CME Direct Installation

This topic provides the guidelines for Brokers, Traders, Administrators, and support staff to install and run CME Direct™.

CME Direct offers side-by-side access to CME Group listed futures and OTC markets—all on one screen. Offering electronic trading of futures and options, aggregated OTC broker markets combined with straight-through processing and straight-through clearing via CME ClearPort, CME Direct helps you work more efficiently and effectively. Occasionally, workstation configuration issues must be addressed before enabling the CME Direct trading platform. This topic describes these issues and provides guidance on navigating any obstacles while installing the CME Direct trading platform.

Contents

CME Direct Support

CME Direct has dedicated support teams based in various locations around the world. See detailed contact information or contact gcc@cmegroup.com

CME Direct Technical Requirements

Ensure your system meets the minimum hardware and software requirements to install and run CME Direct Admin. Configure your workstation to enable your CME Direct needs.

Hardware Requirements

For optimum performance we recommend the following minimum requirements:

- 3GHz + dual-core or higher processor. Quad-core processor preferred.
- 4GB memory or greater.
- A dedicated Video Card (not on-board) with at least 1GB of memory
- Minimum display Resolution setting 1280 x 1024
- Broadband internet connection (5+Mbit) with low latency

Software Requirements

CME Direct has been developed using Microsoft .NET technology. The following software requirements are pre-requisites.

To Install and Run CME Direct:

- Microsoft **Windows 8, or 8.1**, **10**, or **Vista SP2**
- Microsoft **Microsoft IE 6.0+**, **Google Chrome** (with a ClickOnce add-on) or **Firefox**
- ***Microsoft .NET 4.7.2** or higher Framework - free download available
- Client Download - **https://cmedirect.cmegroup.com**

Connectivity Options

Use one of the following connectivity options:

- Internet

- CME Connectivity Offerings
  - Globex Hubs
  - EConnect
  - LNet
  - GLink
  - Customers can also connect via a third party that has connectivity to CME Group and supports access to the CME Direct application

Connection Via Internet

A secure internet connection is the primary connection for most users.

	Secure Internet Connection
Definition	Standard https: Internet connection from CME Direct client application
Capacity/ Bandwidth	Requires ~1 Mbps per user
Connection Mgmt	Both CME Group and the client manage their respective Internet connections
Commitment	No commitment
Availability	U.S. and International
Redundancy	Dependent on client's Internet connection
Set-up	Permission firewall for CME Direct application
Target	Customers comfortable with Internet access for production connection
Proxy Server	Configuring a proxy server may be needed: 205.209.196.38.

The client requires ALL of the following ip addresses to be opened on port 443 on the firewall:

Environment	Description	DNS	IP	PORT
Production	Software Download	cmedirect.cmegroup.com	205.209.196.38	80, 443
Production	Primary Order	cmedirectclient.cmegroup.com	205.209.196.39	443
Production	Primary Market Data	cmedirectmd.cmegroup.com	205.209.196.60	443
DR	Software Download	cmedirect.cmegroup.com	204.10.15.47	443
DR	DR Order	cmedirectclient.cmegroup.com	204.10.15.48	443
DR	DR Market Data	cmedirectmd.cmegroup.com	204.10.15.49	443

Connection Via Customer or 3rd Party Managed Direct Network Connection

Customers can use a new or existing, self-managed or third-party connection solution to CME Data Center. GLink and EConnect connections are supported. Please contact Platform Solutions or Global Account Management (GAM) if interested in other available connection options.

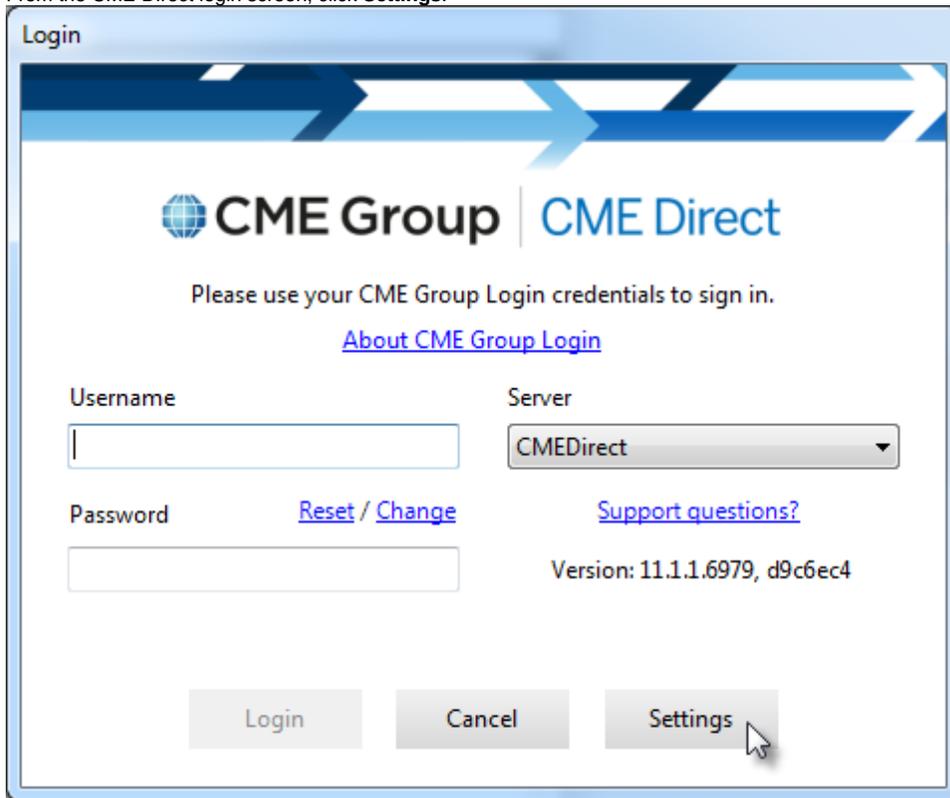| Environment	Type	HTTP Link	IP Address
Production	Order	cmedirectclient.cmegroup.com	167.204.71.39
Production	Market Data	cmedirectmd.cmegroup.com	167.204.71.60

ⓘ   In a Disaster Recovery situation, CME Group will manage failover to back-up IPs and Port.

To configure connection details, complete the following:

1. From the CME Direct login screen, click **Settings**.

2. From the **Environment** drop-down, select **CMEDirectLeasedLine**, then click **OK**.
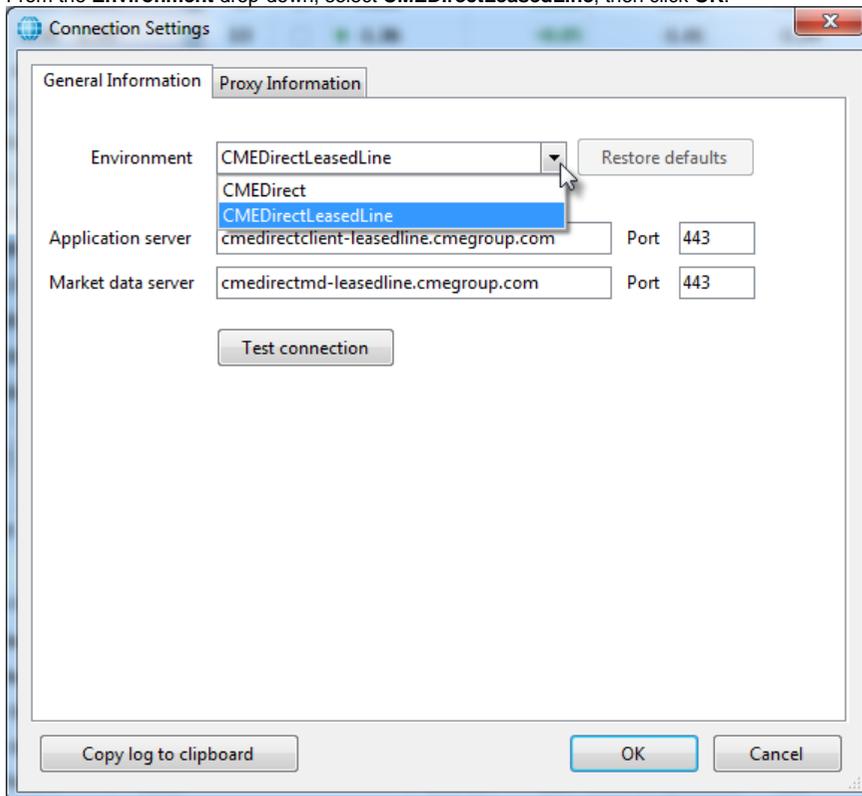
Connection Test

Connection settings are configured automatically. If CME Direct cannot connect to the CME servers, check the connectivity by completing the following steps:

1. From the Login window, click **Settings**. The **Connection Settings** window displays.
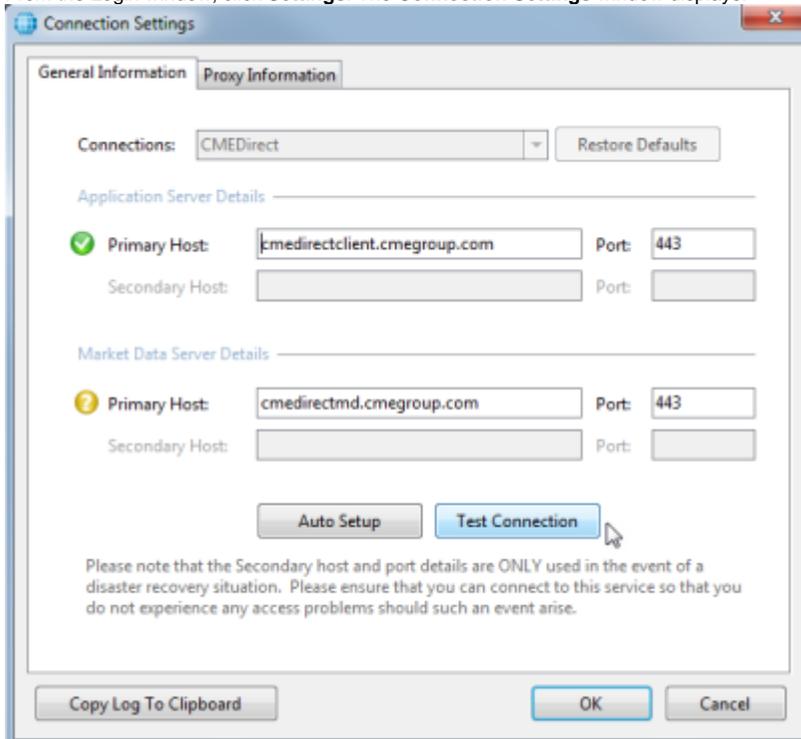
2. To test connections, click **Test Connection.**
   If all connections are correct, a green tick displays. If the test fails to connect, a red cross displays.
   If you are having issues, click **Copy Log to Clipboard**, then paste the log into an email that you can send to the CME Direct support team.

CME Direct Specifications

The CME Direct desktop client maintains the following technical characteristics:

Disk space	36.5 MB
• *Network Bootstrap (50 products)	1 MB
• *OTC Bandwidth (50 products)	300 Bytes per second
• *Exchange Bandwidth (70 products)	6000-9000 Bytes per second
• *Memory	450MB
• *CPU (4 Cores)	1-2%
Installation directory	Profile application directory *C:\Users\username\AppData\Local\Apps\2.0*
Installation technology	Microsoft ClickOnce
Configuration	Stored on the server
Encryption	256 bit SSL (TLS 1.2)

Security Permissions	Full Trust

*These are approximate figures and vary based on the number of products, hardware, and network speed.

Installing and Running CME Direct

Prior to login, ensure your system meets the minimum hardware and software requirements to install and run CME Direct.

First Installation

Install the CME Direct desktop client by clicking https://cmedirect.cmegroup.com. This link launches the install process and downloads the CME Direct client application onto the local PC.

The following warning displays:
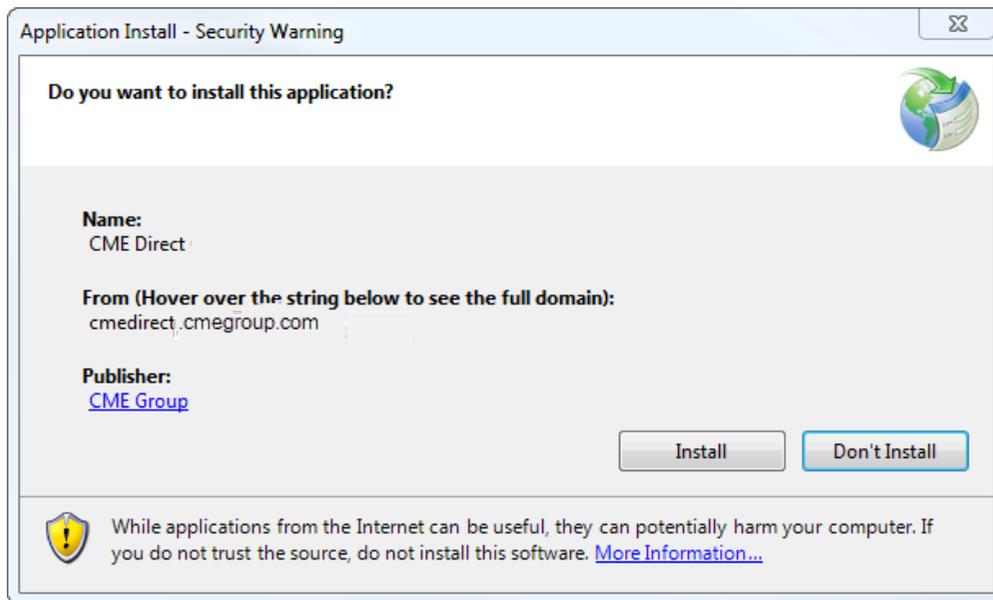
Click **Install**.

Upgrading CME Direct

Release notifications will be communicated via email to traders and technology departments. New releases are typically mandatory and will attempt to convert and retain all custom user layouts and settings where possible.
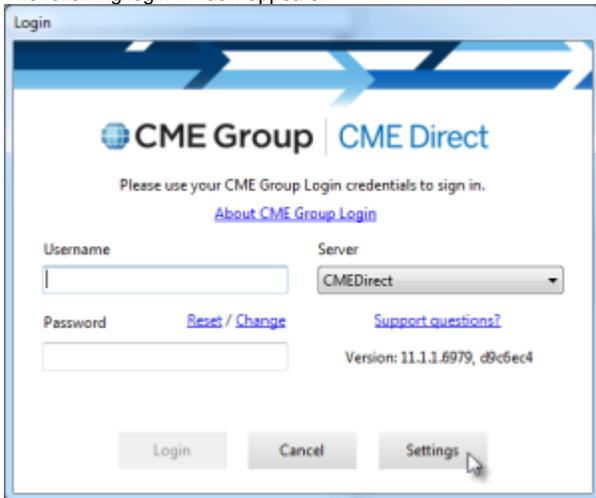
Launching CME Direct

Once installed, there are two ways to launch CME Direct:

- From the **Start > All Programs > CME Group > CME Direct** menu
- From the URL https://cmedirect.cmegroup.com

During start up, the following window displays for a few seconds as CME Direct validates the CME Direct software on your PC. Refer to Upgrading CME Direct to see if there is a new version available:
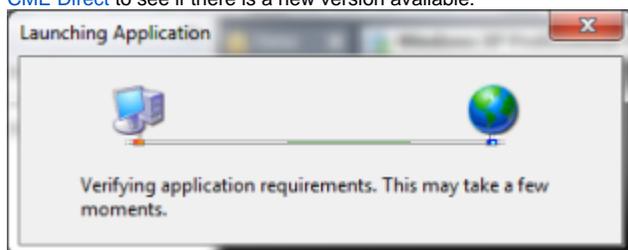
The following login window appears.

Enter your **CME Group Login ID** and **Password**, then click **Login** to launch the CME Direct application.

For more information about managing CME Group Login IDs, see the CME Group Login User Help System.
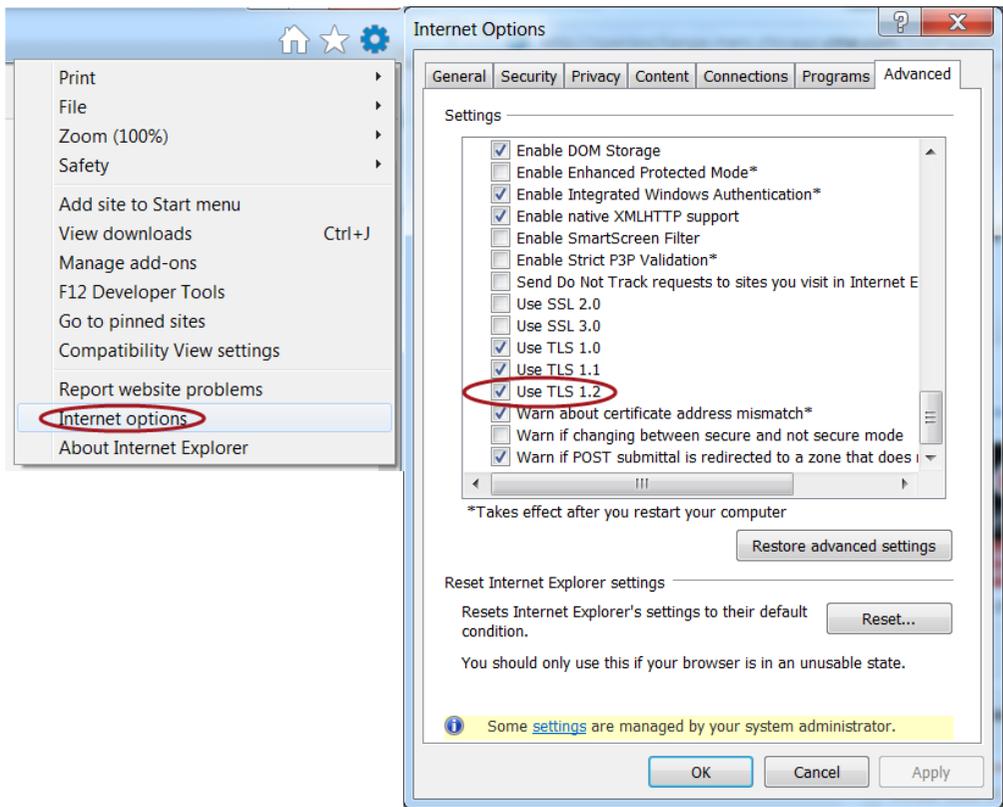
Troubleshooting

Please complete the following procedures if you experience any issues with CME Direct.

Viewing the Installation Page

Ensure security settings in Internet Explorer are checked to allow **TLS 1.2**, as shown:

> ⓘ CME Group recommends using Internet Explorer for this CME Direct internet setting.

Microsoft .NET Framework

To run CME Direct on a PC, you must install .NET. If .NET 4.5.2 or higher is not installed you may experience problems, or the installation may ask to install .NET Framework from the Microsoft website.
Verify the proper files are on the PC by completing the following steps:

1. From Windows Explorer, open **Control Panel > Programs > Programs and Features**.
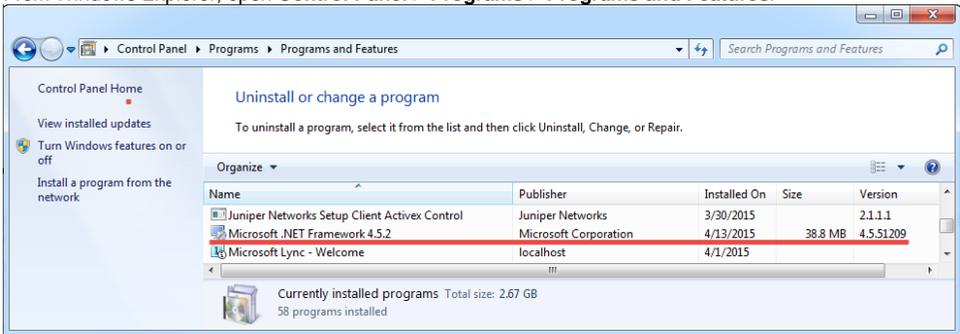
If Microsoft .NET is not present, please install Microsoft .NET version 4.5.2 or higher.

If the client runs with the wrong version of the .Net Framework installed, the client displays an error similar to this:
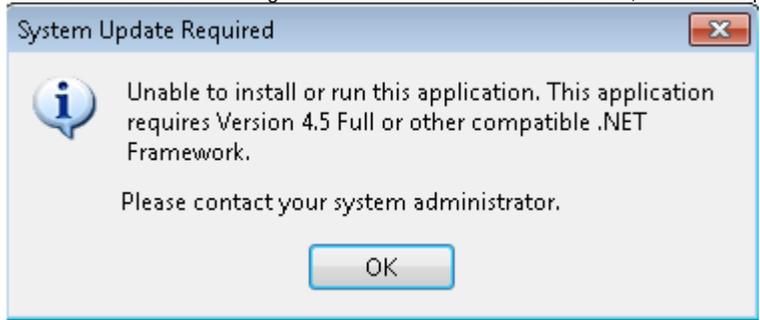
SSL Certificate issues

CME Direct software is signed using a widely recognized Trusted Root Certification Authority. In most cases you should be able to download and install without issue. You may not have this Trusted Root Certification Authority installed, in which case the following error might display:

Activation of https://cmedirect.cmegroup.com/client/CMEDirect.application resulted in exception.
Downloading https://cmedirect.cmegroup.com/client/CMEDirect.application did not succeed.
The underlying connection was closed: Could not establish trust relationship for the SSL/TLS secure channel.
The remote certificate is invalid according to the validation procedure.

If this occurs, please contact your IT department or the Global Command Center.

Disconnection Issues

If disconnected from CME Direct, the system automatically attempts to restore the connection. Your Day/Session orders are automatically held when you are disconnected, unless you have overridden order settings.

If you continue to experience connection issues, obtain the log information before closing and restarting by doing the following:

1. Open an explorer window and locate the CME Direct log files on the PC. The location of the log files depends on your operating system.
   - For Windows Vista: **C:\Users*username*\AppData\Local\CMEGroup\CMEDirect\Prod\ClientLogs**
2. Send the file which will be named something similar to Client_PROD_10.0.0.2641.log to our Support team at to gcc@cmegroup.com.

DNS Information

If you experience any DNS resolution errors, check your DNS settings in the **Connection Settings** tab:
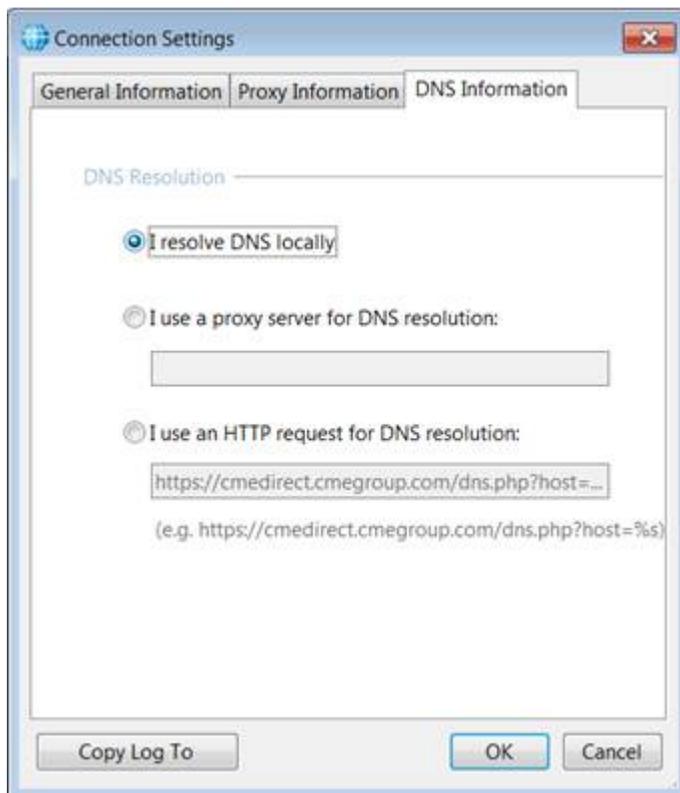
- **I resolve DNS locally:** DNS names are resolved using the DNS Servers configured for the computer and the hosts file. See more info here and in Wikipedia.
- **I use a proxy server for DNS resolution:** In some environments the DNS servers configured for the computer are not able to resolve external names. For instance, DNS servers are hosting an Active Directory DNS zone for a domain and are only allowed to resolves the names in the DNS zones they host. This allows the Active Directory to work. However, you will not be able to browse the WWW, etc. Our software allows an option to specify an additional DNS server, which is able to resolve the "external" names.
- **I use an HTTP request for DNS resolution:** Similar to the previous scenario. However, in this case the client application connects to the web application hosted by CME, which resolves a DNS name to an IP Address. To be able to resolve the URL they can map it to an IP in the hosts file or use an IP Address in the URL.

Client Logs

Logs files are fetched when a user has a problem. Logs are encrypted, you need a special software to decrypt them.

The CME Direct Trading client and Excel logs are located on the user's machine at the following location:
C:\Users\username\AppData\Local\CMEGroup\CMEDirect\Prod

Copy/paste the following path into a file explorer window. ClientLogs and ExcelLogs are located within this directory:
%LOCALAPPDATA%\CMEGROUP\CMEDIRECT\PROD

The log filenames are in this format.
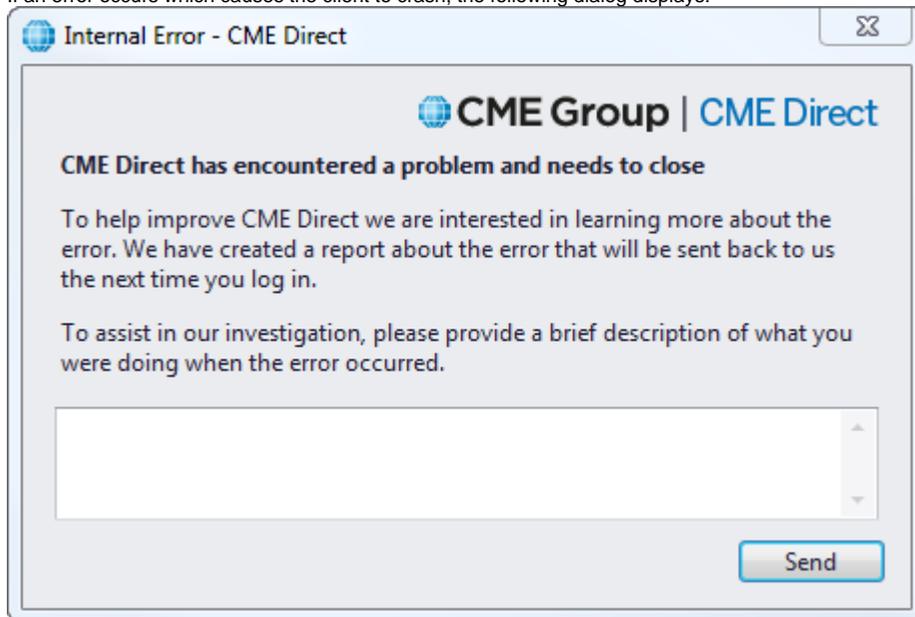
```
<Client Type>_<Environment>_<Version>.logYYYYMMDD.X
```

Examples
Client_Prod_10.2.2.3642.log
Excel_Prod_10.2.2.3642

Client Crashes

If an error occurs which causes the client to crash, the following dialog displays:

Please fill out the description of what you were doing and it will help us determine what went wrong. We will contact you with the details on when your issue will be fixed.