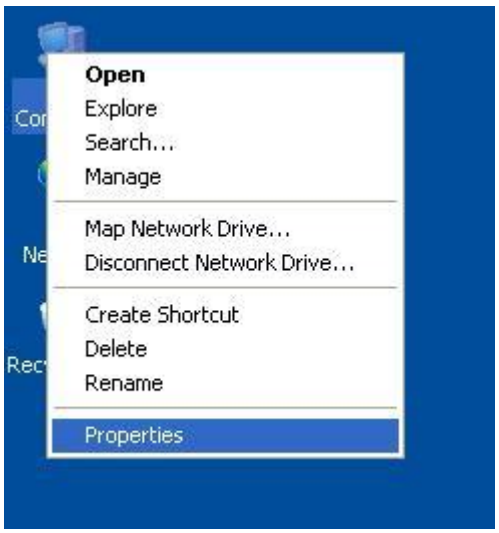
is caused by the following:

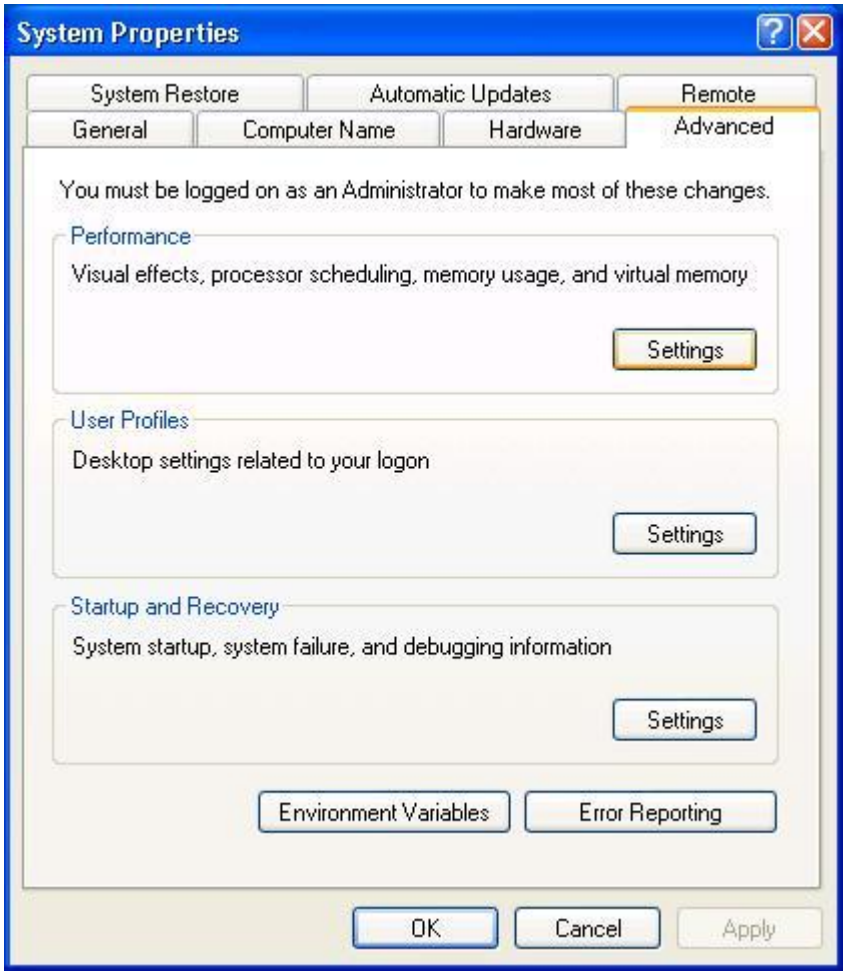
1. An additional set of Data Execution Prevention security checks have been added to Windows XP SP2. These checks, known as software-enforced DEP, are designed to block malicious code that takes advantage of exception-handling mechanisms in Windows. Software-enforced DEP runs on any processor that can run Windows XP SP2. DEP can help block a class of security intrusions. Specifically, DEP can help block a malicious program in which a virus or other type of attack has injected a process with additional code and then tries to run the injected code. On a system with DEP, execution of the injected code causes an exception. Software-enforced DEP can help block programs that take advantage of exception-handling mechanisms in Windows.

   To prevent this message for CASCADE-PC Client/Server Installation, please deactivate the DEP checks as follows:

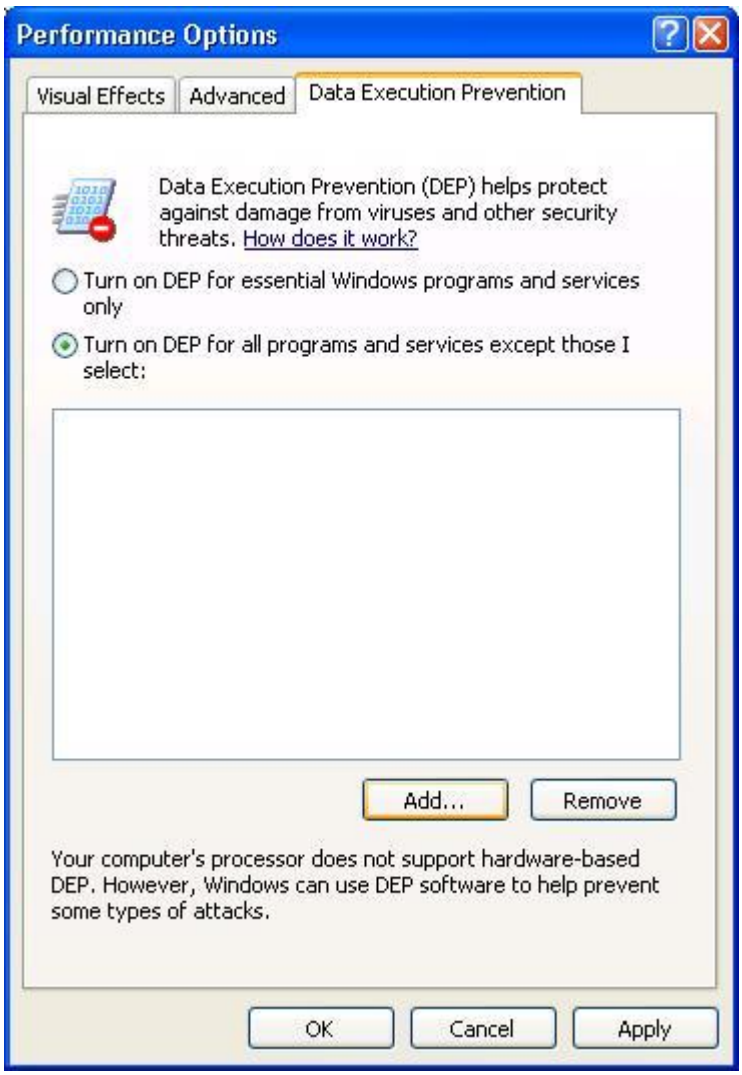
Error Handling

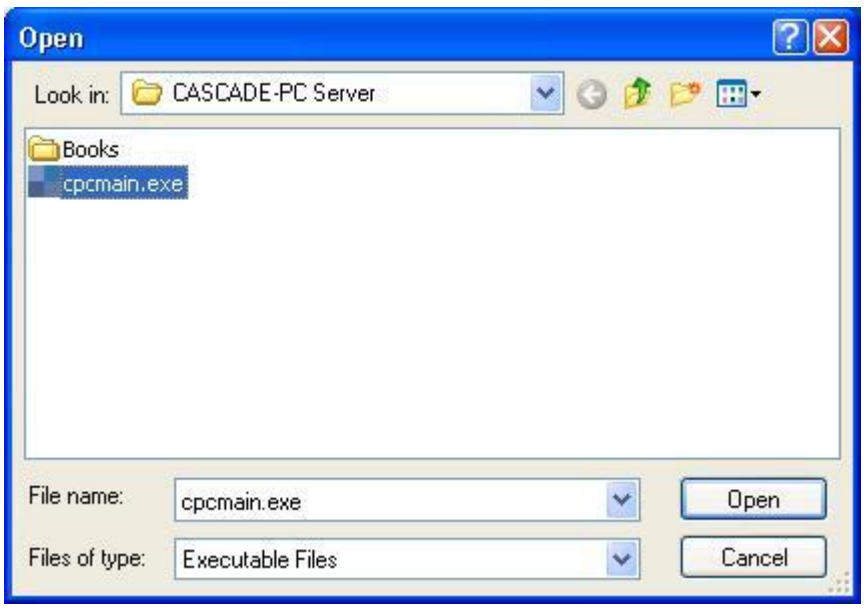
Please open the System Properties Window, choose tab "Advanced" and click on <Performance - Settings>



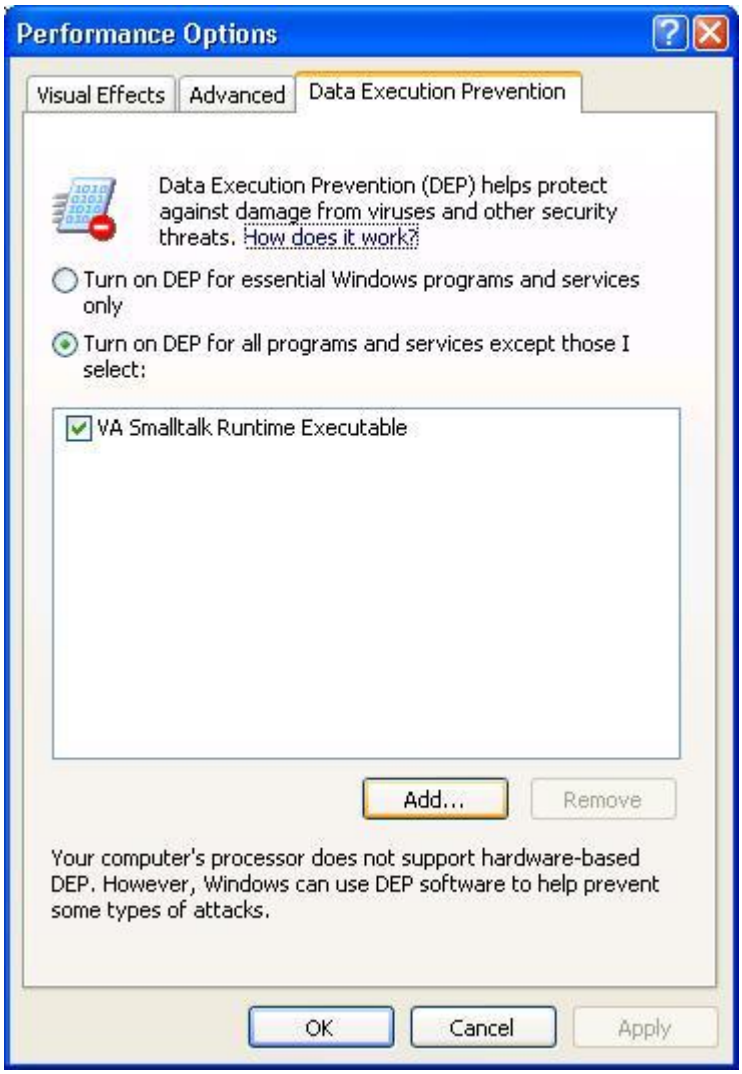


Please choose tab "Data Execution Prevention" and add CASCADE-PC (cpcmain.exe) as exception.





Error Handling



7.11 Fatal Application Error (general protection fault)

This error

is caused by the following:

1. In certain circumstances there might be an abnormal program end (general protection fault) if using CASCADE-PC in combination with **IBM PCom version 5.5**. If that is the case please use version 5.0 or 5.7 of the terminal emulation.

7.12 Primitive failed in: PlatformFunction (printer)

This error

**"Primitive failed in: PlatformFunction>>
#callWith:with:with:with:with:with: due to Floating point underflow"**

is caused by the following:

1. On checking the assigned printers CASCADE-PC can fail with the following error

   "Primitive failed in: PlatformFunction>> #callWith:with:with:with:with:with: due to Floating point underflow".

   CASCADE-PC will not start up. This is caused by the printer driver. In this case please contact the printer manufacturer, ask for an updated version of the printer driver and install it. Alternatively, remove all printers from the environment of the customer or CASCADE-PC can be started using the start parameter "-np" (no printer).

8. CASCADE backend transaction security codes

8.1 CASCADE-PC → CASCADE backend transaction security codes

CASCADE-PC Logon (KVAV PC) *** mandatory for CASCADE-PC ***
CASCADE-PC Logon (MENU) *** mandatory for CASCADE-PC ***
CASCADE-PC Change password (PWAD) *** mandatory for CASCADE-PC ***

bank-info: bank search: alpha search (KVAV IA)
bank-info: bank search: alpha search (KVAV IA)
bank-info: bank search: numeric search (KVAV IB)
bank-info: currency parameters: display (KVAV IW)
bank-info: processing-/accounting information (KVAV ID)
bank-info: system information (KVAV IS)
bank-info: user information: English (DIIN IG)
bank-info: user information: German (DIIN IK)

cash: display: accounting: account information (cash settlement account) (KUCI KI)
cash: display: accounting: cash movements (bank) (KUCI GU)
cash: display: cash forecast: detail overview (bank) (KUCF DE)
cash: display: cash forecast: display cash forecast configuration rule (KUCF RI)
cash: display: cash forecast: overview (cash settlement account) (KUCF CF)
cash: display: custody and other payments: custody payments from STD settlement (KNZI IK)
cash: display: custody and other payments: detailed instructions for Direct Debit-cash clearing (KNZI ID)
cash: display: custody and other payments: netted instructions for Direct Debit-cash clearing (KNZI IN)
cash: display: instructions/standing instructions: cash instructions (KNGI IG)
cash: enter: cash account linking (KNEE DW)
cash: enter: cash forecast rule: modify cash forecast configuration rule (KUAA RA)
cash: enter: market rule… (KNEE DM)
cash: enter: prioritisation of cash sources (KNEE DP)
cash: enter: reservation (KNEE RA)
cash: enter: standing instruction reservation (KNEE DR)
cash: information cash monitoring RTS: central bank money (Euro): buyer (KVGK IK)
cash: information cash monitoring RTS: central bank money (Euro): seller (KVGK IV)
cash: information cash monitoring RTS: commercial bank money: information for buyer (KVGC IK)
cash: information cash monitoring RTS: commercial bank money: information for buyer and seller (KVGC IG)
cash: information cash monitoring RTS: commercial bank money: information for seller (KVGC IV)
cash: unverified instructions: modify/delete (KNGI ID)
cash: unverified instructions: modify/delete: delete instruction (KNEA LN)
cash: unverified instructions: modify/delete: delete standing instructions (KNEA DL)
cash: unverified instructions: modify/delete: modify instruction (KNEA AN)
cash: unverified instructions: modify/delete: modify standing instructions (KNEA DA)

custody: display: all compensations per transaction type (KVGI KG)
custody: display: all mandatory non income corporate actions (KVGI AK)
custody: display: amount to be paid (KVGI AB)
custody: display: compensations (KVGI KO)
custody: display: income / redemptions (KVGI KE)
custody: display: non income corporate actions credit (KVGI EI)
custody: display: non income corporate actions debit (KVGI AU)
custody: display: non income corporate actions exchange (KVGI UM)
custody: display: non income corporate actions other (KVGI SO)
custody: display: provisions (KVGI PR)
custody: display: tax credit (KVGI SG)
custody: display: total income (KVGI UE)

CASCADE backend transaction security codes

custody: display: voluntary offers (KVGI GE)

messages: message journal: Clearstream Banking Frankfurt (CBF) - operational overview (MAMJ FU)
messages: message journal: Clearstream Banking Frankfurt (CBF) - rejected messages (MAMJ AB)
messages: message journal: Clearstream Banking Frankfurt (CBF) - technical overview (MAMJ TU)
messages: message journal: Clearstream Banking Luxemburg (CBL) - file transfer (MAMJ FL)

movements/positions: inventory lists: instructions (KVAB AE)
movements/positions: movements: booked movements (KVDU ID)
movements/positions: movements: movements statistics (KVDU IS)
movements/positions: positions: final positions (KVBA BB)
movements/positions: positions: positions registered owners (KVBA BW)

OTC: enter: conversion (KVEE UT)
OTC: enter: delivery (KVEE WE)
OTC: enter: merger of warrants (KVEE OZ)
OTC: enter: re-conversion (KVEE RT)
OTC: enter: receipt (KVEE MI)
OTC: enter: RS account transfer: enter (KVEE DV)
OTC: enter: RS position transfer: enter (KVEE BV)
OTC: enter: split of warrants (KVEE OT)
OTC: enter: TEFRA-D release (KVEE TD)
OTC: enter: TEFRA-D release: modification (KVEA AT)
OTC: pending instructions: block/unblock: block deliveries (KVAS SA)
OTC: pending instructions: block/unblock: block receipts (KVAS SI)
OTC: pending instructions: block/unblock: unblock deliveries (KVAS FA)
OTC: pending instructions: block/unblock: unblock receipts (KVAS FI)
OTC: pending instructions: information: delivery instructions (KVAI MA)
OTC: pending instructions: information: instruction no. (KVAI AN)
OTC: pending instructions: information: instruction type (KVAI AA)
OTC: pending instructions: information: instructions rejected in process (KVAI AD)
OTC: pending instructions: information: receipt instructions (KVAI MI)
OTC: pending instructions: information: RTS instructions (KVAI SR)
OTC: pending instructions: information: SDS instructions (KVAI SS)
OTC: pending instructions: instruction history (KVAI HA)
OTC: pending instructions: link-service: Link service CASCADE (KVAL LC)
OTC: pending instructions: link-service: Link service LION (KVAL LL)
OTC: pending instructions: match service: cancel matched instructions (KVAM RM)
OTC: pending instructions: match service: delivery instructions (KVAM MA)
OTC: pending instructions: match service: receipt instructions (KVAM MI)
OTC: pending instructions: modify/delete: deletion (KVAA ML)
OTC: pending instructions: modify/delete: modification (KVAA MA)
OTC: pending instructions: modify/delete: for Partial Settlement Indicator and Settlement Priority (KVAA AA)
OTC: pending instructions: reservation service: display reservation against payment (foreign currency) (KVAR IW)
OTC: pending instructions: reservation service: display reservation against payment (KVAR IR)
OTC: pending instructions: reservation service: reservation revocation (KVAR RR)
OTC: pending instructions: self collateralisation: block receipts (single)-SA (KVAC SA)
OTC: pending instructions: self collateralisation: block receipts (single)-SI (KVAC SI)
OTC: pending instructions: self collateralisation: deletion-LC (KVAC LC)
OTC: pending instructions: self collateralisation: display instructions-IA (KVAC IA)
OTC: pending instructions: self collateralisation: display instructions-II (KVAC II)
OTC: pending instructions: self collateralisation: display-IC (KVAC IC)
OTC: pending instructions: self collateralisation: flag-MC (KVAC MC)
OTC: pending instructions: self collateralisation: unblock receipts (cash amount / all)-GI (KVAC GI)
OTC: pending instructions: self collateralisation: unblock receipts (single)-FA (KVAC FA)
OTC: pending instructions: self collateralisation: unblock receipts (single)-FI (KVAC FI)
OTC: unverified instructions: modify/delete/display (KVEB AN)

OTC: unverified instructions: modify/delete/display: delete (KVEA LN)
OTC: unverified instructions: modify/delete/display: delete (KVEB LN)
OTC: unverified instructions: modify/delete/display: list display: all instructions (KVEI AA)
OTC: unverified instructions: modify/delete/display: list display: all invalid instructions (KVEI AF)
OTC: unverified instructions: modify/delete/display: list display: credit bank (KVEI GK)
OTC: unverified instructions: modify/delete/display: list display: debit bank (KVEI LK)
OTC: unverified instructions: modify/delete/display: list display: file no. (KVEI PN)
OTC: unverified instructions: modify/delete/display: modification (KVEA AN)
OTC: unverified instructions: verify (KVEK VN)
OTC: unverified instructions: verify: display (KVEI NR)
OTC: unverified instructions: verify: full display: all instructions (KVEC VA)
OTC: unverified instructions: verify: full display: all instructions (KVEK VA)
OTC: unverified instructions: verify: full display: credit bank (KVEC VG)
OTC: unverified instructions: verify: full display: credit bank (KVEK VG)
OTC: unverified instructions: verify: full display: debit bank (KVEC VL)
OTC: unverified instructions: verify: full display: debit bank (KVEK VL)
OTC: unverified instructions: verify: full display: file no. (KVEC VP)
OTC: unverified instructions: verify: full display: file no. (KVEK VP)
OTC: unverified instructions: verify: full display: instruction no. (KVEC VN)
OTC: unverified instructions: verify: list display: all instructions (KVEK TA)
OTC: unverified instructions: verify: list display: all instructions (vaults) (KVEC TA)
OTC: unverified instructions: verify: list display: credit bank (KVEK TG)
OTC: unverified instructions: verify: list display: credit bank (vaults) (KVEC TG)
OTC: unverified instructions: verify: list display: debit bank (KVEK TL)
OTC: unverified instructions: verify: list display: debit bank (vaults) (KVEC TL)
OTC: unverified instructions: verify: list display: file no. (KVEK TP)
OTC: unverified instructions: verify: list display: file no. (vaults) (KVEC TP)
OTC: unverified instructions: verify: list display: instruction no. (KVEK TN)
OTC: unverified instructions: verify: list display: instruction no. (vaults) (KVEC TN)

RS: positions instructions: deletion (KVCB BL)
RS: positions instructions: display (KVCB BI)
RS: positions instructions: enter (KVCB BE)
RS: positions instructions: modification (KVCB BA)
RS: positions instructions: verify (KVCB BK)
RS: re-registration: delete (KVCU UL)
RS: re-registration: display (KVCU UI)
RS: re-registration: enter (KVCU UE)
RS: re-registration: modify (KVCU UA)
RS: re-registration: verify (KVCU UK)
RS: registration: delete (KVCE EL)
RS: registration: display (KVCE EI)
RS: registration: enter (KVCE EE)
RS: registration: modify (KVCE EA)
RS: registration: verify (KVCE EK)
RS: shareholder data: delete (KVCA AL)
RS: shareholder data: display (KVCA AI)
RS: shareholder data: enter (KVCA AE)
RS: shareholder data: modify (KVCA AA)
RS: shareholder data: verify (KVCA AK)

security: authorisations: copy user authorisations (SECU CO)
security: authorisations: delete all authorisations (SECU LT)
security: authorisations: modify/delete/display authorisations -detail- (SECU IT)
security: authorisations: modify/delete/display authorisations -overview- (SECU ET)
security: authorisations: verify authorisations -detail- (SECU FR)
security: authorisations: verify authorisations -overview- (SECU FR)

CASCADE backend transaction security codes

security: newsletter… (SECU IR)
security: user data: create new user (SECU EB)
security: user data: delete user (SECU LB)
security: user data: modify user (SECU AB)
security: user data: user information (SECU IB)
security: user data: user logon violations (SECU IF)
security: user data: user member directory (SECU IU)

stock exchange: s/e transactions: block/unblock: settlement (KVLS SB)
stock exchange: s/e transactions: delete: deletion (KVLA LL)
stock exchange: s/e transactions: display (KVLI IB)
stock exchange: s/e transactions: modify: modification (KVLA AL)
stock exchange: s/e transactions: reverse deletion (KVLA RL)
stock exchange: statistics: checking totals (KVLI IK)
stock exchange: statistics: orders (KVLI IA)
stock exchange: statistics: reconciliation totals (KVLI IS)

vaults: display: instruction history: deposits (KPHI HE)
vaults: display: instruction history: withdrawals (KPHI HA)
vaults: display: positions of certificates: certificates (KCKI IH)
vaults: display: positions of certificates: search of certificate numbers (KCKI IS)
vaults: enter (CBF Vaults): new admission/ mark up (KVEW NV)
vaults: enter (CBF Vaults): withdrawal (KVEW AL)

8.2 CASCADE backend transaction security codes → CASCADE-PC

MENU		**CASCADE-PC Logon**	*** mandatory for CASCADE-PC ***
KVAV	**PC**	**CASCADE-PC Logon**	*** mandatory for CASCADE-PC ***
PWAD		**CASCADE-PC Change password**	*** mandatory for CASCADE-PC ***
DIIN	IG	bank-info: user information: English	
DIIN	IK	bank-info: user information: German	
KCKI	IH	vaults: display: positions of certificates: certificates	
KCKI	IS	vaults: display: positions of certificates: search of certificate numbers	
KNEA	AN	cash: unverified instructions: modify/delete: modify instruction	
KNEA	DA	cash: unverified instructions: modify/delete: modify standing instructions	
KNEA	DL	cash: unverified instructions: modify/delete: delete standing instructions	
KNEA	LN	cash: unverified instructions: modify/delete: delete instruction	
KNEE	DM	cash: enter: market rule…	
KNEE	DP	cash: enter: prioritisation of cash sources	
KNEE	DR	cash: enter: standing instruction reservation	
KNEE	DW	cash: enter: cash account linking	
KNEE	RA	cash: enter: reservation	
KNGI	ID	cash: unverified instructions: modify/delete	
KNGI	IG	cash: display: instructions/standing instructions: cash instructions	
KNZI	ID	cash: display: custody and other payments: detailed instructions for Direct Debit-cash clearing	
KNZI	IK	cash: display: custody and other payments: custody payments from STD settlement	
KNZI	IN	cash: display: custody and other payments: netted instructions for Direct Debit-cash clearing	
KPHI	HA	vaults: display: instruction history: withdrawals	
KPHI	HE	vaults: display: instruction history: deposits	
KUAA	RA	cash: enter: cash forecast rule: modify cash forecast configuration rule	
KUCF	CF	cash: display: cash forecast: overview (cash settlement account)	
KUCF	DE	cash: display: cash forecast: detail overview (bank)	
KUCF	RI	cash: display: cash forecast: display cash forecast configuration rule	
KUCI	GU	cash: display: accounting: cash movements (bank)	
KUCI	KI	cash: display: accounting: account information (cash settlement account)	
KVAA	AA	OTC: pending instructions: modify/delete: modification for Partial Settlement Indicator and Settlement Priority	
KVAA	MA	OTC: pending instructions: modify/delete: modification	
KVAA	ML	OTC: pending instructions: modify/delete: deletion	
KVAB	AE	movements/positions: inventory lists: instructions	
KVAC	FA	OTC: pending instructions: self collateralisation: unblock receipts (single)-FA	
KVAC	FI	OTC: pending instructions: self collateralisation: unblock receipts (single)-FI	
KVAC	GI	OTC: pending instructions: self collateralisation: unblock receipts (cash amount / all)-GI	
KVAC	IA	OTC: pending instructions: self collateralisation: display instructions-IA	
KVAC	IC	OTC: pending instructions: self collateralisation: display-IC	
KVAC	II	OTC: pending instructions: self collateralisation: display instructions-II	
KVAC	LC	OTC: pending instructions: self collateralisation: deletion-LC	
KVAC	MC	OTC: pending instructions: self collateralisation: flag-MC	
KVAC	SA	OTC: pending instructions: self collateralisation: block receipts (single)-SA	
KVAC	SI	OTC: pending instructions: self collateralisation: block receipts (single)-SI	
KVAI	AA	OTC: pending instructions: information: instruction type	
KVAI	AD	OTC: pending instructions: information: instructions rejected in process	
KVAI	AN	OTC: pending instructions: information: instruction no.	

CASCADE backend transaction security codes

KVAI	HA	OTC: pending instructions: instruction history
KVAI	MA	OTC: pending instructions: information: delivery instructions
KVAI	MI	OTC: pending instructions: information: receipt instructions
KVAI	SR	OTC: pending instructions: information: RTS instructions
KVAI	SS	OTC: pending instructions: information: SDS instructions
KVAL	LC	OTC: pending instructions: link-service: Link service CASCADE
KVAL	LL	OTC: pending instructions: link-service: Link service LION
KVAM	MA	OTC: pending instructions: match service: delivery instructions
KVAM	MI	OTC: pending instructions: match service: receipt instructions
KVAM	RM	OTC: pending instructions: match service: cancel matched instructions
KVAR	IR	OTC: pending instructions: reservation service: display reservation against payment
KVAR	IW	OTC: pending instructions: reservation service: display reservation against payment (foreign currency)
KVAR	RR	OTC: pending instructions: reservation service: reservation revocation
KVAS	FA	OTC: pending instructions: block/unblock: unblock deliveries
KVAS	FI	OTC: pending instructions: block/unblock: unblock receipts
KVAS	SA	OTC: pending instructions: block/unblock: block deliveries
KVAS	SI	OTC: pending instructions: block/unblock: block receipts
KVAV	IA	bank-info: bank search: alpha search
KVAV	IB	bank-info: bank search: numeric search
KVAV	ID	bank-info: processing-/accounting information
KVAV	IS	bank-info: system information
KVAV	IW	bank-info: currency parameters: display
KVBA	BB	movements/positions: positions: final positions
KVBA	BW	movements/positions: positions: positions registered owners
KVCA	AA	RS: shareholder data: modify
KVCA	AE	RS: shareholder data: enter
KVCA	AI	RS: shareholder data: display
KVCA	AK	RS: shareholder data: verify
KVCA	AL	RS: shareholder data: delete
KVCB	BA	RS: positions instructions: modification
KVCB	BE	RS: positions instructions: enter
KVCB	BI	RS: positions instructions: display
KVCB	BK	RS: positions instructions: verify
KVCB	BL	RS: positions instructions: deletion
KVCE	EA	RS: registration: modify
KVCE	EE	RS: registration: enter
KVCE	EI	RS: registration: display
KVCE	EK	RS: registration: verify
KVCE	EL	RS: registration: delete
KVCU	UA	RS: re-registration: modify
KVCU	UE	RS: re-registration: enter
KVCU	UI	RS: re-registration: display
KVCU	UK	RS: re-registration: verify
KVCU	UL	RS: re-registration: delete
KVDU	ID	movements/positions: movements: booked movements
KVDU	IS	movements/positions: movements: movements statistics
KVEA	AN	OTC: unverified instructions: modify/delete/display: modification
KVEA	AT	OTC: enter: TEFRA-D release: modification
KVEA	LN	OTC: unverified instructions: modify/delete/display: delete
KVEB	AN	OTC: unverified instructions: modify/delete/display
KVEB	LN	OTC: unverified instructions: modify/delete/display: delete
KVEC	TA	OTC: unverified instructions: verify: list display: all instructions (vaults)

KVEC	TG	OTC: unverified instructions: verify: list display: credit bank (vaults)
KVEC	TL	OTC: unverified instructions: verify: list display: debit bank (vaults)
KVEC	TN	OTC: unverified instructions: verify: list display: instruction no. (vaults)
KVEC	TP	OTC: unverified instructions: verify: list display: file no. (vaults)
KVEC	VA	OTC: unverified instructions: verify: full display: all instructions
KVEC	VG	OTC: unverified instructions: verify: full display: credit bank
KVEC	VL	OTC: unverified instructions: verify: full display: debit bank
KVEC	VN	OTC: unverified instructions: verify: full display: instruction no.
KVEC	VP	OTC: unverified instructions: verify: full display: file no.
KVEE	BV	OTC: enter: RS position transfer: enter
KVEE	DV	OTC: enter: RS account transfer: enter
KVEE	MI	OTC: enter: receipt
KVEE	OT	OTC: enter: split of warrants
KVEE	OZ	OTC: enter: merger of warrants
KVEE	RT	OTC: enter: re-conversion
KVEE	TD	OTC: enter: TEFRA-D release
KVEE	UT	OTC: enter: conversion
KVEE	WE	OTC: enter: delivery
KVEI	AA	OTC: unverified instructions: modify/delete/display: list display: all instructions
KVEI	AF	OTC: unverified instructions: modify/delete/display: list display: all invalid instructions
KVEI	GK	OTC: unverified instructions: modify/delete/display: list display: credit bank
KVEI	LK	OTC: unverified instructions: modify/delete/display: list display: debit bank
KVEI	NR	OTC: unverified instructions: verify: display
KVEI	PN	OTC: unverified instructions: modify/delete/display: list display: file no.
KVEK	TA	OTC: unverified instructions: verify: list display: all instructions
KVEK	TG	OTC: unverified instructions: verify: list display: credit bank
KVEK	TL	OTC: unverified instructions: verify: list display: debit bank
KVEK	TN	OTC: unverified instructions: verify: list display: instruction no.
KVEK	TP	OTC: unverified instructions: verify: list display: file no.
KVEK	VA	OTC: unverified instructions: verify: full display: all instructions
KVEK	VG	OTC: unverified instructions: verify: full display: credit bank
KVEK	VL	OTC: unverified instructions: verify: full display: debit bank
KVEK	VN	OTC: unverified instructions: verify
KVEK	VP	OTC: unverified instructions: verify: full display: file no.
KVEW	AL	vaults: enter (CBF Vaults): withdrawal
KVEW	NV	vaults: enter (CBF Vaults): new admission/ mark up
KVGC	IG	cash: information cash monitoring RTS: commercial bank money: information for buyer and seller
KVGC	IK	cash: information cash monitoring RTS: commercial bank money: information for buyer
KVGC	IV	cash: information cash monitoring RTS: commercial bank money: information for seller
KVGI	AB	custody: display: amount to be paid
KVGI	AK	custody: display: all mandatory non income corporate actions
KVGI	AU	custody: display: non income corporate actions debit
KVGI	EI	custody: display: non income corporate actions credit
KVGI	GE	custody: display: voluntary offers
KVGI	KE	custody: display: income / redemptions
KVGI	KG	custody: display: all compensations per transaction type
KVGI	KO	custody: display: compensations
KVGI	PR	custody: display: provisions
KVGI	SG	custody: display: tax credit
KVGI	SO	custody: display: non income corporate actions other
KVGI	UE	custody: display: total income
KVGI	UM	custody: display: non income corporate actions exchange

CASCADE backend transaction security codes

KVGK	IK	cash: information cash monitoring RTS: central bank money (Euro): buyer
KVGK	IV	cash: information cash monitoring RTS: central bank money (Euro): seller
KVLA	AL	stock exchange: s/e transactions: modify: modification
KVLA	LL	stock exchange: s/e transactions: delete: deletion
KVLA	RL	stock exchange: s/e transactions: reverse deletion
KVLI	IA	stock exchange: statistics: orders
KVLI	IB	stock exchange: s/e transactions: display
KVLI	IK	stock exchange: statistics: checking totals
KVLI	IS	stock exchange: statistics: reconciliation totals
KVLS	SB	stock exchange: s/e transactions: block/unblock: settlement
MAMJ	AB	messages: message journal: Clearstream Banking Frankfurt (CBF) - rejected messages
MAMJ	FL	messages: message journal: Clearstream Banking Luxemburg (CBL) - file transfer
MAMJ	FU	messages: message journal: Clearstream Banking Frankfurt (CBF) - operational overview
MAMJ	TU	messages: message journal: Clearstream Banking Frankfurt (CBF) - technical overview
SECU	AB	security: user data: modify user
SECU	CO	security: authorisations: copy user authorisations
SECU	EB	security: user data: create new user
SECU	ET	security: authorisations: modify/delete/display authorisations -overview-
SECU	FR	security: authorisations: verify authorisations -detail-
SECU	FR	security: authorisations: verify authorisations -overview-
SECU	IB	security: user data: user information
SECU	IF	security: user data: user logon violations
SECU	IR	security: newsletter…
SECU	IT	security: authorisations: modify/delete/display authorisations -detail-
SECU	IU	security: user data: user member directory
SECU	LB	security: user data: delete user
SECU	LT	security: authorisations: delete all authorisations

Contact

Clearstream International - Head Office

Clearstream International
L-2964 Luxembourg
Internet:www.clearstream.com

Clearstream Banking - Business Centres

Clearstream Banking Frankfurt
Mergenthalerallee 61
65760 Eschborn
Tel: +49 (0) 69 211- 0
Fax: +49 (0) 69 211 - 1 20 05

Clearstream Banking Luxembourg
42 Avenue JF Kennedy
L-1855 Luxembourg
Tel: +352 - 243 - 0
Fax: +352 - 243 - 38000

Clearstream Banking - Regional Offices

Dubai
City Tower
Sheikh Zayed Road
PO Box 27250
Dubai

Tel: +971 (0) 4 - 3310644
Fax: +971 (0) 4 - 3316973

Dublin
13-17 Dawson Street
Dublin 2
Ireland

Tel.: +353 – 1 – 899 - 2461
Fax: +352 – 243 - 626354

Hong Kong
2606-7 Two Exchange Square
8 Connaught Place
Central
Hong Kong

Tel: +852 - 2523 - 0728
Fax: +852 - 2523 - 7796

London
One Canada Square
Floor 42
Canary Wharf
London E14 5DR

Tel: +44 (0) 20 - 7862 - 7000
Fax: +44 (0) 20 - 7862 - 70016

New York
55Broad Sreet
8th Floor
New York NY 10004

Tel: +1 (1) 212 - 309 - 8888
Fax: +1 (1) 212 - 309 - 8889

Prague
Futurama Business Park
Building B
Sokolovska 662/136b
CZ-18600 Prague 8

Tel.: +420-296 - 429 111
Fax: +420-296 - 429 305

Singapore
9 Raffles Place #55-01
Republic Plaza
Singapore 048619

Tel: +65 659 71600
Fax: +65 659 71700

Tokyo
Toranomon 4-chome MT Building II
Floor 9
4-2-12 Toranomon
Minato-ku
Tokyo 105-0001

Tel: +81 (0) 3 3433 1787
Fax: +81-(0) 3 3433 179